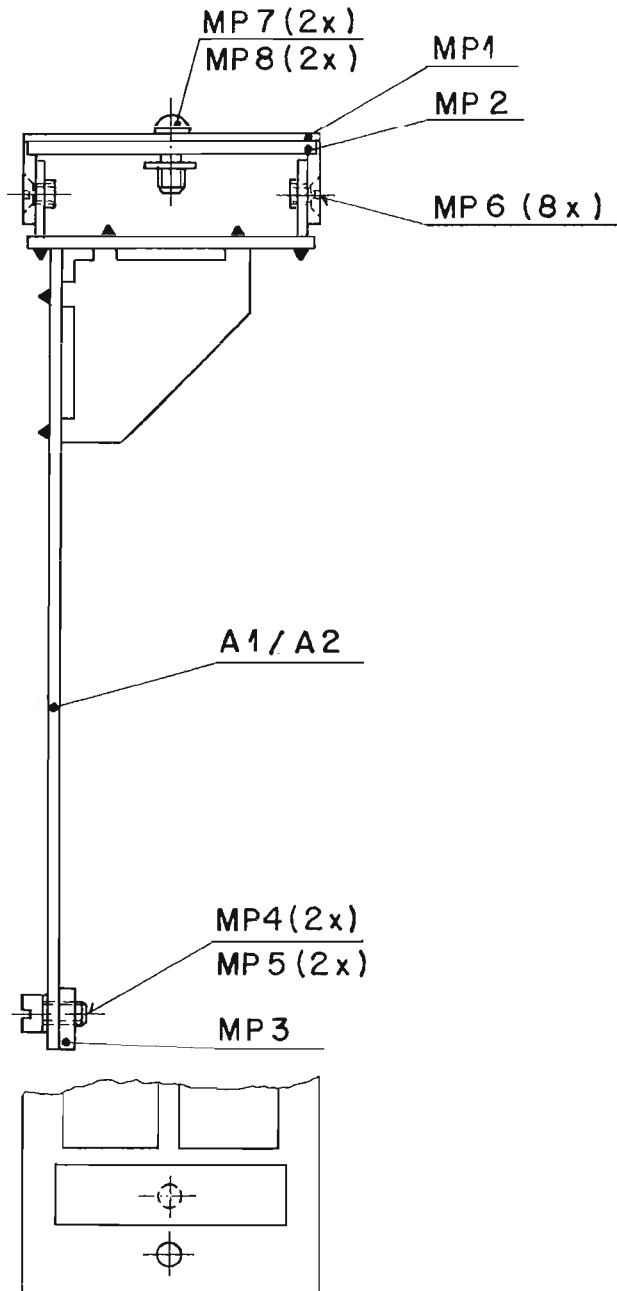


SOURCE SELECTOR UNIT

1.990.390.00



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

A.....1	1.990.498.00	SOURCE SELECTOR
A.....2	1.990.498.00	SOURCE SELECTOR
MP....1	1.990.390.01	1 pcs Frontschild SOURCE SELECTOR 40 PB
MP....2	1.990.390.02	1 pcs Traeger SOURCE SELECTOR 40 PB
MP....3	1.990.390.03	1 pcs Printverbinder
MP....4	21.53.0353	2 pcs Z-Schr. M3*5
MP....5	24.16.1030	2 pcs Rippenscheibe zu M3
MP....6	21.01.2352	8 pcs S-Schr. M3*4
MP....7	1.010.022.21	2 pcs Linsenrundschr. IS M3*8
MP....8	24.16.3023	2 pcs Wellensicherung 3mm
MP....9	1.990.390.04	1 pcs Studer-Wr-Etikette 10*20

1.990.390.00 SOURCE SELECTOR UNIT 40 PB SCA89/07/0600

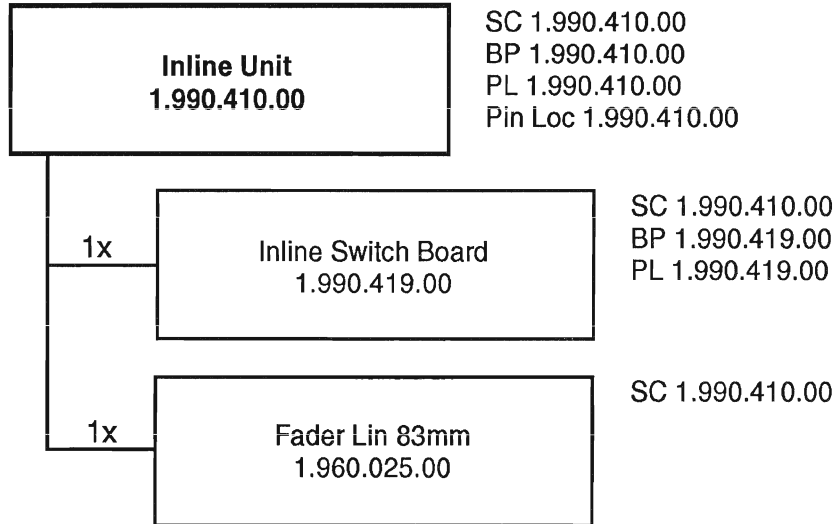
Zeichnung									
Änderung									
3.4.90									
Datum	Gez	Gepr	Ges	Index					
Kreuz Nr									
Number	1.990.390-00								

STUDER
REGENSDORF
ZÜRICH

SOURCE SELECTOR UNIT
40 PB

Inline Unit

1.990.410.00



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

Pin location list

1.990.410

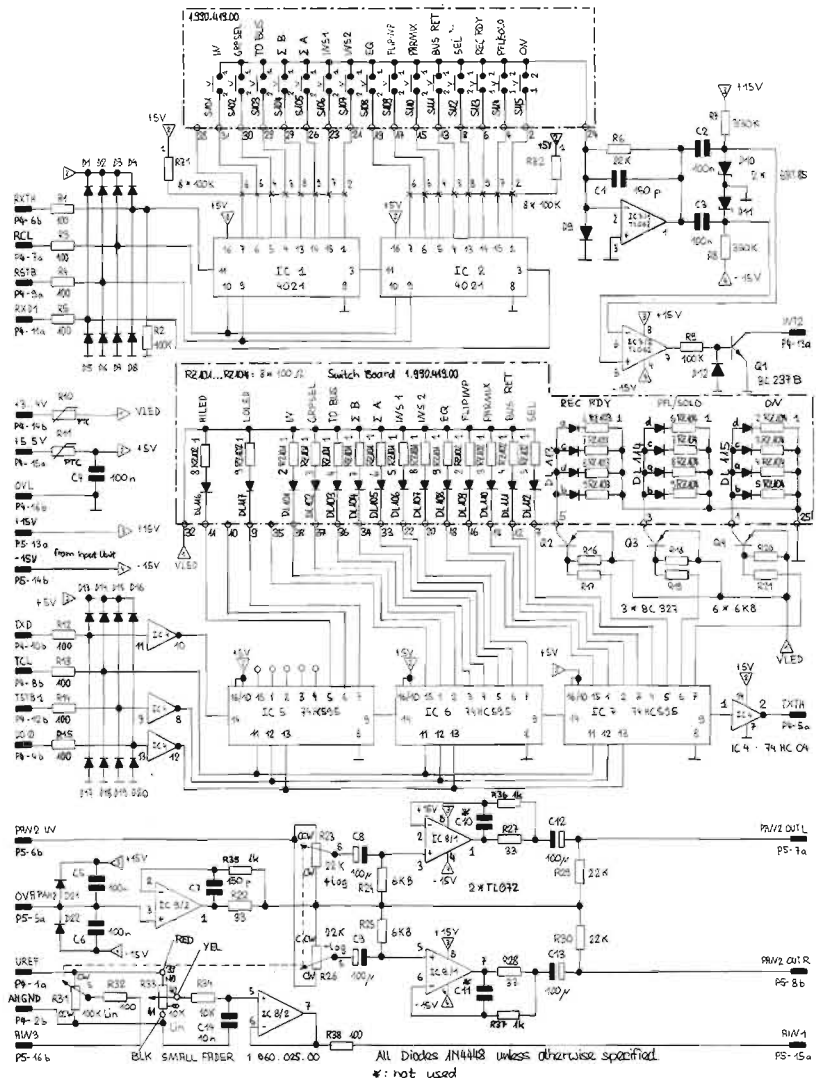
P	NO	NAME	REMARK	

				B=BUS
				O=CONNECTION
				S=SYMMETRIC
				I=INVERS
				AS=ASYMMETRIC

P4	01	UREF	+ 5V REFERENZ	B
P4	02	AN GND	ANALOG GROUND	B
P4	03	-	RES	
P4	04	DO 0	DATA OUT 0 (ENABLE)	
P4	05	TXTH	TRANSMIT DATA THROUGH	
P4	06	RXTH	RECEIVE DATA THROUGH	
P4	07	RCL	RECEIVE CLOCK	
P4	08	TCL	TRANSMIT CLOCK	
P4	09	RSTB	RECEIVE STROBE	
P4	10	TXD	TRANSMIT DATA	
P4	11	RXD 1	RECEIVE DATA 1	
P4	12	TSTB 1	TRANSMIT STROBE 1	
P4	13	INT 2	INTERUPT 2	
P4	14	+3..4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	15	+ 5.5V	+ SUPPLY	B
P4	16	0V-L	GROUND SIGN (LOGIC)	B
P5	01	OVA PAN1	GROUND SIGN PAN 1	
P5	02	B-L/PAN1-IN	PAN 1 IN (BAL LEFT IN)	
P5	03	B-L/PAN1-IN	PAN 1 IN / OUTPUT (BAL LEFT IN)	
P5	04	-	RES	
P5	05	OVA PAN2	GROUND SIGN PAN 2	
P5	06	B-R/PAN2-IN	PAN 2 IN (BAL RIGHT IN)	
P5	07	PAN2-OUT-L	PAN 2 OUT LEFT	
P5	08	PAN2-OUT-R	PAN 2 OUT RIGHT	
P5	09	FILM-OUT-S	OPTIONAL OUTPUT	
P5	10	FILM-OUT-C	OPTIONAL OUTPUT	
P5	11	FILM-OUT-R	OPTIONAL OUTPUT	
P5	12	FILM-OUT-L	OPTIONAL OUTPUT	
P5	13	+ 15V	+ SUPPLY FROM INPUT UNIT	
P5	14	- 15V	- SUPPLY FROM INPUT UNIT	
P5	15	A IN 1	OUTPUT ; TO MCU ANALOG IN 1	
P5	16	A IN 3	OUTPUT ; TO MCU ANALOG IN 3	

IN LINE UNIT

1.990.410.00

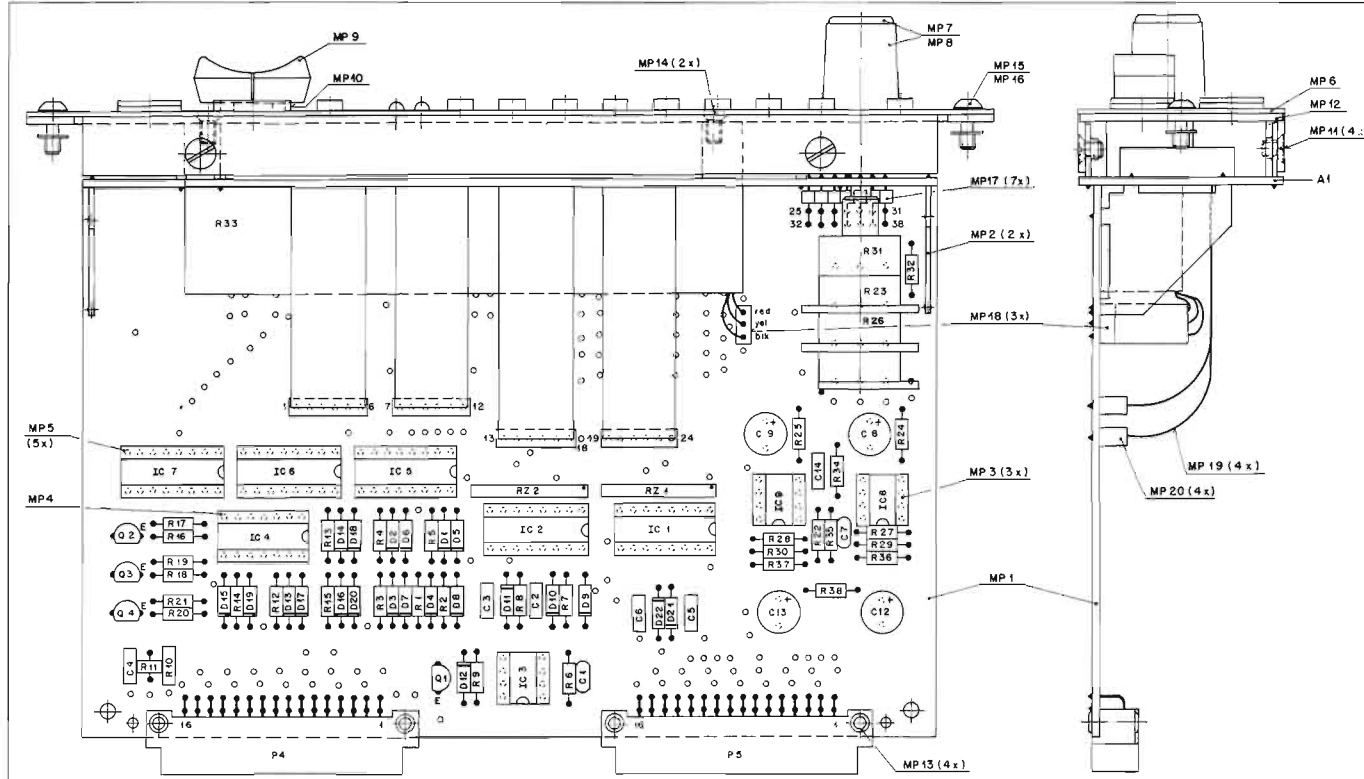


All Diodes 1N4148 unless otherwise specified.
 * : not used

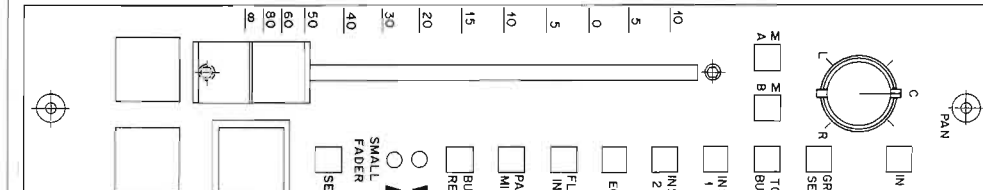
3.09.90 ad	INCLUDES 1.990.410.00	PAGE 1 OF 1
STUDER	IN LINE UNIT	1.990.410.00

IN LINE MODULE ESE

1.990.410.00



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
IC...	1	50.07.1021	4021	8-bit static shift register
IC...	2	50.07.1021	4021	8-bit static shift register
IC...	3	50.09.0119	T1062	Dual Op Amp/ low power/ J-FET input
IC...	4	50.17.1004	74HC04	Hex inverter
IC...	5	50.17.1995	74HC595	8-bit serial/para. shift register
IC...	6	50.17.1995	74HC595	8-bit serial/para. shift register
IC...	7	50.17.1995	74HC595	8-bit serial/para. shift register
IC...	8	50.09.0117	MC33078	Dual Op Amp/ low noise
01 IC...	8	50.09.0121	T1072BCP	Dual Op Amp/ low offset
02 IC...	8	50.09.0101	T1072 CP	Dual FET-Op Amp/ low noise
IC...	9	50.09.0117	MC33078	Dual Op Amp/ low noise
01 IC...	9	50.09.0121	T1072BCP	Dual Op Amp/ low offset
02 IC...	9	50.09.0101	T1072 CP	Dual FET-Op Amp/ low noise
MP...	1	1.990.410.11	1	IN-LINE PCB
MP...	2	1.990.100.01	2	Quarprintausätze
MP...	3	53.03.0166	3	IC-socket 8 pins
MP...	4	53.03.0167	1	IC-socket 14 pins
MP...	5	53.03.0168	5	IC-socket 16 pins
MP...	6	1.990.410.01	1	Frontschild IN-LINE
MP...	7	42.01.0233	1	Potiknopf
MP...	8	42.01.0257	1	Deckel zu Potiknopf
MP...	9	1.911.000.38	1	Faderkopf
MP...	10	1.990.000.01	1	Schutzkragen 12.5*12.5
MP...	11	21.01.2352	4	S-Schr., Zn, M3*4
MP...	12	1.990.410.02	1	Träger IN-LINE
MP...	13	28.99.0119	4	Nohrmitse
MP...	14	1.010.022.21	2	Linsenschr. spez. M3*4 sv fuer Faderbef. St
MP...	15	21.99.0175	2	S-Schr., SMOX, M3*6
MP...	16	24.16.3023	2	Wellensicherung 2.3
MP...	17	54.11.0131	7	Dual pin Stiftleiste (total 14 pins), Se
MP...	18	54.01.0020	3	Stiftleiste fuer Faderanschluss, Au
MP...	19	64.03.0506	4	Flachlabel konfektioniert 6 polig
MP...	20	54.10.3506	4	Buchsenleiste zu Flachlabel 6 polig
P...	1	0	not exist	
P...	2	0	not exist	
P...	3	0	not exist	
P...	4	54.11.2007	1*16 pin	Eurocard connector 1*16 pins
P...	5	54.11.2007	1*16 pin	Eurocard connector 1*16 pins
Q...	1	50.03.0436	BC 237 B	MPN Universal
Q...	2	50.03.0351	BC 327	PMP Standard, Ic=200mA, B=100
Q...	3	50.03.0351	BC 327	PMP Standard, Ic=200mA, B=100
Q...	4	50.03.0351	BC 327	PMP Standard, Ic=200mA, B=100
R...	1	57.11.3101	100 Ohm	
R...	2	57.11.3104	100 kOhm	
R...	3	57.11.3101	100 Ohm	
R...	4	57.11.3101	100 Ohm	
R...	5	57.11.3101	100 Ohm	
R...	6	57.11.3223	22 kOhm	
R...	7	57.11.3334	330 kOhm	
R...	8	57.11.3334	330 kOhm	
R...	9	57.11.3104	100 kOhm	
R...	10	57.92.7013	0.75 Ohm	
R...	11	57.99.0206	50 Ohm	0.5 W
R...	12	57.11.3101	100 Ohm	
R...	13	57.11.3101	100 Ohm	
R...	14	57.11.3101	100 Ohm	
R...	15	57.11.3101	100 Ohm	
R...	16	57.11.3682	6.8 kOhm	
R...	17	57.11.3682	6.8 kOhm	
R...	18	57.11.3682	6.8 kOhm	
R...	19	57.11.3682	6.8 kOhm	
R...	20	57.11.3682	6.8 kOhm	
R...	21	57.11.3682	6.8 kOhm	
R...	22	57.11.3330	33 Ohm	
R...	23	1.010.033.58	22 kOhm	*log potentiometer, comb. with R 26/ R 31
R...	24	57.11.3682	6.8 kOhm	
R...	25	57.11.3682	6.8 kOhm	
R...	26	57.11.3330	33 Ohm	-log potentiometer included in R23
R...	27	57.11.3330	33 Ohm	
R...	28	57.11.3330	33 Ohm	
R...	29	57.11.3223	22 kOhm	
R...	30	57.11.3223	22 kOhm	
R...	31	0	100 kOhm	1in potentiometer included in R23
R...	32	57.11.3101	100 Ohm	
R...	33	1.940.025.00	10 kOhm	1in small fader
R...	34	57.11.3103	10 kOhm	
R...	35	57.11.3102	1 kOhm	
R...	36	57.11.3102	1 kOhm	
R...	37	57.11.3102	1 kOhm	
R...	38	57.11.3101	100 Ohm	
RZ...	1	57.88.4104	100 kOhm	Resistor-network SIP 9, 8*100 k
RZ...	2	57.88.4104	100 kOhm	Resistor-network SIP 9, 8*100 k
(01)		90/09/14	-Better Noise and Offset	
(02)		91/04/26	-Better Noise , IC 8 , 9 : use only TL 072 II	
PE=			Polyester, EL=	Electrolytic, CER=Ceramic
MANUFACTURER:			MOT=	Motorola, TI=
			Texas Instruments, St=	Studer
1.990.410.00			IN-LINE UNIT	AB 90/04/2000
1.990.410.00			IN-LINE UNIT	AB 90/09/1401
1.990.410.00			IN-LINE UNIT	AB 91/04/2602

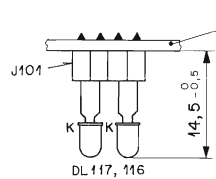
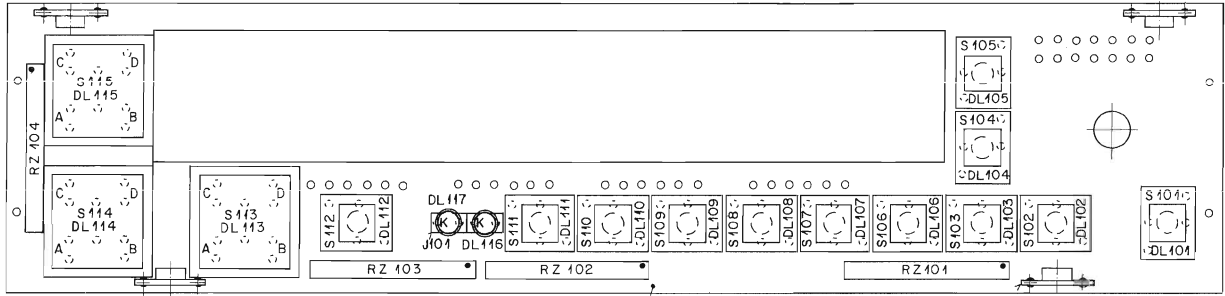


Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....	1	1.990.419.00	IN-LINE SWITCH BOARD	
C.....	1	59.34.4151	150 pF	CER
C.....	2	59.06.0104	100 nF	PE
C.....	3	59.06.0104	100 nF	PE
C.....	4	59.06.0104	100 nF	PE
C.....	5	59.06.0104	100 nF	PE
C.....	6	59.06.0104	100 nF	PE
C.....	7	59.34.4151	150 pF	CER
C.....	8	59.22.4101	100 uF	EL
C.....	9	59.22.4101	100 uF	EL
C.....	10	59.34.4151	150 pF	CER
C.....	10	0	not used	

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
D.....	1	50.04.0127	BA785	Schottky
D.....	2	50.04.0125	BA785	Schottky
D.....	3	50.04.0125	BA785	Schottky
D.....	4	50.04.0125	BA785	Schottky
D.....	5	50.04.0125	BA785	Schottky
D.....	6	50.04.0125	BA785	Schottky
D.....	7	50.04.0125	BA785	Schottky
D.....	8	50.04.0125	BA785	Schottky
D.....	9	50.04.0125	BA785	Schottky
D.....	10	50.04.0127	BA785	Schottky
D.....	11	50.04.0127	BA785	Schottky
D.....	12	50.04.0125	BA785	Schottky
D.....	13	50.04.0125	BA785	Schottky
D.....	14	50.04.0125	BA785	Schottky
D.....	15	50.04.0125	BA785	Schottky
D.....	16	50.04.0125	BA785	Schottky
D.....	17	50.04.0125	BA785	Schottky
D.....	18	50.04.0125	BA785	Schottky
D.....	19	50.04.0125	BA785	Schottky
D.....	20	50.04.0125	BA785	Schottky
D.....	21	50.04.0125	BA785	Schottky
D.....	22	50.04.0125	BA785	Schottky

IN LINE SWITCH BOARD

1.990.419.00



MP 101 MP 102 (4 x)

Änderung									
20.3.90									
Datum	Gez.	Gepr.	Ges.	Index					
Kopie für:									
Nummer: 1.990.419-00									

STUDER
REGENSDORF
ZÜRICH

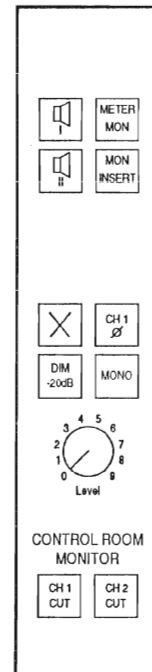
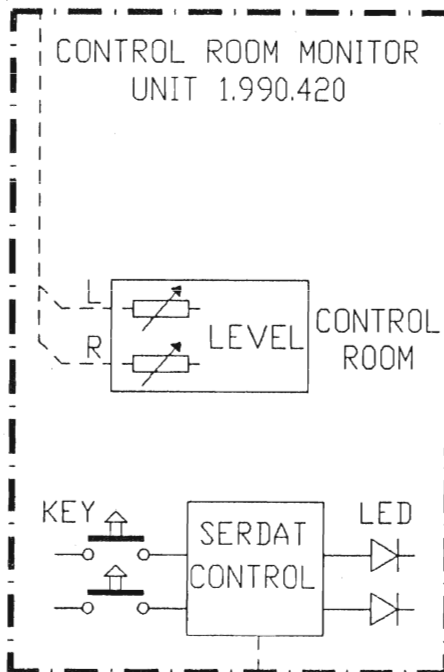
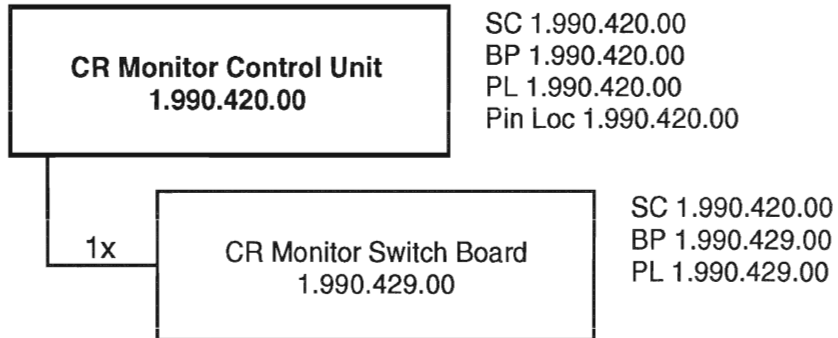
IN-LINE SWITCH
BOARD

Ad	..POS..	..REF.No...	DESCRIPTION.....	MANUFACTURER
DL..101	.	0	not used	see S 101
DL..102	.	0	not used	see S 102
DL..103	.	0	not used	see S 103
DL..104	.	0	not used	see S 104
DL..105	.	0	not used	see S 105
DL..106	.	0	not used	see S 106
DL..107	.	0	not used	see S 107
DL..108	.	0	not used	see S 108
DL..109	.	0	not used	see S 109
DL..110	.	0	not used	see S 110
DL..111	.	0	not used	see S 111
DL..112	.	0	not used	see S 112
DL..113	.	0	not used	see S 113
DL..114	.	0	not used	see S 114
DL..115	.	0	not used	see S 115
DL..116	50.04.2130		LY3360 LED 3.18mm gb	
DL..117	50.04.2130		LY3360 LED 3.18mm gb	
J...101	53.03.0231		LED-Socket	
MP..101	1.990.419.11	1 pcs	IN-LINE SWITCH PCB	St
MP..102	1.990.100.05	4 pcs	Querprinthalter	St
RZ..101	57.88.4101	100 Ohm	resistor-network SIP 9, 8*100 R	
RZ..102	57.88.4101	100 Ohm	resistor-network SIP 9, 8*100 R	
RZ..103	57.88.4101	100 Ohm	resistor-network SIP 9, 8*100 R	
RZ..104	57.88.4101	100 Ohm	resistor-network SIP 9, 8*100 R	
S...101	55.15.0622		Switch, 5mm, rd/rd IN	
S...102	55.15.0644		Switch, 5mm, ye/ye GRP SEL	
S...103	55.15.0604		Switch, 5mm, ye/tr TO BUS	
S...104	55.15.0604		Switch, 5mm, ye/tr SUN B	
S...105	55.15.0604		Switch, 5mm, ye/tr SUN A	
S...106	55.15.0605		Switch, 5mm, gn/tr INS 1	
S...107	55.15.0605		Switch, 5mm, gn/tr INS 2	
S...108	55.15.0605		Switch, 5mm, gn/tr EQ	
S...109	55.15.0602		Switch, 5mm, rd/tr FLIP IN	
S...110	55.15.0602		Switch, 5mm, rd/tr PAR MIX	
S...111	55.15.0602		Switch, 5mm, rd/tr BUS RET	
S...112	55.15.0605		Switch, 5mm, gn/tr SEL	
S...113	55.15.0722		Switch, 12mm, rd/rd RCD RDY	
S...114	55.15.0705		Switch, 12mm, gn/tr PFL/SOL	
S...115	55.15.0704		Switch, 12mm, ye/tr ON/OFF	

MANUFACTURER: St=Studer
1.990.419.00 IN-LINE SWITCH BOARD AB 89/09/2700

CR Monitor Control Unit

1.990.420.00



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

Pin location list

1.990.420

P	NO	NAME	REMARK	
-----			-----	
				B=BUS
				O=CONNECTION
				S=SYMMETRIC
				I=INVERS
				AS=ASYMMETRIC

P4	01A	0V-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	0V-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3..4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERUPT 0	
P4	05A	INT 1	INTERUPT 1	
P4	05B	INT 2	INTERUPT 2	
P4	06A	INT 3	INTERUPT 3	
P4	06B	INT 4	INTERUPT 4	
P4	07A	INT 5	INTERUPT 5	
P4	07B	INT 6	INTERUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	

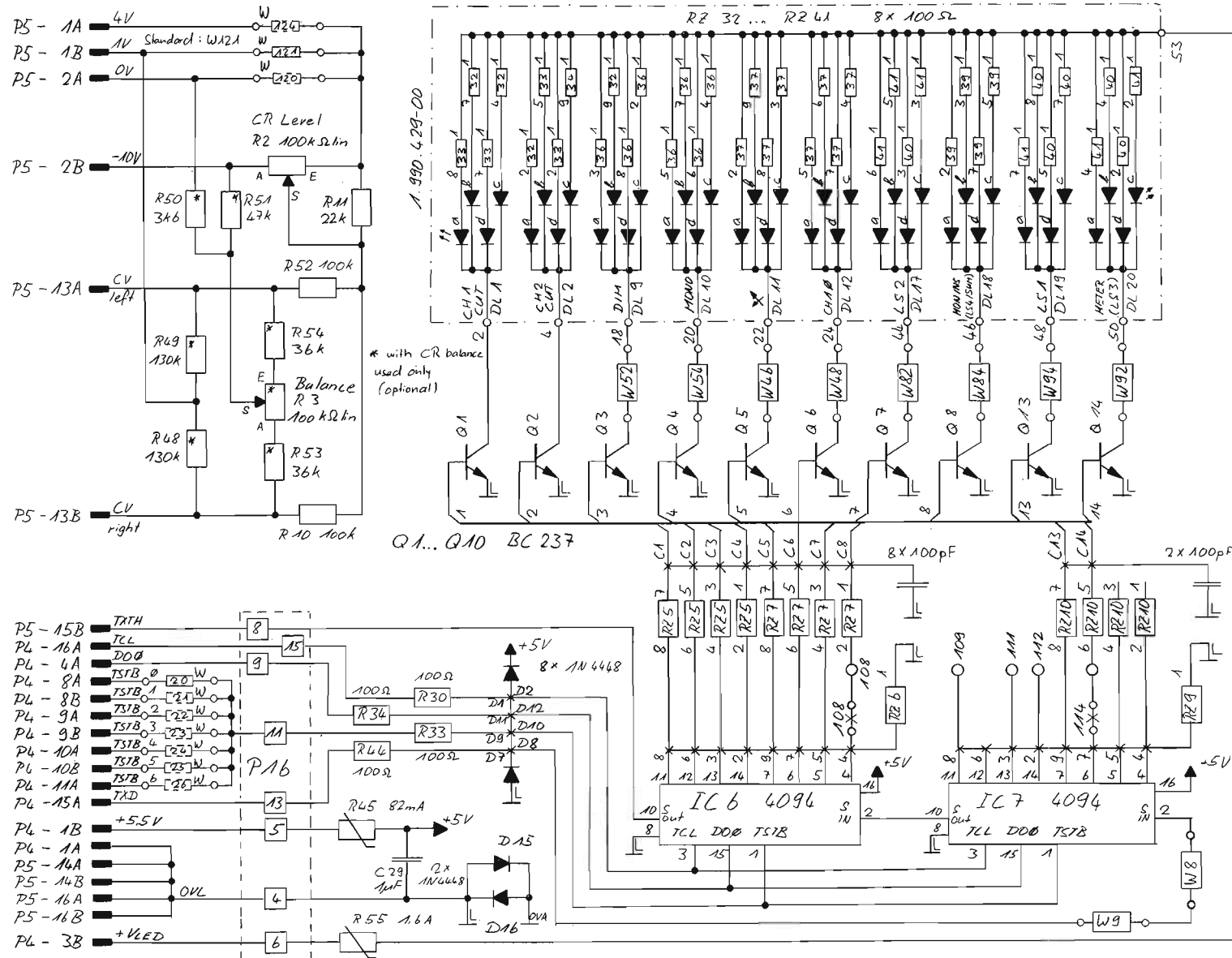
Pin location list

1.990.420

P5	01A	+4V	CONTROL VOLTAGE VCA		
P5	01B	+1V	CONTROL VOLTAGE VCA		
P5	02A	0V	CONTROL VOLTAGE VCA		
P5	02B	-10V	CONTROL VOLTAGE VCA		
P5	03A	-	N.C.		
P5	03B	-	N.C.		
P5	04A	-	N.C.		
P5	04B	-	N.C.		
P5	05A	-	N.C.		
P5	05B	-	N.C.		
P5	06A	-	N.C.		
P5	06B	-	N.C.		
P5	07A	-	N.C.		
P5	07B	-	N.C.		
P5	08A	-	N.C.		
P5	08B	-	N.C.		
P5	09A	-	N.C.		
P5	09B	-	N.C.		
P5	10A	-	N.C.		
P5	10B	-	N.C.		
P5	11A	-	N.C.		
P5	11B	-	N.C.		
P5	12A	-	N.C.		
P5	12B	-	N.C.		
P5	13A	CV-CR-L	CTRL.VOLTAGE CR LEVEL LEFT		
P5	13B	CV-CR-R	CTRL.VOLTAGE CR LEVEL RIGHT		
P5	14	0V-L	GROUND SIGN (LOGIC)	B	X X
P5	15A	RXTH	RECEIVE DATA THROUGH		
P5	15B	TXTH	TRANSMIT DATA THROUGH		
P5	16	0V-L	GROUND SIGN (LOGIC)	B	X X

CR MONITOR CONTROL UNIT

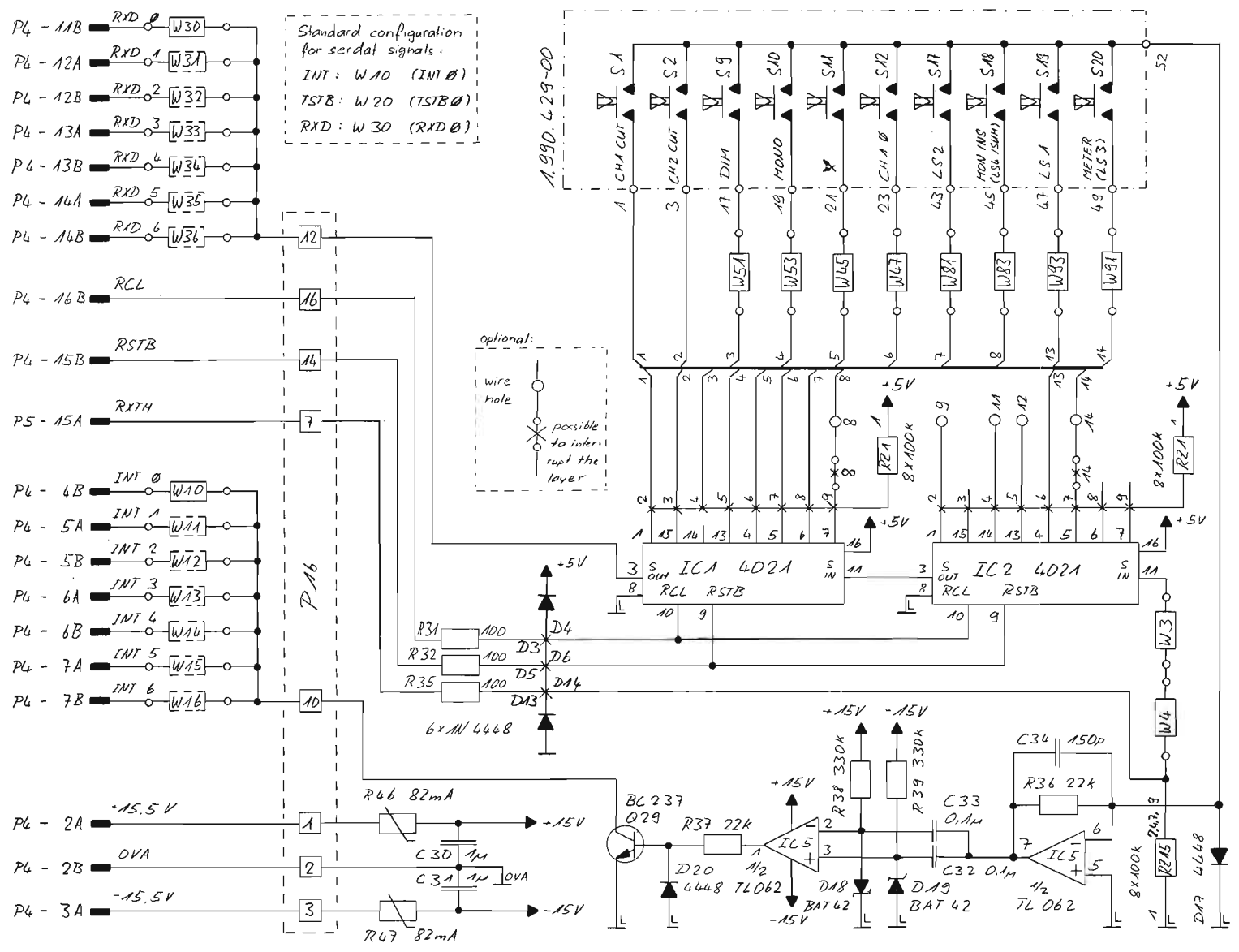
1.990.420.00



7.590 A.Schmid	INCL. SWITCH BOARD 1.990.429.00	PAGE 1 OF 2
STUDER	CR MONITOR CONTROL UNIT	SC 1.990.420-00

CR MONITOR CONTROL UNIT

1.990.420.00



Standard configuration for serdat signals:
 INT: W10 (INT 0)
 TSTB: W20 (TSTB 0)
 RXD: W30 (RXD 0)

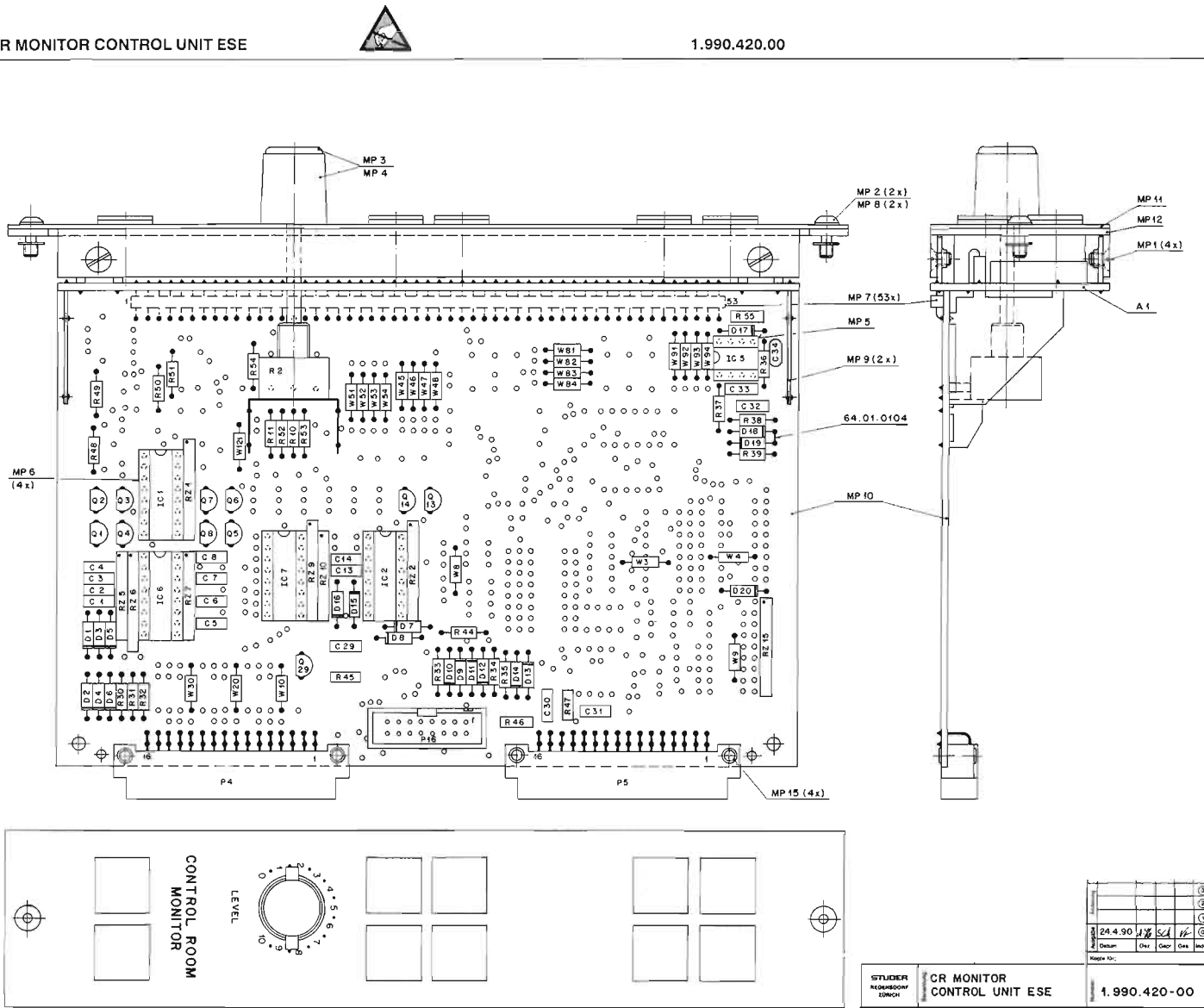
optional:
 wire hole
 possible to interrupt the layer

1.990.429-00

7.5.90 A.Schmid	INCL. SWITCH BOARD 1.990.429.00	PAGE 2 OF 2
STUDER	CR MONITOR CONTROL UNIT	SC 1.990.420-00

CR MONITOR CONTROL UNIT ESE

1.990.420.00



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A....1	1.990.429.00		CR MONITOR SWITCH BOARD	
C....1	59.34.4101	100 pF	CE	
C....2	59.34.4101	100 pF	CE	
C....3	59.34.4101	100 pF	CE	
C....4	59.34.4101	100 pF	CE	
C....5	59.34.4101	100 pF	CE	
C....6	59.34.4101	100 pF	CE	
C....7	59.34.4101	100 pF	CE	
C....8	59.34.4101	100 pF	CE	
C....13	59.34.4101	100 pF	CE	
C....14	59.34.4101	100 pF	CE	
C....29	59.06.0104	100 nF	PE	
C....30	59.06.0104	100 nF	PE	
C....31	59.06.0104	100 nF	PE	
C....32	59.06.0104	100 nF	PE	
C....33	59.06.0104	100 nF	PE	
C....34	59.34.7151	150 pF	CE	
D....1	50.04.0125	1M4448		
D....2	50.04.0125	1M4448		
D....3	50.04.0125	1M4448		
D....4	50.04.0125	1M4448		
D....5	50.04.0125	1M4448		
D....6	50.04.0125	1M4448		
D....7	50.04.0125	1M4448		
D....8	50.04.0125	1M4448		
D....9	50.04.0125	1M4448		
D....10	50.04.0125	1M4448		
D....11	50.04.0125	1M4448		
D....12	50.04.0125	1M4448		
D....13	50.04.0125	1M4448		
D....14	50.04.0125	1M4448		
D....15	50.04.0125	1M4448		
D....16	50.04.0125	1M4448		
D....17	50.04.0125	1M4448		
D....18	50.04.0127	BAT 42		
D....19	50.04.0127	BAT 42		
D....20	50.04.0125	1M4448		
IC....1	50.07.1021	CD4021	8-bit static shift register	
IC....2	50.07.1021	CD4021	8-bit static shift register	
IC....5	50.09.0139	TL 062	J FET dual op. amp.	
IC....6	50.07.0018	CD4094	shift and store bus register	
IC....7	50.07.0018	CD4094	shift and store bus register	
MP....1	21.01.2352	4 pcs	S-Schr. M3*4	
MP....2	24.16.3023	2 pcs	Wellensicherung 3mm	
MP....3	42.01.0233	1 pcs	Knebelknopf D15/A grau	
MP....4	42.01.0257	1 pcs	Dreieck halbrau	
MP....5	53.03.0166	1 pcs	IC-Socket 8-pol	
MP....6	53.03.0168	4 pcs	IC-Socket 16-pol	
MP....7	54.11.0125	53 pcs	Siffenleiste winke	
MP....8	1.010.022.21	2 pcs	Linsehschraube IS M3*8	
MP....9	1.990.100.01	2 pcs	Overprinttaetze	
MP....10	1.990.420.11	1 pcs	CR-MONITOR PCB	
MP....11	1.990.420.01	1 pcs	Frontschild CR-MONITOR CONTROL	
MP....12	1.990.420.02	1 pcs	Trigger Source Selector	
MP....13	1.990.420.04	1 pcs	Studer-Nr-Etlatte 10*20	
MP....14	43.01.0108	1 pcs	ESE-Schild	
MP....15	28.99.0139	4 pcs	Rohrleiste D2.5*0.15*10	
Q....1	50.03.0436	BC 237		
Q....2	50.03.0436	BC 237		
Q....3	50.03.0436	BC 237		
Q....4	50.03.0436	BC 237		
Q....5	50.03.0436	BC 237		
Q....6	50.03.0436	BC 237		
Q....7	50.03.0436	BC 237		
Q....8	50.03.0436	BC 237		
Q....13	50.03.0436	BC 237		
Q....14	50.03.0436	BC 237		
Q....29	50.03.0436	BC 237		
P....1	0	not used	see MP	
P....2	54.14.2002	16 pin	PCB ribbon connector	
P....4	54.11.2013	2*16 pin	eurocard-connector	
P....5	54.11.2013	2*16 pin	eurocard-connector	
R....2	1.010.039.58	100 k	Poti 20k lin (only used without balance)	
R....3	0	not used	used in balance version only (1.010.032-58)	
R....10	57.11.3104	100 kOhm	1W MF	
R....11	57.11.3223	22 kOhm	1W MF	
R....30	57.11.3101	100 Ohm	1k MF	
R....31	57.11.3101	100 Ohm	1k MF	
R....32	57.11.3101	100 Ohm	1k MF	
R....33	57.11.3101	100 Ohm	1k MF	
R....34	57.11.3101	100 Ohm	1k MF	
R....35	57.11.3101	100 Ohm	1k MF	
R....36	57.11.3223	22 kOhm	1W MF	
R....37	57.11.3223	22 kOhm	1W MF	
R....38	57.11.3334	330 kOhm	1W MF	
R....39	57.11.3334	330 kOhm	1W MF	
R....44	57.11.3101	100 Ohm	1k MF	
R....45	57.92.1820	82 mA	PTC 42 Ohm	
R....46	57.92.1820	82 mA	PTC 42 Ohm	
R....47	57.92.1820	82 mA	PTC 42 Ohm	
R....48	0	not used	used in balance version only (57113134)	

CR MONITOR CONTROL UNIT ESE



1.990.420.00

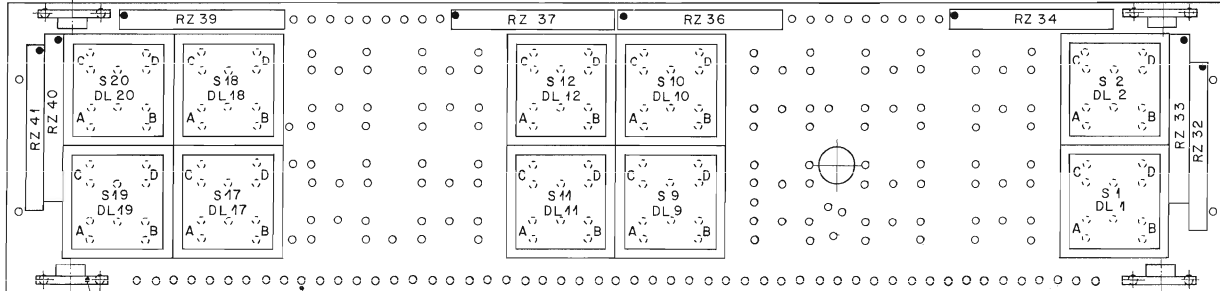
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R....49	.	0	not used	used in balance version only (57113134)
R....50	.	0	not used	used in balance version only (57113362)
R....51	.	0	not used	used in balance version only (57113473)
R....52	57.11.3104	100 kOhm	1% MF	
R....53	.	0	not used	used in balance version only (57113363)
R....54	.	0	not used	used in balance version only (57113363)
R....55	57.92.7016	1.6 A	R-PTC 0.22 Ohm	
W....3	57.11.3000	0 Ohm	wire bridge	RXTH to IC 2
W....4	57.11.3000	0 Ohm	wire bridge	RXTH to W 3
W....8	57.11.3000	0 Ohm	wire bridge	TXD to IC 7
W....9	57.11.3000	0 Ohm	wire bridge	TXD to W 8
W....10	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (INT 0)
W....11	.	0	not used	wire bridge SERDAT #1 INT 1 57113000
W....12	.	0	not used	wire bridge SERDAT #2 INT 2 57113000
W....13	.	0	not used	wire bridge SERDAT #3 INT 3 57113000
W....14	.	0	not used	wire bridge SERDAT #4 INT 4 57113000
W....15	.	0	not used	wire bridge SERDAT #5 INT 5 57113000
W....16	.	0	not used	wire bridge SERDAT #6 INT 6 57113000
W....20	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (TSTB 0)
W....21	.	0	not used	wire bridge SERDAT #1 TSTB 1 57113000
W....22	.	0	not used	wire bridge SERDAT #2 TSTB 2 57113000
W....23	.	0	not used	wire bridge SERDAT #3 TSTB 3 57113000
W....24	.	0	not used	wire bridge SERDAT #4 TSTB 4 57113000
W....25	.	0	not used	wire bridge SERDAT #5 TSTB 5 57113000
W....26	.	0	not used	wire bridge SERDAT #6 TSTB 6 57113000
W....30	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (RXD 0)
W....31	.	0	not used	wire bridge SERDAT #1 RXD 1 57113000
W....32	.	0	not used	wire bridge SERDAT #2 RXD 2 57113000
W....33	.	0	not used	wire bridge SERDAT #3 RXD 3 57113000
W....34	.	0	not used	wire bridge SERDAT #4 RXD 4 57113000
W....35	.	0	not used	wire bridge SERDAT #5 RXD 5 57113000
W....36	.	0	not used	wire bridge SERDAT #6 RXD 6 57113000
W....45	57.11.3000	0 Ohm	wire bridge	
W....46	57.11.3000	0 Ohm	wire bridge	
W....47	57.11.3000	0 Ohm	wire bridge	
W....48	57.11.3000	0 Ohm	wire bridge	
W....51	57.11.3000	0 Ohm	wire bridge	
W....52	57.11.3000	0 Ohm	wire bridge	
W....53	57.11.3000	0 Ohm	wire bridge	
W....54	57.11.3000	0 Ohm	wire bridge	
W....81	57.11.3000	0 Ohm	wire bridge	
W....82	57.11.3000	0 Ohm	wire bridge	
W....83	57.11.3000	0 Ohm	wire bridge	
W....84	57.11.3000	0 Ohm	wire bridge	
W....91	57.11.3000	0 Ohm	wire bridge	
W....92	57.11.3000	0 Ohm	wire bridge	
W....93	57.11.3000	0 Ohm	wire bridge	
W....94	57.11.3000	0 Ohm	wire bridge	
W....120	.	0	not used	used only for CR LEVEL -100dB...+0dB
W....121	57.11.3000	0 Ohm	wire bridge	CR LEVEL -100dB...+10dB
W....124	.	0	not used	only used for CR LEVEL -100dB...+40dB
RZ....1	57.88.4104	100 kOhm	2%	resistor-network
RZ....2	57.88.4104	100 kOhm	2%	resistor-network
RZ....5	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....6	57.88.4104	100 kOhm	2%	resistor-network
RZ....7	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....9	57.88.4104	100 kOhm	2%	resistor-network
RZ....10	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....15	57.88.4104	100 kOhm	2%	resistor-network

CE=Ceramic, PE=Polyester
MF=Metal Film

1.990.420.00 CR MONITOR CONTROL UNIT SCA90/12/0500

CR MONITOR SWITCH BOARD

1.990.429.00



MP1 (4 x)

MP 2

Alphabet					③
Arbeitsnr.					②
Datum	6.3.90	Gez.	Gspr.	Ges.	①
Index					④

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung CR MONITOR SWITCH BOARD	Nummer: 1.990.429-00
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Ad .POS.. REF.No... DESCRIPTION.....MANUFACTURER

DL...1	. . 0	not used	see S 01	
DL...2	. . 0	not used	see S 02	
DL...9	. . 0	not used	see S 09	
DL...10	. . 0	not used	see S 10	
DL...11	. . 0	not used	see S 11	
DL...12	. . 0	not used	see S 12	
DL...17	. . 0	not used	see S 17	
DL...18	. . 0	not used	see S 18	
DL...19	. . 0	not used	see S 19	
DL...20	. . 0	not used	see S 20	
MP...1	1.990.100.05	4 pcs	Querprinthalter	
MP...2	1.990.429.11	1 pcs	CR MONITOR SWITCH PCB	
MP...3	1.990.429.04	1 pcs	Nr-Etikette	
S....1	55.15.0702		Taste 1*A,12mm RT/Trans	CH I CUT
S....2	55.15.0702		Taste 1*A,12mm RT/Trans	CH II CUT
S....9	55.15.0722		Taste 1*A,12mm RT/RT	DIM - 20dB
S....10	55.15.0705		Taste 1*A,12mm GN/Trans	MONO
S....11	55.15.0705		Taste 1*A,12mm GN/Trans	Kanalvert.
S....12	55.15.0705		Taste 1*A,12mm GN/Trans	CH I Phase
S....17	55.15.0704		Taste 1*A,12mm GB/Trans	speaker ALT.
S....18	55.15.0704		Taste 1*A,12mm GB/Trans	speaker MINI
S....19	55.15.0704		Taste 1*A,12mm GB/Trans	speaker I
S....20	55.15.0704		Taste 1*A,12mm GB/Trans	speaker II
RZ...32	57.88.4101	100 Ohm	2% ,8*	
RZ...33	57.88.4101	100 Ohm	2% ,8*	
RZ...34	57.88.4101	100 Ohm	2% ,8*	
RZ...36	57.88.4101	100 Ohm	2% ,8*	
RZ...37	57.88.4101	100 Ohm	2% ,8*	
RZ...39	57.88.4101	100 Ohm	2% ,8*	
RZ...40	57.88.4101	100 Ohm	2% ,8*	
RZ...41	57.88.4101	100 Ohm	2% ,8*	

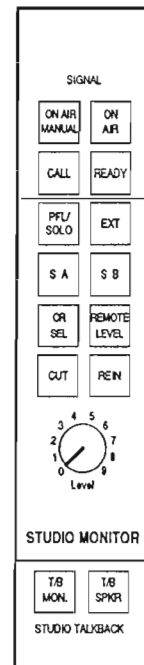
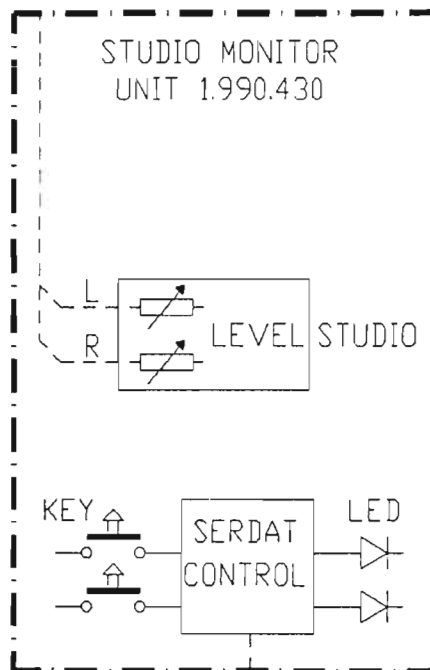
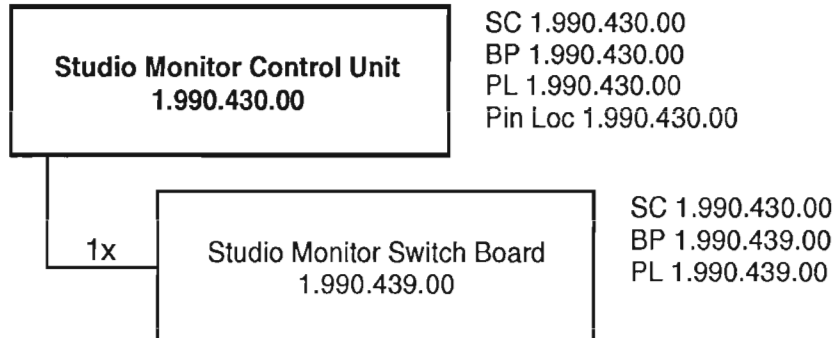
CER=Ceramic, PE=Polyester
MF=Metal Film, PMG=Cermet

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

1.990.429.00 CR MONITOR SWITCH BOARD SCA88/12/1600

Studio Monitor Control Unit

1.990.430.00



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

Pin location list

1.990.430

P	NO	NAME	REMARK	

				B=BUS
				O=CONNECTION
				S=SYMMETRIC
				I=INVERS
				AS=ASYMMETRIC

P4	01A	0V-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	0V-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3..4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERUPT 0	
P4	05A	INT 1	INTERUPT 1	
P4	05B	INT 2	INTERUPT 2	
P4	06A	INT 3	INTERUPT 3	
P4	06B	INT 4	INTERUPT 4	
P4	07A	INT 5	INTERUPT 5	
P4	07B	INT 6	INTERUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	

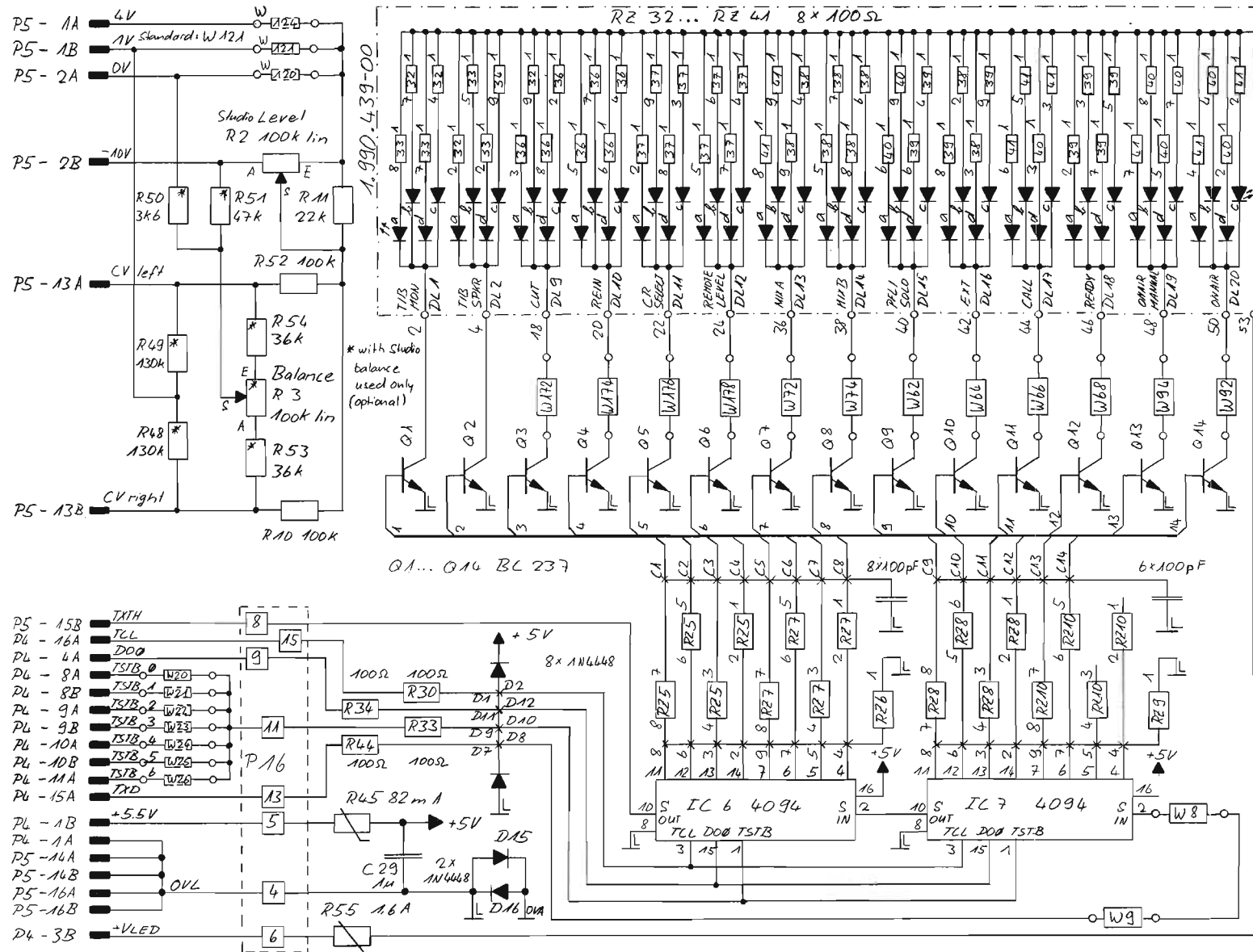
Pin location list

1.990.430

P5	01A	+4V	CONTROL VOLTAGE VCA		
P5	01B	+1V	CONTROL VOLTAGE VCA		
P5	02A	0V	CONTROL VOLTAGE VCA		
P5	02B	-10V	CONTROL VOLTAGE VCA		
P5	03A	-	N.C.		
P5	03B	-	N.C.		
P5	04A	-	N.C.		
P5	04B	-	N.C.		
P5	05A	-	N.C.		
P5	05B	-	N.C.		
P5	06A	-	N.C.		
P5	06B	-	N.C.		
P5	07A	-	N.C.		
P5	07B	-	N.C.		
P5	08A	-	N.C.		
P5	08B	-	N.C.		
P5	09A	-	N.C.		
P5	09B	-	N.C.		
P5	10A	-	N.C.		
P5	10B	-	N.C.		
P5	11A	-	N.C.		
P5	11B	-	N.C.		
P5	12A	-	N.C.		
P5	12B	-	N.C.		
P5	13A	CV-STUDIO-L	CTRL.VOLT.STUDIO LEVEL LEFT		
P5	13B	CV-STUDIO-R	CTRL.VOLT.STUDIO LEVEL RIGHT		
P5	14	0V-L	GROUND SIGN (LOGIC)	B	X X
P5	15A	RXTH	RECEIVE DATA THROUGH		
P5	15B	TXTH	TRANSMIT DATA THROUGH		
P5	16	0V-L	GROUND SIGN (LOGIC)	B	X X

STUDIO MONITOR CONTROL UNIT

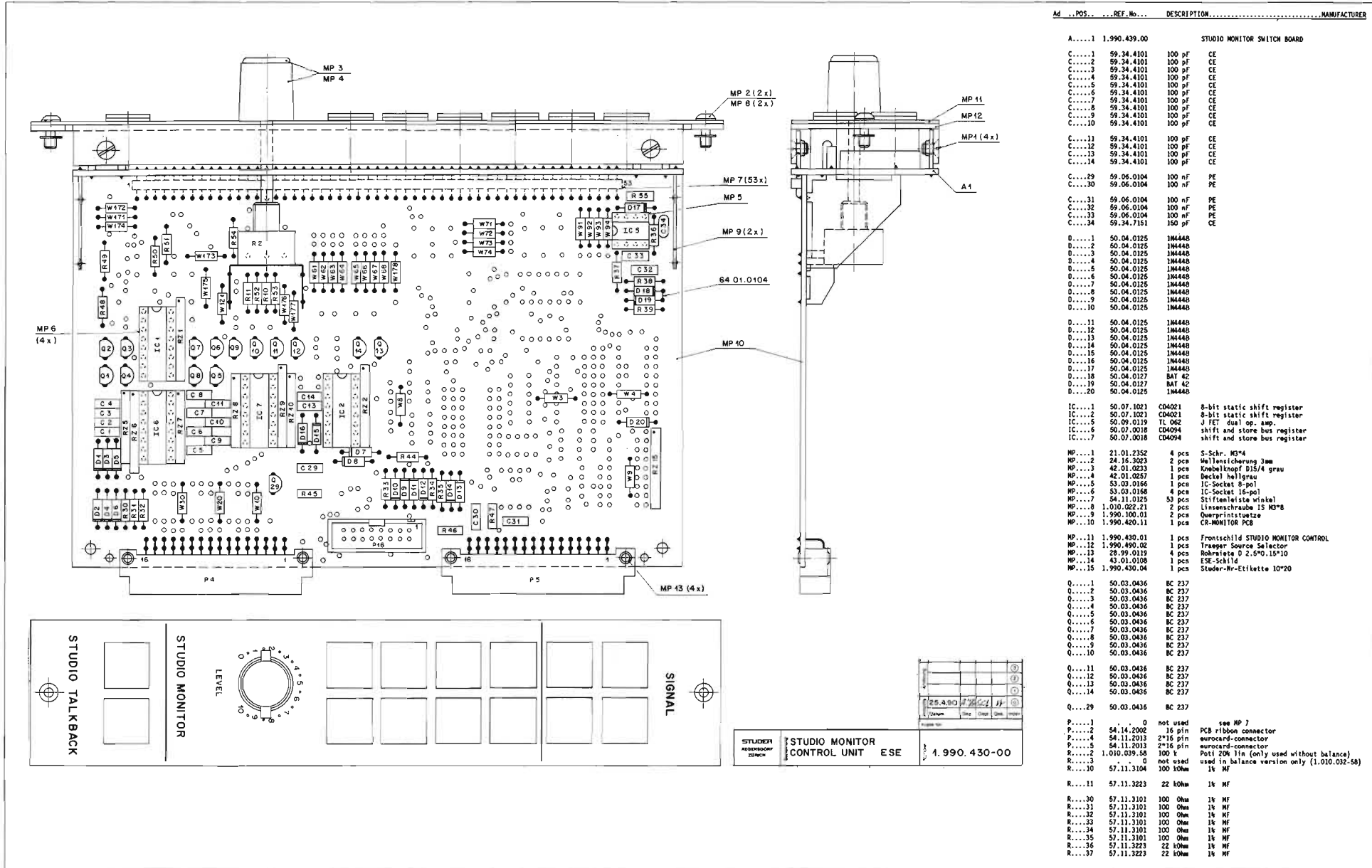
1.990.430.00



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

STUDIO MONITOR CONTROL UNIT ESE

1.990.430.00



Ad.	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A....1		1.990.439.00	STUDIO MONITOR SWITCH BOARD	
C.....1		59.34.4101	100 pF	CE
C.....2		59.34.4101	100 pF	CE
C.....3		59.34.4101	100 pF	CE
C.....4		59.34.4101	100 pF	CE
C.....5		59.34.4101	100 pF	CE
C.....6		59.34.4101	100 pF	CE
C.....7		59.34.4101	100 pF	CE
C.....8		59.34.4101	100 pF	CE
C.....9		59.34.4101	100 pF	CE
C.....10		59.34.4101	100 pF	CE
C.....11		59.34.4101	100 pF	CE
C.....12		59.34.4101	100 pF	CE
C.....13		59.34.4101	100 pF	CE
C.....14		59.34.4101	100 pF	CE
C.....29		59.06.0104	100 nF	PE
C.....30		59.06.0104	100 nF	PE
C.....31		59.06.0104	100 nF	PE
C.....32		59.06.0104	100 nF	PE
C.....33		59.06.0104	100 nF	PE
C.....34		59.34.7151	150 pF	CE
D.....1		50.04.0125	1M4448	
D.....2		50.04.0125	1M4448	
D.....3		50.04.0125	1M4448	
D.....4		50.04.0125	1M4448	
D.....5		50.04.0125	1M4448	
D.....6		50.04.0125	1M4448	
D.....7		50.04.0125	1M4448	
D.....8		50.04.0125	1M4448	
D.....9		50.04.0125	1M4448	
D.....10		50.04.0125	1M4448	
D.....11		50.04.0125	1M4448	
D.....12		50.04.0125	1M4448	
D.....13		50.04.0125	1M4448	
D.....14		50.04.0125	1M4448	
D.....15		50.04.0125	1M4448	
D.....16		50.04.0125	1M4448	
D.....17		50.04.0125	1M4448	
D.....18		50.04.0127	BAT 42	
D.....19		50.04.0127	BAT 42	
D.....20		50.04.0125	1M4448	
IC.....1		50.07.1021	CD4021	8-bit static shift register
IC.....2		50.07.1023	CD4021	8-bit static shift register
IC.....5		50.09.0119	TL 062	1 FET dual op. amp.
IC.....6		50.07.0018	CD4094	shift and store bus register
IC.....7		50.07.0018	CD4094	shift and store bus register
MP.....1		21.01.2352	4 pcs	S-Schr. M3*4
MP.....2		24.16.3023	2 pcs	Welleneicherung 3mm
MP.....3		42.01.0233	1 pcs	Knobellknopf Ø15/4 grau
MP.....4		42.01.0257	1 pcs	Deckel hellgrau
MP.....5		53.03.0166	1 pcs	IC-Socket 8-pol
MP.....6		53.03.0168	4 pcs	IC-Socket 16-pol
MP.....7		54.11.0125	53 pcs	Stiftenleiste winkel
MP.....8		1.010.022.21	2 pcs	Linienerschraube IS M3*8
MP.....9		1.990.100.01	2 pcs	Overprintstempel
MP.....10		1.990.420.11	1 pcs	CR-MONITOR PCB
MP.....11		1.990.430.01	1 pcs	Frontschild STUDIO MONITOR CONTROL
MP.....12		1.990.490.02	1 pcs	Träger Source Selector
MP.....13		28.99.0119	4 pcs	Rohrleiste D 2,5*0,15*10
MP.....14		43.01.0108	1 pcs	ESE-Schild
MP.....15		1.990.430.04	1 pcs	Stücker-Br-Etikette 10*20
Q.....1		50.03.0436	BC 237	
Q.....2		50.03.0436	BC 237	
Q.....3		50.03.0436	BC 237	
Q.....4		50.03.0436	BC 237	
Q.....5		50.03.0436	BC 237	
Q.....6		50.03.0436	BC 237	
Q.....7		50.03.0436	BC 237	
Q.....8		50.03.0436	BC 237	
Q.....9		50.03.0436	BC 237	
Q.....10		50.03.0436	BC 237	
Q.....11		50.03.0436	BC 237	
Q.....12		50.03.0436	BC 237	
Q.....13		50.03.0436	BC 237	
Q.....14		50.03.0436	BC 237	
Q.....29		50.03.0436	BC 237	
P.....1		0	not used	see MP 7
P.....2		54.14.2002	16 pin	PCB ribbon connector
P.....4		54.11.2013	2*16 pin	eurocard-connector
P.....5		54.11.2013	2*16 pin	eurocard-connector
R.....2		1.010.039.58	100 k	Poti 20k 1in (only used without balance)
R.....3		0	not used	used in balance version only (1.010.032-58)
R.....10		57.11.3104	100 kOhm	1k MF
R.....11		57.11.3223	22 kOhm	1k MF
R.....30		57.11.3101	100 Ohm	1k MF
R.....31		57.11.3101	100 Ohm	1k MF
R.....32		57.11.3101	100 Ohm	1k MF
R.....33		57.11.3101	100 Ohm	1k MF
R.....34		57.11.3101	100 Ohm	1k MF
R.....35		57.11.3101	100 Ohm	1k MF
R.....36		57.11.3223	22 kOhm	1k MF
R.....37		57.11.3223	22 kOhm	1k MF



STUDIO MONITOR CONTROL UNIT ESE

1.990.430.00

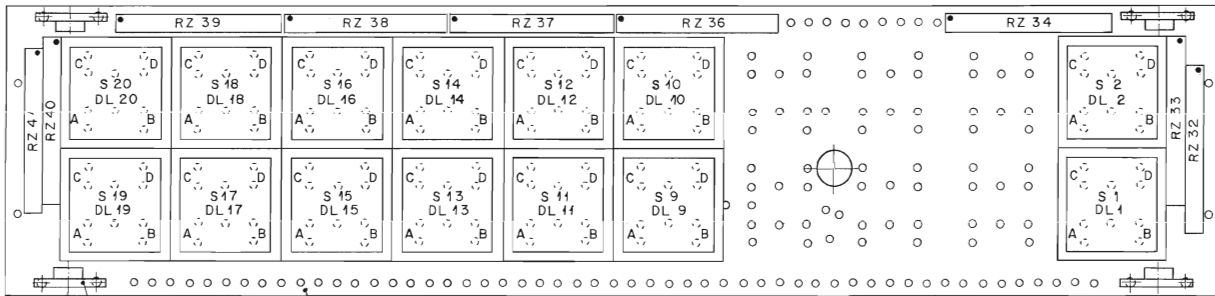
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R....38		57.11.3334	330 kOhm	1% MF
R....39		57.11.3334	330 kOhm	1% MF
R....44		57.11.3101	100 Ohm	1% MF
R....45		57.92.1820	82 mA	PTC 42 Ohm
R....46		57.92.1820	82 mA	PTC 42 Ohm
R....47		57.92.1820	82 mA	PTC 42 Ohm
R....48		. . . 0	not used	used in balance version only (57113134)
R....49		. . . 0	not used	used in balance version only (57113134)
R....50		. . . 0	not used	used in balance version only (57113362)
R....51		. . . 0	not used	used in balance version only (57113473)
R....52		57.11.3104	100 kOhm	1% MF
R....53		. . . 0	not used	used in balance version only (57113363)
R....54		. . . 0	not used	used in balance version only (57113363)
R....55		57.92.7016	1.6 A	R-PTC 0.22 Ohm
W....3		57.11.3000	0 Ohm	wire bridge RXTH to IC 2
W....4		57.11.3000	0 Ohm	wire bridge RXTH to W 3
W....8		57.11.3000	0 Ohm	wire bridge TXD to IC 7
W....9		57.11.3000	0 Ohm	wire bridge TXD to W 8
W....10		57.11.3000	0 Ohm	wire bridge SERDAT #0 (INT 0)
W....11		. . . 0	not used	wire bridge SERDAT #1 INT 1 57113000
W....12		. . . 0	not used	wire bridge SERDAT #2 INT 2 57113000
W....13		. . . 0	not used	wire bridge SERDAT #3 INT 3 57113000
W....14		. . . 0	not used	wire bridge SERDAT #4 INT 4 57113000
W....15		. . . 0	not used	wire bridge SERDAT #5 INT 5 57113000
W....16		. . . 0	not used	wire bridge SERDAT #6 INT 6 57113000
W....20		57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSTB 0)
W....21		. . . 0	not used	wire bridge SERDAT #1 TSTB 1 57113000
W....22		. . . 0	not used	wire bridge SERDAT #2 TSTB 2 57113000
W....23		. . . 0	not used	wire bridge SERDAT #3 TSTB 3 57113000
W....24		. . . 0	not used	wire bridge SERDAT #4 TSTB 4 57113000
W....25		. . . 0	not used	wire bridge SERDAT #5 TSTB 5 57113000
W....26		. . . 0	not used	wire bridge SERDAT #6 TSTB 6 57113000
W....30		57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)
W....31		. . . 0	not used	wire bridge SERDAT #1 RXD 1 57113000
W....32		. . . 0	not used	wire bridge SERDAT #2 RXD 2 57113000
W....33		. . . 0	not used	wire bridge SERDAT #3 RXD 3 57113000
W....34		. . . 0	not used	wire bridge SERDAT #4 RXD 4 57113000
W....35		. . . 0	not used	wire bridge SERDAT #5 RXD 5 57113000
W....36		. . . 0	not used	wire bridge SERDAT #6 RXD 6 57113000
W....61		57.11.3000	0 Ohm	wire bridge
W....62		57.11.3000	0 Ohm	wire bridge
W....63		57.11.3000	0 Ohm	wire bridge
W....64		57.11.3000	0 Ohm	wire bridge
W....65		57.11.3000	0 Ohm	wire bridge
W....66		57.11.3000	0 Ohm	wire bridge
W....67		57.11.3000	0 Ohm	wire bridge
W....68		57.11.3000	0 Ohm	wire bridge
W....71		57.11.3000	0 Ohm	wire bridge
W....72		57.11.3000	0 Ohm	wire bridge
W....73		57.11.3000	0 Ohm	wire bridge
W....74		57.11.3000	0 Ohm	wire bridge
W....91		57.11.3000	0 Ohm	wire bridge
W....92		57.11.3000	0 Ohm	wire bridge
W....93		57.11.3000	0 Ohm	wire bridge
W....94		57.11.3000	0 Ohm	wire bridge
W....171		57.11.3000	0 Ohm	wire bridge
W....172		57.11.3000	0 Ohm	wire bridge
W....173		57.11.3000	0 Ohm	wire bridge
W....174		57.11.3000	0 Ohm	wire bridge
W....175		57.11.3000	0 Ohm	wire bridge
W....176		57.11.3000	0 Ohm	wire bridge
W....177		57.11.3000	0 Ohm	wire bridge
W....178		57.11.3000	0 Ohm	wire bridge
W....120		. . . 0	not used	used only for CR LEVEL -100dB...+0dB
W....121		57.11.3000	0 Ohm	wire bridge CR LEVEL -100dB...+10dB
W....124		. . . 0	not used	only used for CR LEVEL -100dB...+40dB
RZ....1		57.88.4104	100 kOhm	2% resistor-network
RZ....2		57.88.4104	100 kOhm	2% resistor-network
RZ....5		57.88.2682	6.8 kOhm	2% resistor-network
RZ....6		57.88.4104	100 kOhm	2% resistor-network
RZ....7		57.88.2682	6.8 kOhm	2% resistor-network
RZ....8		57.88.2682	6.8 kOhm	2% resistor-network
RZ....9		57.88.4104	100 kOhm	2% resistor-network
RZ....10		57.88.2682	6.8 kOhm	2% resistor-network
RZ....15		57.88.4104	100 kOhm	2% resistor-network

CE=Ceramic, PE=Polyester
MF=Metal Film

1.990.430.00 STUDIO MONITOR CONTROL UNIT SCA90/12/0500

STUDIO MONITOR SWITCH BOARD

1.990.439.00



MP1 (4x)

MP2

Abgegeben									
Angenommen	6.3.90	HAH	SEA	HA					
Datum		Gez.	Gepr.	Ges.	Index				

STUDER REGENSDORF ZÜRICH	Bemerkung:	STUDIO MONITOR SWITCH BOARD
Kopie für:		Nummer: 1.990.439-00

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

DL...1	. . 0	not used	see S 01
DL...2	. . 0	not used	see S 02
DL...9	. . 0	not used	see S 09
DL...10	. . 0	not used	see S 10
DL...11	. . 0	not used	see S 11
DL...12	. . 0	not used	see S 12
DL...13	. . 0	not used	see S 13
DL...14	. . 0	not used	see S 14
DL...15	. . 0	not used	see S 15
DL...16	. . 0	not used	see S 16
DL...17	. . 0	not used	see S 17
DL...18	. . 0	not used	see S 18
DL...19	. . 0	not used	see S 19
DL...20	. . 0	not used	see S 20
MP...1	1.990.100.05	4 pcs	Querprinthalter
MP...2	1.990.429.11	1 pcs	CR MONITOR SWITCH PCB
MP...3	1.990.439.04	1 pcs	Nr-Etikette 5*20
S....1	55.15.0722		Taste 1*A,12mm RT/RT T/B MON
S....2	55.15.0722		Taste 1*A,12mm RT/RT T/B SPKR
S....9	55.15.0702		Taste 1*A,12mm RT/Trans CUT
S....10	55.15.0705		Taste 1*A,12mm GN/Trans REIN
S....11	55.15.0704		Taste 1*A,12mm GB/Trans CR SELECT
S....12	55.15.0705		Taste 1*A,12mm GN/Trans REMOTE LEVEL
S....13	55.15.0704		Taste 1*A,12mm GB/Trans MIX A
S....14	55.15.0704		Taste 1*A,12mm GB/Trans MIX B
S....15	55.15.0704		Taste 1*A,12mm GB/Trans PFL/SOLO
S....16	55.15.0704		Taste 1*A,12mm GB/Trans EXT.
S....17	55.15.0704		Taste 1*A,12mm GB/Trans CALL
S....18	55.15.0705		Taste 1*A,12mm GN/Trans READY
S....19	55.15.0702		Taste 1*A,12mm RT/Trans ON AIR MANUAL
S....20	55.15.0722		Taste 1*A,12mm RT/RT ON AIR
RZ...32	57.88.4101	100 Ohm	2% ,8*
RZ...33	57.88.4101	100 Ohm	2% ,8*
RZ...34	57.88.4101	100 Ohm	2% ,8*
RZ...36	57.88.4101	100 Ohm	2% ,8*
RZ...37	57.88.4101	100 Ohm	2% ,8*
RZ...38	57.88.4101	100 Ohm	2% ,8*
RZ...39	57.88.4101	100 Ohm	2% ,8*
RZ...40	57.88.4101	100 Ohm	2% ,8*
RZ...41	57.88.4101	100 Ohm	2% ,8*

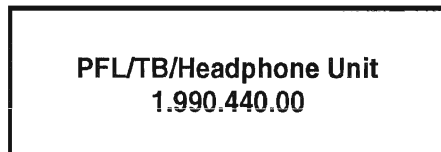
CER=Ceramic, PE=Polyester
MF=Metal Film, PMG=Cermet

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

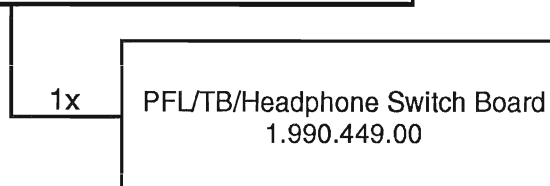
1.990.439.00 STUDIO MONITOR SWITCH BOARD SCA89/07/0500

PFL/Talk Back/Headphone Unit

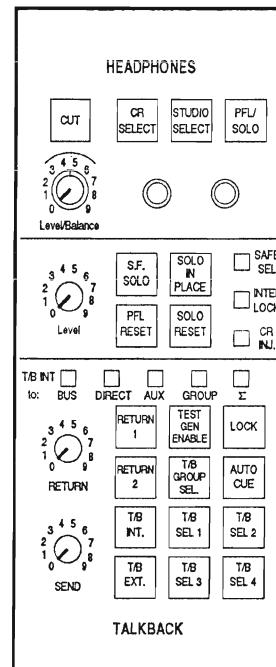
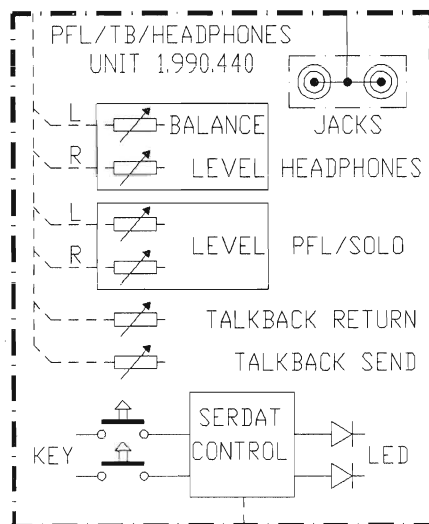
1.990.440.00



SC 1.990.440.00
BP 1.990.440.00
PL 1.990.440.00
Pin Loc 1.990.440.00



SC 1.990.440.00
BP 1.990.449.00
PL 1.990.449.00



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

Pin location list

1.990.440

P	NO	NAME	REMARK	
-----				B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC -----
P4	01A	0V-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	0V-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3..4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERUPT 0	
P4	05A	INT 1	INTERUPT 1	
P4	05B	INT 2	INTERUPT 2	
P4	06A	INT 3	INTERUPT 3	
P4	06B	INT 4	INTERUPT 4	
P4	07A	INT 5	INTERUPT 5	
P4	07B	INT 6	INTERUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	

Pin location list

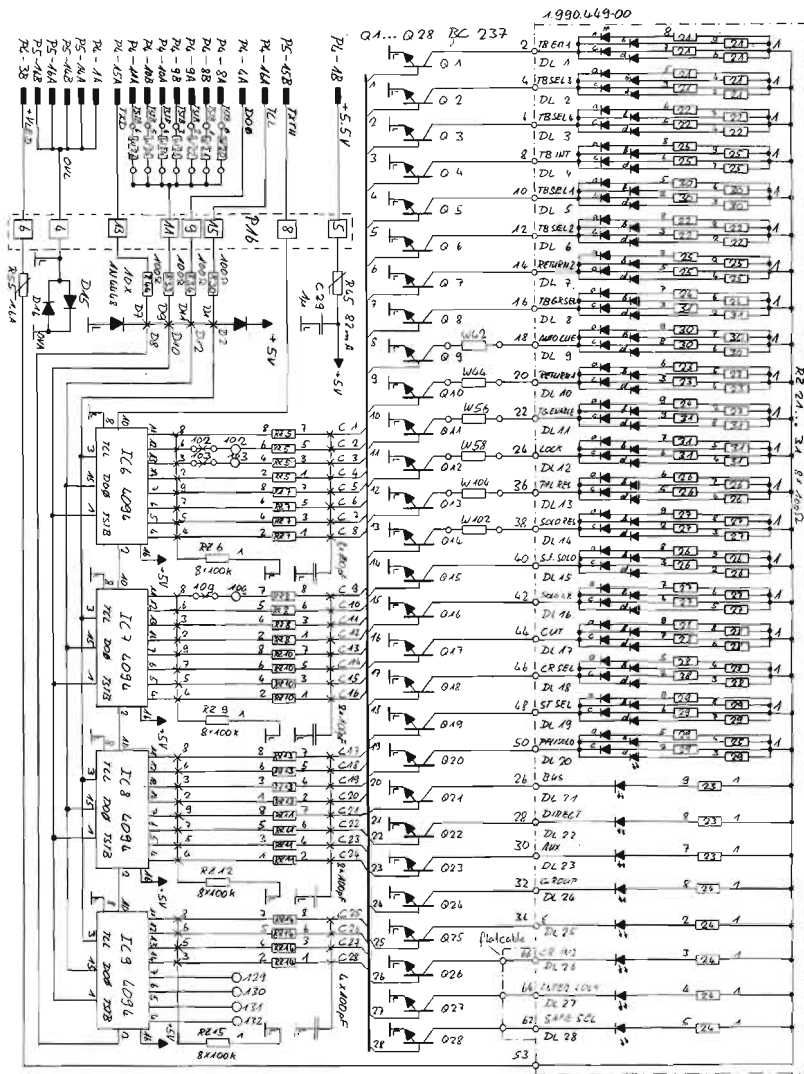
1.990.440

P5	01A	+4V	CONTROL VOLTAGE VCA
P5	01B	+1V	CONTROL VOLTAGE VCA
P5	02A	0V	CONTROL VOLTAGE VCA
P5	02B	-10V	CONTROL VOLTAGE VCA
P5	03A	CV-PHONES-L	CONTROL VOLTAGE HEADPHONE L
P5	03B	CV-PHONES-R	CONTROL VOLTAGE HEADPHONE R
P5	04A	CV-PFL-L	CONTROL VOLTAGE PFL LEFT
P5	04B	CV-PFL-R	CONTROL VOLTAGE PFL RIGHT
P5	05A	-	N.C.
P5	05B	--	N.C.
P5	06A	-	N.C.
P5	06B	-	N.C.
P5	07A	-	N.C.
P5	07B	-	N.C.
P5	08A	-	N.C.
P5	08B	-	N.C.
P5	09A	PHO.IN -1-L	PHONE INPUT 1 LEFT
P5	09B	PHO.IN -1-R	PHONE INPUT 1 RIGHT
P5	10A	PHO.OUT-1-L	PHONE OUTPUT 1 LEFT
P5	10B	PHO.OUT-1-R	PHONE OUTPUT 1 RIGHT
P5	11A	PHONE 1 0V	GROUND SIGN PHONE 1
P5	11B	PHONE 2-0V	GROUND SIGN PHONE 2
P5	12A	PHO.IN-2-L	INPUT PHONE 2 LEFT
P5	12B	PHO.IN-2-R	INPUT PHONE 2 RIGHT
P5	13A	CV-SEND	CTRL.VOLTAGE SEND LEVEL
P5	13B	CV-RETURN	CTRL.VOLTAGE RETURN LEVEL
P5	14	0V-L	GROUND SIGN (LOGIC)
P5	15A	RXTH	RECEIVE DATA THROUGH
P5	15B	TXTH	TRANSMIT DATA THROUGH
P5	16	0V-L	GROUND SIGN (LOGIC)

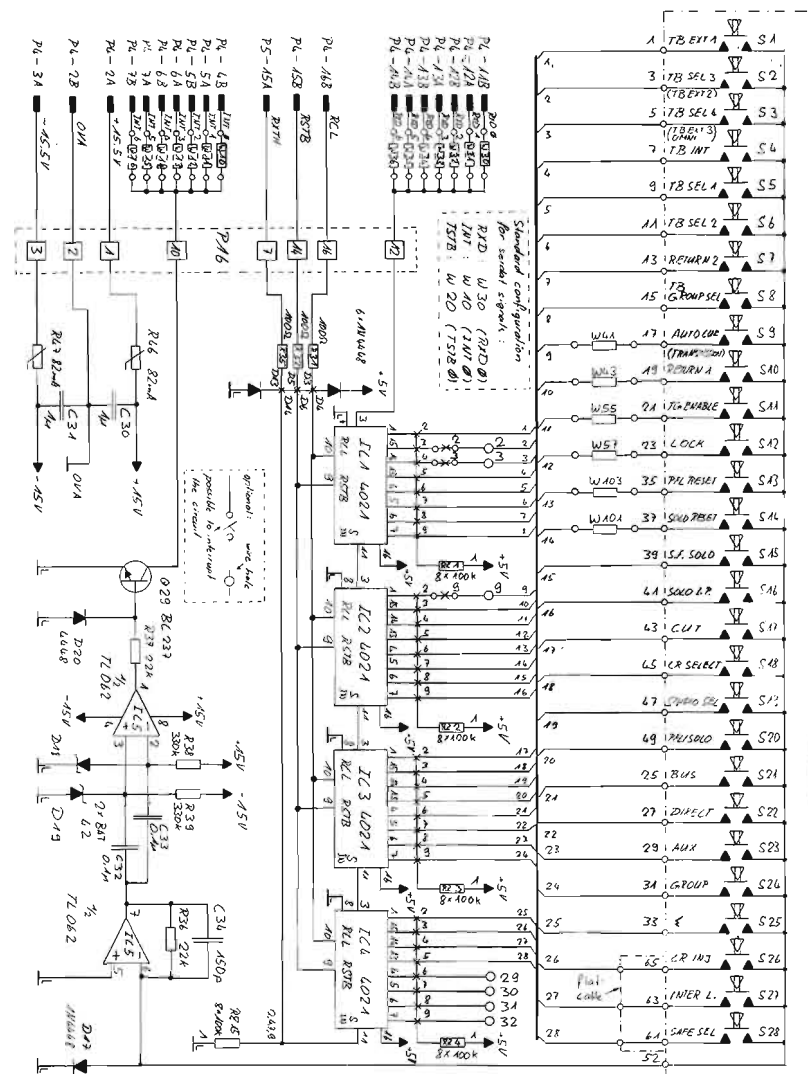
PFL/TB/HEADPHONE UNIT



1.990.440.00



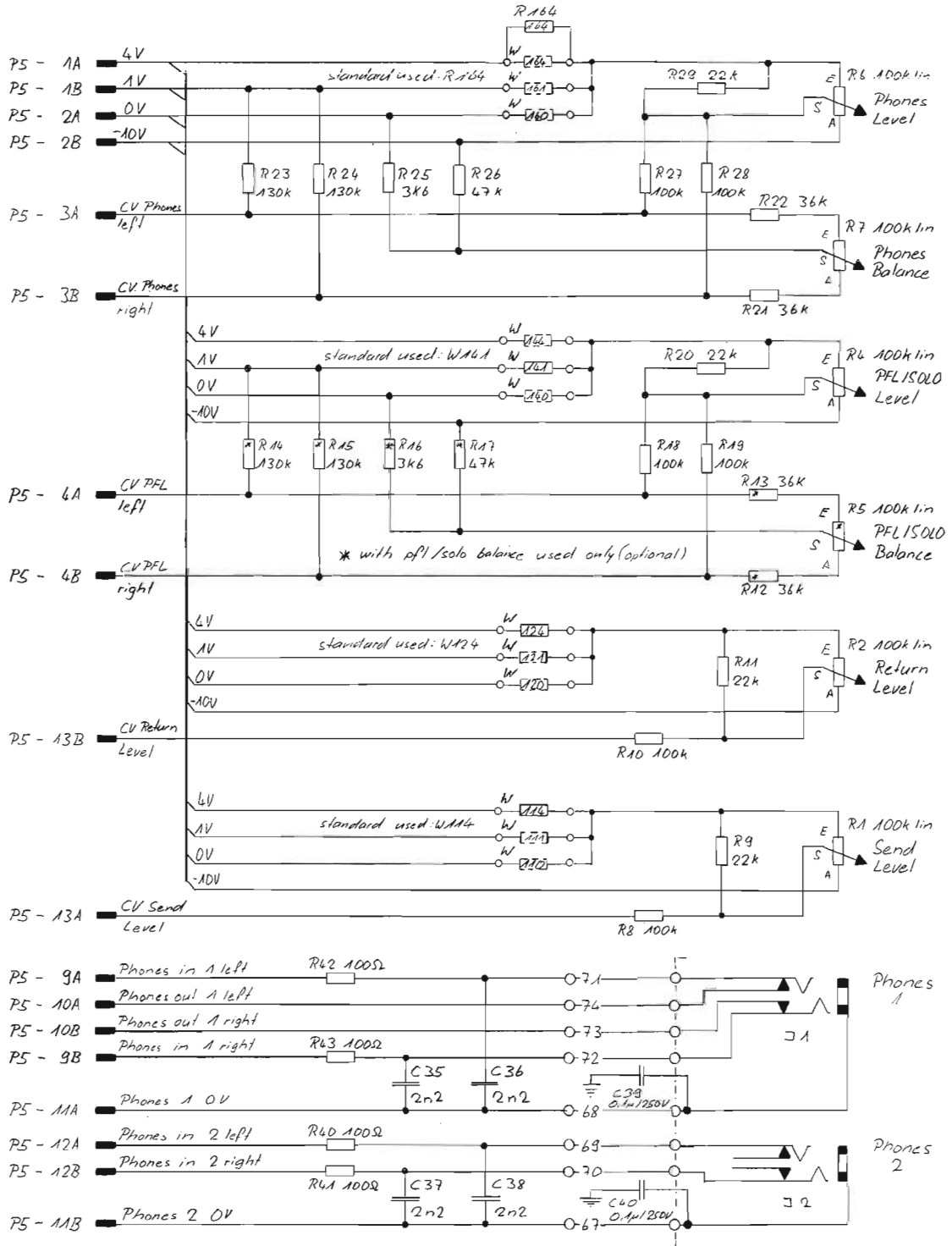
15.530 A.Schmid	INCL. SWITCH BOARD 1.990.449.00	PAGE 1 OF 3
STUDER	PFL/TB/HEADPHONE UNIT	SC 1.990.440.00



15.530 A.Schmid	INCL. SWITCH BOARD 1.990.449.00	PAGE 2 OF 3
STUDER	PFL/TB/HEADPHONE UNIT	SC 1.990.440.00

PFL/TB/HEADPHONE UNIT

1.990.440.00



① 19. 4.90 A.Schmid	② 12.12.90	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞	㉟	㊱	㊲	㊳	㊴	㊵	㊶	㊷	㊸	㊹	㊺	㊻	㊼	㊽	㊾	㊿
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STUDER															PFL/TB/HEADPHONE UNIT										SC		1.990.440.00																						



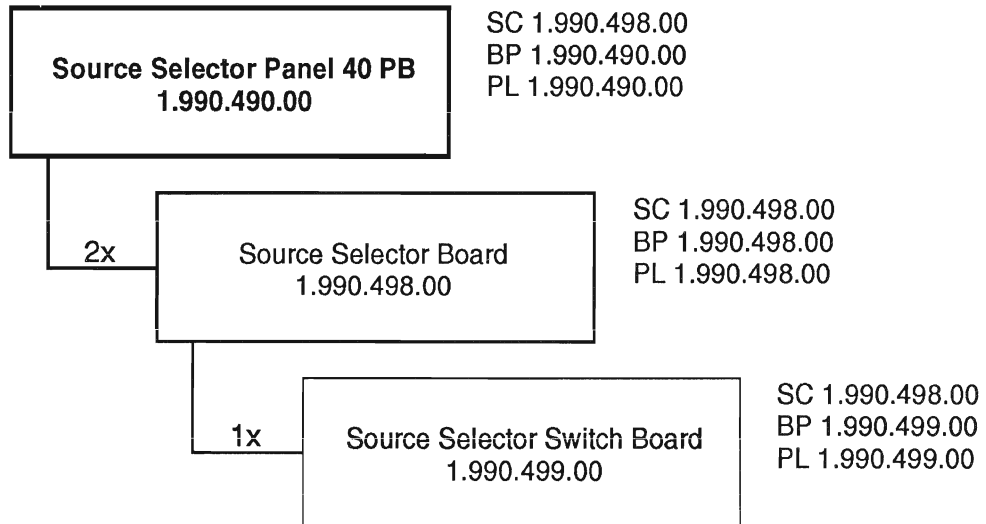
PFL/TB/HEADPHONE UNIT ESE

1.990.440.00

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER			
A...	1	1.990.449.00	PFL/TB/PHONES SWITCH BOARD		MP...	25	29.26.1022	1 pcs	Loetpaste NS	W...	24	.	0	not used	wire bridge	SERDAT #4 TSTB 4	57113000
C...	1	59.34.4101	100 pF	CE	MP...	26	1.990.100.03	1 pcs	Queerprintstatue rechts	W...	25	.	0	not used	wire bridge	SERDAT #5 TSTB 5	57113000
C...	2	59.34.4101	100 pF	CE	Q...	1	50.03.0436	BC 237		W...	26	.	0	not used	wire bridge	SERDAT #6 TSTB 6	57113000
C...	3	59.34.4101	100 pF	CE	Q...	2	50.03.0436	BC 237		W...	30	57.11.3000	0	0 Ohm	wire bridge	SERDAT #0 (R00 0)	
C...	4	59.34.4101	100 pF	CE	Q...	3	50.03.0436	BC 237		W...	31	.	0	not used	wire bridge	SERDAT #1 R00 1	57113000
C...	5	59.34.4101	100 pF	CE	Q...	4	50.03.0436	BC 237		W...	32	.	0	not used	wire bridge	SERDAT #2 R00 2	57113000
C...	6	59.34.4101	100 pF	CE	Q...	5	50.03.0436	BC 237		W...	33	.	0	not used	wire bridge	SERDAT #3 R00 3	57113000
C...	7	59.34.4101	100 pF	CE	Q...	6	50.03.0436	BC 237		W...	34	.	0	not used	wire bridge	SERDAT #4 R00 4	57113000
C...	8	59.34.4101	100 pF	CE	Q...	7	50.03.0436	BC 237		W...	35	.	0	not used	wire bridge	SERDAT #5 R00 5	57113000
C...	9	59.34.4101	100 pF	CE	Q...	8	50.03.0436	BC 237		W...	36	.	0	not used	wire bridge	SERDAT #6 R00 6	57113000
C...	10	59.34.4101	100 pF	CE	Q...	9	50.03.0436	BC 237		W...	41	57.11.3000	0	0 Ohm	Bridge		
C...	11	59.34.4101	100 pF	CE	Q...	10	50.03.0436	BC 237		W...	42	57.11.3000	0	0 Ohm	Bridge		
C...	12	59.34.4101	100 pF	CE	Q...	11	50.03.0436	BC 237		W...	43	57.11.3000	0	0 Ohm	Bridge		
C...	13	59.34.4101	100 pF	CE	Q...	12	50.03.0436	BC 237		W...	44	57.11.3000	0	0 Ohm	Bridge		
C...	14	59.34.4101	100 pF	CE	Q...	13	50.03.0436	BC 237		W...	55	57.11.3000	0	0 Ohm	Bridge		
C...	15	59.34.4101	100 pF	CE	Q...	14	50.03.0436	BC 237		W...	56	57.11.3000	0	0 Ohm	Bridge		
C...	16	59.34.4101	100 pF	CE	Q...	15	50.03.0436	BC 237		W...	57	57.11.3000	0	0 Ohm	Bridge		
C...	17	59.34.4101	100 pF	CE	Q...	16	50.03.0436	BC 237		W...	58	57.11.3000	0	0 Ohm	Bridge		
C...	18	59.34.4101	100 pF	CE	Q...	17	50.03.0436	BC 237		W...	101	57.11.3000	0	0 Ohm	Bridge		
C...	19	59.34.4101	100 pF	CE	Q...	18	50.03.0436	BC 237		W...	102	57.11.3000	0	0 Ohm	Bridge		
C...	20	59.34.4101	100 pF	CE	Q...	19	50.03.0436	BC 237		W...	103	57.11.3000	0	0 Ohm	Bridge		
C...	21	59.34.4101	100 pF	CE	Q...	20	50.03.0436	BC 237		W...	104	57.11.3000	0	0 Ohm	Bridge		
C...	22	59.34.4101	100 pF	CE	Q...	21	50.03.0436	BC 237		W...	110	.	0	not used	used only for SEND LEVEL	-100dB...+0dB	
C...	23	59.34.4101	100 pF	CE	Q...	22	50.03.0436	BC 237		W...	111	.	0	not used	used only for SEND LEVEL	-100dB...+10dB	
C...	24	59.34.4101	100 pF	CE	Q...	23	50.03.0436	BC 237		W...	114	57.11.3000	0	0 Ohm	wire bridge	SEND LEVEL	-100dB...+40dB
C...	25	59.34.4101	100 pF	CE	Q...	24	50.03.0436	BC 237		W...	120	.	0	not used	used only for RETURN LEVEL	-100dB...+0dB	
C...	26	59.34.4101	100 pF	CE	Q...	25	50.03.0436	BC 237		W...	121	.	0	not used	used only for RETURN LEVEL	-100dB...+10dB	
C...	27	59.34.4101	100 pF	CE	Q...	26	50.03.0436	BC 237		W...	124	57.11.3000	0	0 Ohm	wire bridge	RETURN LEVEL	-100dB...+40dB
C...	28	59.34.4101	100 pF	CE	Q...	27	50.03.0436	BC 237		W...	140	.	0	not used	used only for PFL LEVEL	-100dB...+0dB	
C...	29	59.06.0104	100 nF	PE	Q...	28	50.03.0436	BC 237		W...	141	57.11.3000	0	0 Ohm	wire bridge	PFL LEVEL	-100dB...+10dB
C...	30	59.06.0104	100 nF	PE	Q...	29	50.03.0436	BC 237		W...	144	.	0	not used	used only for PFL LEVEL	-100dB...+40dB	
C...	31	59.06.0104	100 nF	PE	P...	1	.	0	not used	see MP 8	W...	160	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB
C...	32	59.06.0104	100 nF	PE	P...	2	54.14.2002	16 pin	PCB ribbon connector	W...	161	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	33	59.06.0104	100 nF	PE	P...	3	54.11.2013	2*16 pin	eurocard-connector	W...	164	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	34	59.34.7151	150 pF	CE	P...	5	54.11.2013	2*16 pin	eurocard-connector	W...	164	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	35	59.06.0222	2.2 nF	PE	R...	1	1.010.027.58	100 kOhm	Poti 20k lin SEND LEVEL	W...	160	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	36	59.06.0222	2.2 nF	PE	R...	2	1.010.027.58	100 kOhm	Poti 20k lin RETURN LEVEL	W...	161	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	37	59.06.0222	2.2 nF	PE	R...	4	1.010.027.58	100 kOhm	Poti used only in version without balance	W...	164	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB	
C...	38	59.06.0222	2.2 nF	PE	R...	5	.	0	not used	Poti used only in balance version(1.010.032-58)	W...	164	.	0	not used	used only for PHONES LEVEL	-100dB...+10dB
C...	39	59.03.2104	0.1 nF	MPET 104 160/250V	R...	6	57.11.3104	100 kOhm	1% MF	RZ...	1	57.88.4104	100 kOhm	2%	resistor-network		
C...	40	59.03.2104	0.1 nF	MPET 104 160/250V	R...	7	57.11.3104	100 kOhm	1% MF	RZ...	2	57.88.4104	100 kOhm	2%	resistor-network		
D...	1	50.04.0125	1M4448		R...	8	57.11.3104	100 kOhm	1% MF	RZ...	3	57.88.4104	100 kOhm	2%	resistor-network		
D...	2	50.04.0125	1M4448		R...	9	57.11.3223	22 kOhm	1% MF	RZ...	4	57.88.4104	100 kOhm	2%	resistor-network		
D...	3	50.04.0125	1M4448		R...	10	57.11.3104	100 kOhm	1% MF	RZ...	5	57.88.2682	6.8 kOhm	2%	resistor-network		
D...	4	50.04.0125	1M4448		R...	11	57.11.3223	22 kOhm	1% MF	RZ...	6	57.88.4104	100 kOhm	2%	resistor-network		
D...	5	50.04.0125	1M4448		R...	12	.	0	not used	used only in balance version (57113363)	RZ...	7	57.88.2682	6.8 kOhm	2%	resistor-network	
D...	6	50.04.0125	1M4448		R...	13	.	0	not used	used only in balance version (57113363)	RZ...	8	57.88.2682	6.8 kOhm	2%	resistor-network	
D...	7	50.04.0125	1M4448		R...	14	.	0	not used	used only in balance version (57113363)	RZ...	9	57.88.4104	100 kOhm	2%	resistor-network	
D...	8	50.04.0125	1M4448		R...	15	.	0	not used	used only in balance version (57113363)	RZ...	10	57.88.2682	6.8 kOhm	2%	resistor-network	
D...	9	50.04.0125	1M4448		R...	16	.	0	not used	used only in balance version (57113362)	RZ...	11	57.88.2682	6.8 kOhm	2%	resistor-network	
D...	10	50.04.0125	1M4448		R...	17	.	0	not used	used only in balance version (57113473)	RZ...	12	57.88.4104	100 kOhm	2%	resistor-network	
D...	11	50.04.0125	1M4448		R...	18	57.11.3104	100 kOhm	1% MF	RZ...	13	57.88.4104	100 kOhm	2%	resistor-network		
D...	12	50.04.0125	1M4448		R...	19	57.11.3104	100 kOhm	1% MF	RZ...	14	57.88.2682	6.8 kOhm	2%	resistor-network		
D...	13	50.04.0125	1M4448		R...	20	57.11.3223	22 kOhm	1% MF	RZ...	15	57.88.4104	100 kOhm	2%	resistor-network		
D...	14	50.04.0125	1M4448		R...	21	57.11.3363	36 kOhm	1% MF	RZ...	16	57.88.4104	100 kOhm	2%	resistor-network		
D...	15	50.04.0125	1M4448		R...	22	57.11.3363	36 kOhm	1% MF	RZ...	21	57.11.3101	100 Ohm	1%	MF		
D...	16	50.04.0125	1M4448		R...	23	57.11.3134	130 kOhm	1% MF	RZ...	22	57.11.3101	100 Ohm	1%	MF		
D...	17	50.04.0125	1M4448		R...	24	57.11.3134	130 kOhm	1% MF	RZ...	23	57.11.3101	100 Ohm	1%	MF		
D...	18	50.04.0127	BAT 42		R...	25	57.11.3362	3.5 kOhm	1% MF	RZ...	24	57.11.3473	24 kOhm	1% MF			
D...	19	50.04.0127	BAT 42		R...	26	57.11.3473	24 kOhm	1% MF	RZ...	25	57.11.3101	100 Ohm	1%	MF		
D...	20	50.04.0125	1M4448		R...	27	57.11.3104	100 kOhm	1% MF	RZ...	26	57.11.3104	100 kOhm	1% MF			
IC...	1	50.07.1021	CD4021	8-bit static shift register	R...	28	57.11.3104	100 kOhm	1% MF	RZ...	27	57.11.3223	22 kOhm	1% MF			
IC...	2	50.07.1021	CD4021	8-bit static shift register	R...	29	57.11.3223	22 kOhm	1% MF	RZ...	30	57.11.3101	100 Ohm	1% MF			
IC...	3	50.07.1021	CD4021	8-bit static shift register	R...	31	57.11.3101	100 Ohm	1% MF	RZ...	31	57.11.3101	100 Ohm	1% MF			
IC...	4	50.07.1021	CD4021	8-bit static shift register	R...	32	57.11.3101	100 Ohm	1% MF	RZ...	32	57.11.3101	100 Ohm	1% MF			
IC...	5	50.09.0119	TL 062	J FET dual op. amp.	R...	33	57.11.3101	100 Ohm	1% MF	RZ...	33	57.11.3101	100 Ohm	1% MF			
IC...	6	50.07.0018	CD4094	shift and store bus register	R...	34	57.11.3101	100 Ohm	1% MF	RZ...	34	57.11.3101	100 Ohm	1% MF			
IC...	7	50.07.0018	CD4094	shift and store bus register	R...	35	57.11.3101	100 Ohm	1% MF	RZ...	35	57.11.3101	100 Ohm	1% MF			
IC...	8	50.07.0018	CD4094	shift and store bus register	R...	36	57.11.3223	22 kOhm	1% MF	RZ...	36	57.11.3223	22 kOhm	1% MF			
IC...	9	50.07.0018	CD4094	shift and store bus register	R...	37	57.11.3223	22 kOhm	1% MF	RZ...	37	57.11.3334	330 kOhm	1% MF			
J...	1	54.24.0103	6.3 mm	3 pol-Klinke 6.3mm	R...	38	57.11.3334	330 kOhm									

Source Selector Panel 20 PB

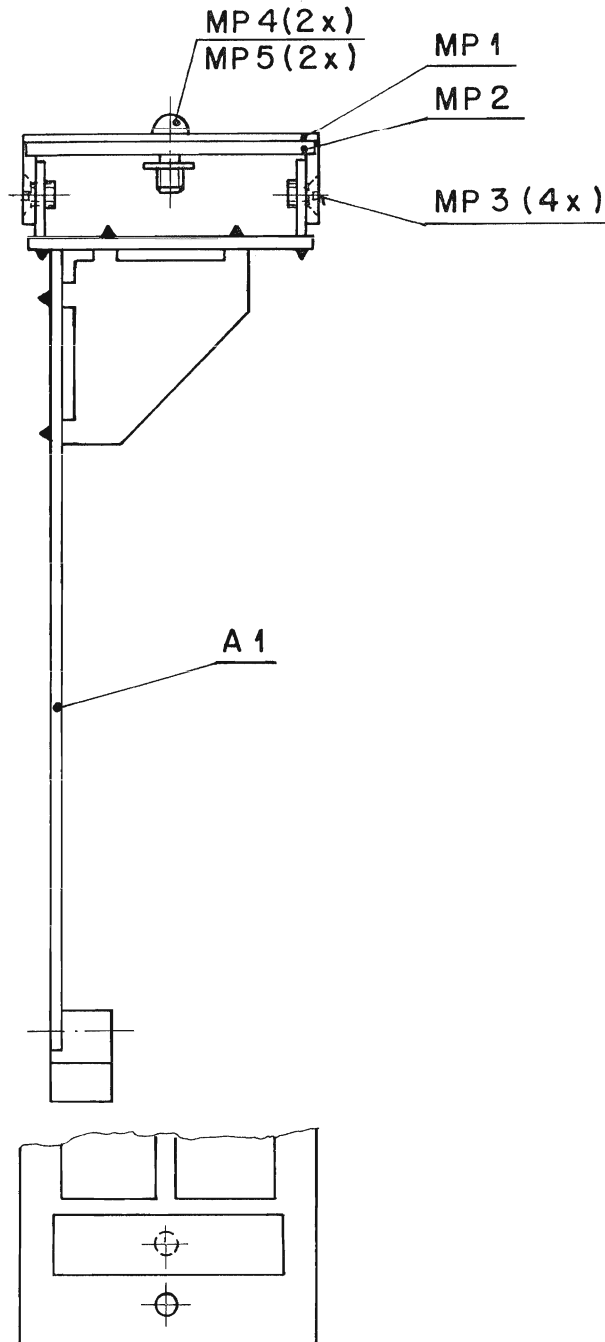
1.990.490.00



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

SOURCE SELECTOR UNIT

1.990.490.00



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

A 1	1.990.498.00		SOURCE SELECTOR
MP 1	1.990.490.01	1 pcs	Frontschild SOURCE SELECTOR 20 PB
MP 2	1.990.490.02	1 pcs	Traeger SOURCE SELECTOR
MP 3	21.01.2352	4 pcs	S-Schr. M3*4
MP 4	1.010.022.21	2 pcs	Linse(r)nschr. IS M3*8
MP 5	24.16.3023	2 pcs	Wellensicherung 3mm
MP 6	1.990.490.04	1 pcs	Studer-Nr-Etikette 10*20

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

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

1.990.490.00 SOURCE SELECTOR UNIT 20 PB SCA88/11/3000

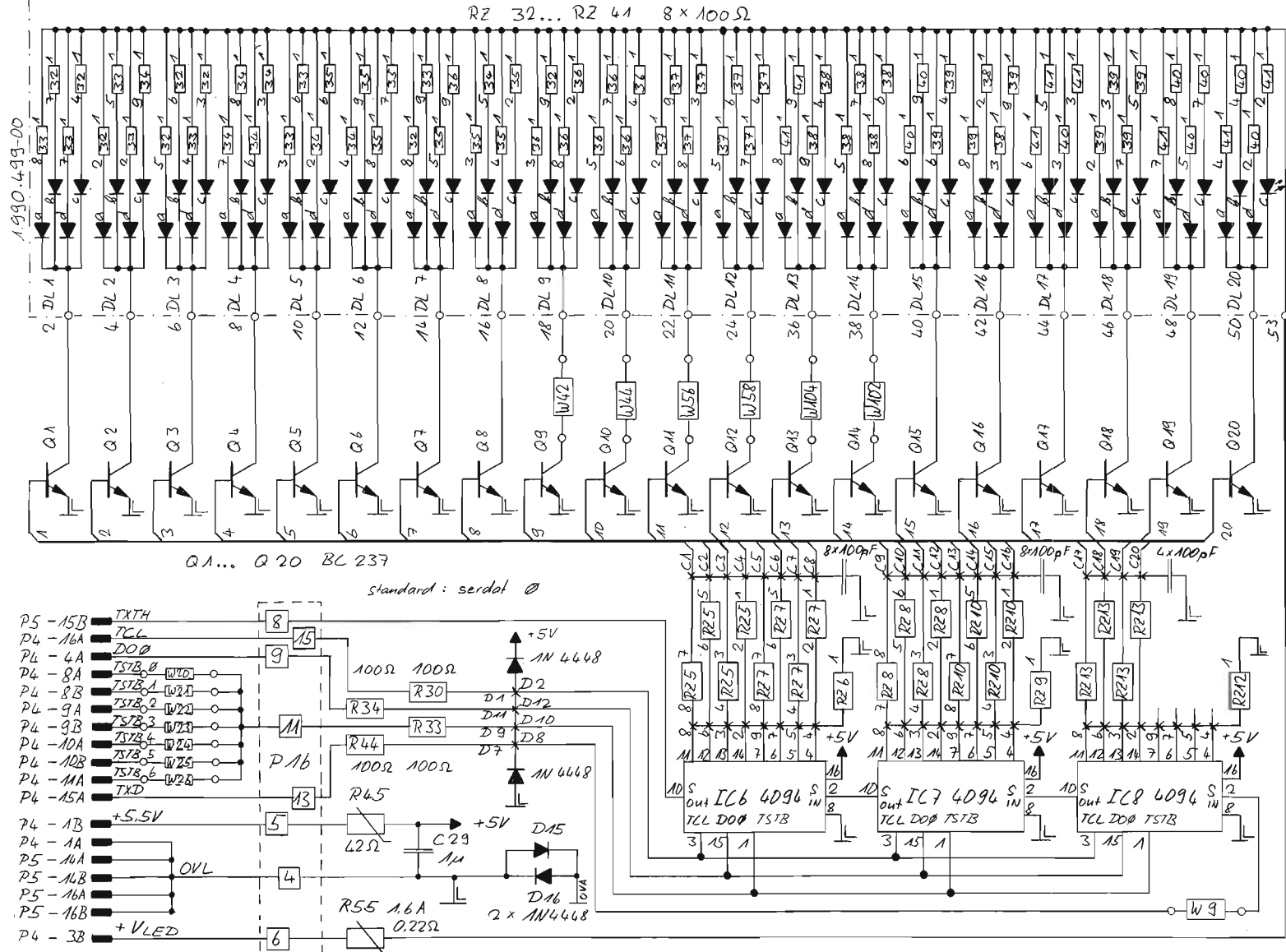
Angezeichnet	Freigegeben				(3)
					(2)
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Datum	Gez.	Gepr.	Ges.	Index	(0)

Kopie für:

STUDER REGENSDORF ZÜRICH	Bezeichnung	SOURCE SELECTOR UNIT	Nummer	1.990.490-00
		20 PB		

SOURCE SELECTOR BOARD

1.990.498.00



1.990.499-00

RZ 32... RZ 41 8 x 100Ω

Q1... Q20 BC 237

standard: serdot

- P5 - 15B TXTH
- P4 - 16A TCL
- P4 - 4A DO0
- P4 - 8A TS7B 0
- P4 - 8B TS7B 1
- P4 - 9A TS7B 2
- P4 - 9B TS7B 3
- P4 - 10A TS7B 4
- P4 - 10B TS7B 5
- P4 - MA TS7B 6
- P4 - 15A TXD
- P4 - 1B +5.5V
- P4 - 1A OVL
- P5 - 16B
- P5 - 16A
- P5 - 16B
- P4 - 3B +VLED

8.5.90 A. Schmid

INCL. SWITCH BOARD 1.990.499.00

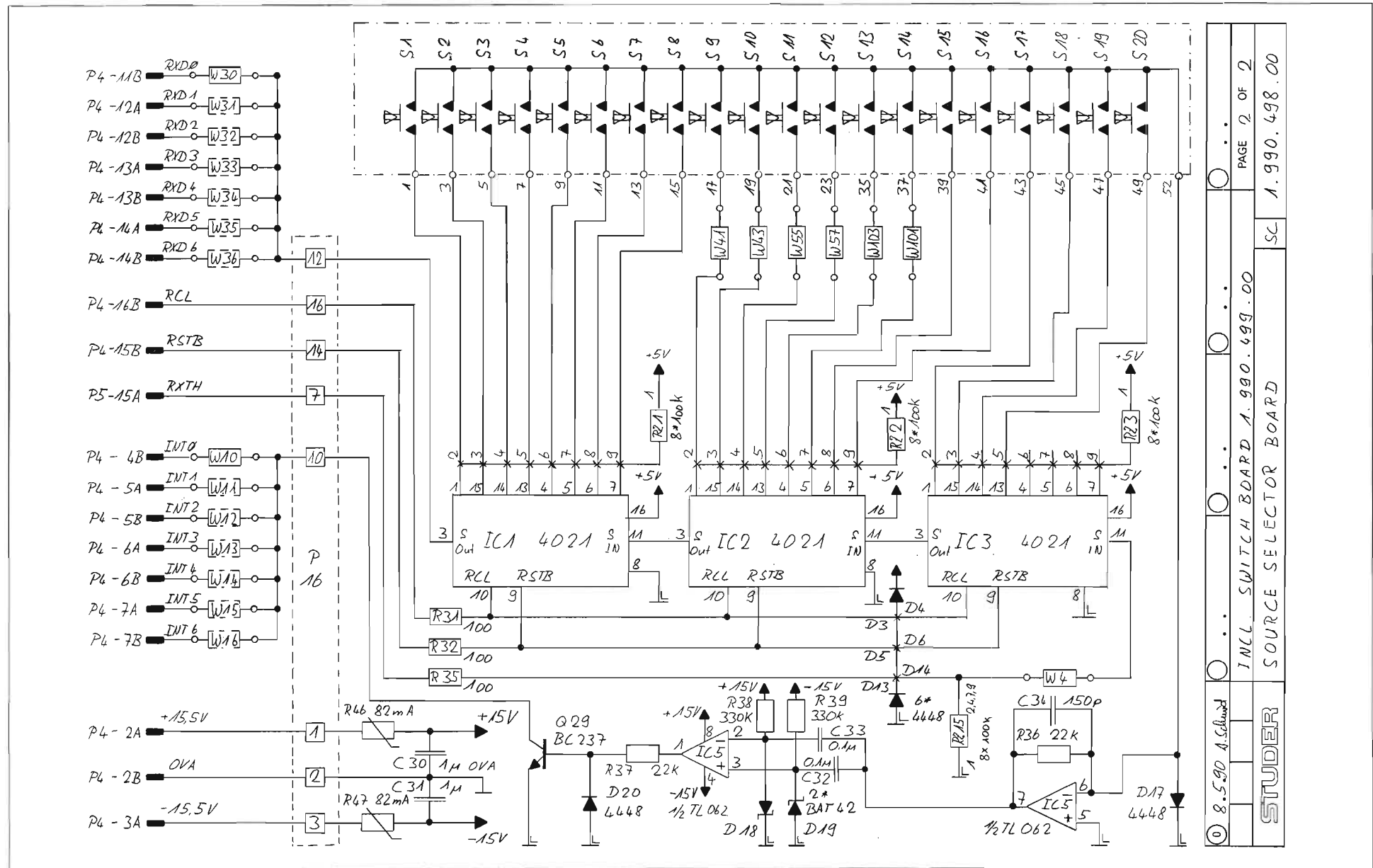
SOURCE SELECTOR BOARD

PAGE 1 OF 2

SC 1.990.498.00

SOURCE SELECTOR BOARD

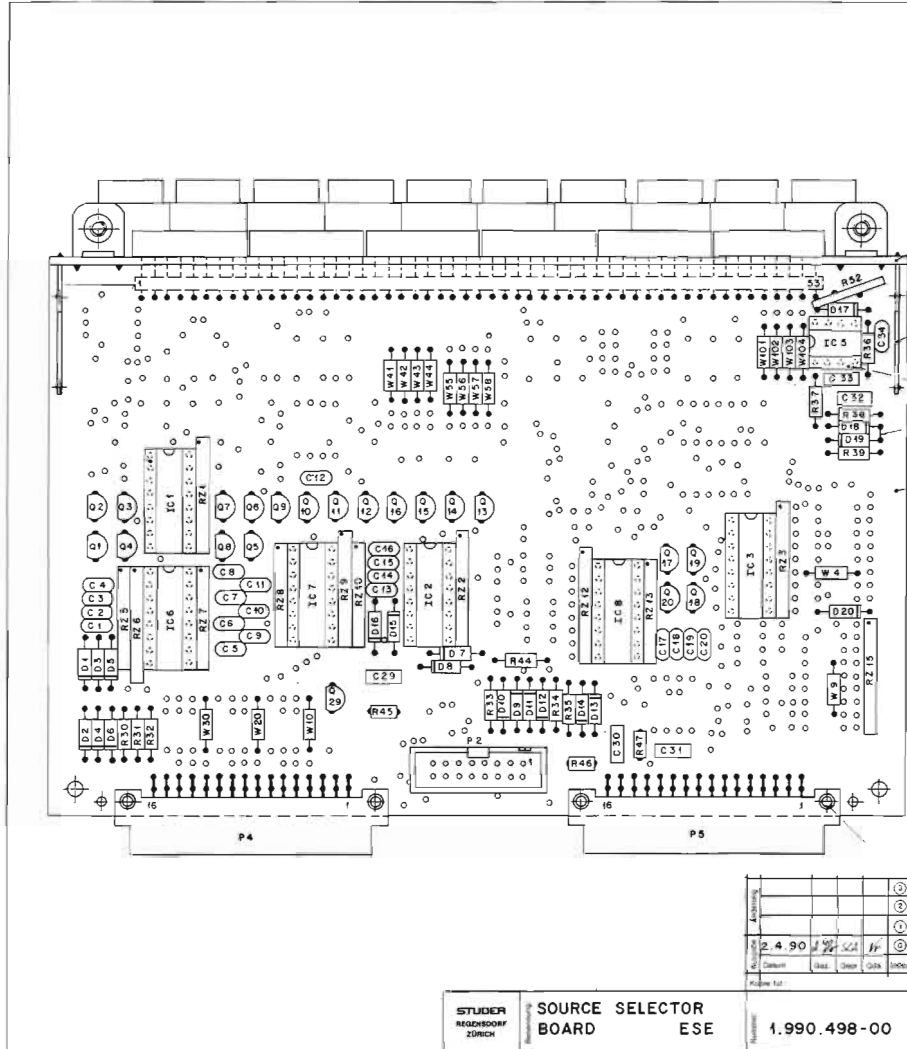
1.990.498.00



8.5.90 A. G. Schmid
 INCL. SWITCH BOARD 1.990.499.00
 SOURCE SELECTOR BOARD
 SC 1.990.498.00
 PAGE 2 OF 2

SOURCE SELECTOR BOARD ESE

1.990.498.00



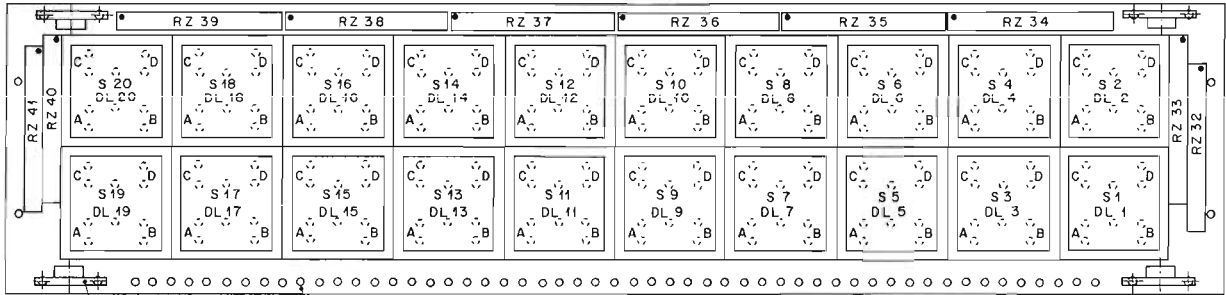
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A.....1		1.990.498.00	Source Selector Switch Board	
C.....1		59.34.4101	100 pF	CE
C.....2		59.34.4101	100 pF	CE
C.....3		59.34.4101	100 pF	CE
C.....4		59.34.4101	100 pF	CE
C.....5		59.34.4101	100 pF	CE
C.....6		59.34.4101	100 pF	CE
C.....7		59.34.4101	100 pF	CE
C.....8		59.34.4101	100 pF	CE
C.....9		59.34.4101	100 pF	CE
C.....10		59.34.4101	100 pF	CE
C.....11		59.34.4101	100 pF	CE
C.....12		59.34.4101	100 pF	CE
C.....13		59.34.4101	100 pF	CE
C.....14		59.34.4101	100 pF	CE
C.....15		59.34.4101	100 pF	CE
C.....16		59.34.4101	100 pF	CE
C.....17		59.34.4101	100 pF	CE
C.....18		59.34.4101	100 pF	CE
C.....19		59.34.4101	100 pF	CE
C.....20		59.34.4101	100 pF	CE
C.....29		59.06.0104	100 nF	PE
C.....30		59.06.0104	100 nF	PE
C.....31		59.06.0104	100 nF	PE
C.....32		59.06.0104	100 nF	PE
C.....33		59.06.0104	100 nF	PE
C.....34		59.34.7151	150 pF	CE
D.....1		50.04.0125	1M4448	
D.....2		50.04.0125	1M4448	
D.....3		50.04.0125	1M4448	
D.....4		50.04.0125	1M4448	
D.....5		50.04.0125	1M4448	
D.....6		50.04.0125	1M4448	
D.....7		50.04.0125	1M4448	
D.....8		50.04.0125	1M4448	
D.....9		50.04.0125	1M4448	
D.....10		50.04.0125	1M4448	
D.....11		50.04.0125	1M4448	
D.....12		50.04.0125	1M4448	
D.....13		50.04.0125	1M4448	
D.....14		50.04.0125	1M4448	
D.....15		50.04.0125	1M4448	
D.....16		50.04.0125	1M4448	
D.....17		50.04.0125	1M4448	
D.....18		50.04.0127	42	
D.....19		50.04.0127	BAT 42	
D.....20		50.04.0125	1M4448	
IC.....1		50.07.1021	CD4021	8-bit static shift register
IC.....2		50.07.1021	CD4021	8-bit static shift register
IC.....3		50.07.1021	CD4021	8-bit static shift register
IC.....5		50.09.0119	11 092	J-FET dual op. amp.
IC.....6		50.07.0018	CD4094	shift and store bus register
IC.....7		50.07.0018	CD4094	shift and store bus register
IC.....8		50.07.0018	CD4094	shift and store bus register
MP.....1		53.03.0186	1 pcs	IC-Socket 8-pin
MP.....2		53.03.0188	4 pcs	IC-Socket 16-pin
MP.....3		54.11.0125	53 pcs	Stiftleiste Winkel RH 2.54
MP.....4		1.990.100.01	2 pcs	Querpinstuetze
MP.....5		1.990.420.11	1 pcs	CR MONITOR PCB
MP.....6		28.99.0119	4 pcs	Rohrleiste 2.5*0.1510
MP.....7		43.01.0108	1 pcs	ESE-Schild
MP.....8		1.990.498.04	1 pcs	Mr-Etikette
Q.....1		50.03.0436	BC237	uni npn
Q.....2		50.03.0436	BC237	uni npn
Q.....3		50.03.0436	BC237	uni npn
Q.....4		50.03.0436	BC237	uni npn
Q.....5		50.03.0436	BC237	uni npn
Q.....6		50.03.0436	BC237	uni npn
Q.....7		50.03.0436	BC237	uni npn
Q.....8		50.03.0436	BC237	uni npn
Q.....9		50.03.0436	BC237	uni npn
Q.....10		50.03.0436	BC237	uni npn
Q.....11		50.03.0436	BC237	uni npn
Q.....12		50.03.0436	BC237	uni npn
Q.....13		50.03.0436	BC237	uni npn
Q.....14		50.03.0436	BC237	uni npn
Q.....15		50.03.0436	BC237	uni npn
Q.....16		50.03.0436	BC237	uni npn
Q.....17		50.03.0436	BC237	uni npn
Q.....18		50.03.0436	BC237	uni npn
Q.....19		50.03.0436	BC237	uni npn
Q.....20		50.03.0436	BC237	uni npn
Q.....29		50.03.0436	BC237	uni npn
P.....1		0	not used	see MP
P.....2		54.14.2002	16 pin	PCB ribbon-connector
P.....4		54.11.2013	2*16 pin	eurocard-connector
P.....5		54.11.2013	2*16 pin	eurocard-connector
R.....30		57.11.3101	100 Ohm	1k MF
R.....31		57.11.3101	100 Ohm	1k MF
R.....32		57.11.3101	100 Ohm	1k MF
R.....33		57.11.3101	100 Ohm	1k MF
R.....34		57.11.3101	100 Ohm	1k MF
R.....35		57.11.3101	100 Ohm	1k MF

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R.....26		57.11.3223	22 kOhm	1k MF
R.....27		57.11.3223	22 kOhm	1k MF
R.....28		57.11.3334	230 kOhm	1k MF
R.....29		57.11.3334	330 kOhm	1k MF
R.....44		57.11.3101	100 Ohm	1k MF
R.....45		57.92.1820	82 mA	PTC 42 Ohm
R.....46		57.92.1820	82 mA	PTC 42 Ohm
R.....47		57.92.1820	82 mA	PTC 42 Ohm
R.....55		57.92.7016	1.6 A	R-PTC 0.22 Ohm
M.....4		57.11.3000	0 Ohm	Bridge
M.....9		57.11.3000	0 Ohm	Bridge
M.....30		57.11.3000	0 Ohm	Bridge
M.....11		0	not used	wire bridge SERDAT #1 INT 1 57113000
M.....12		0	not used	wire bridge SERDAT #2 INT 2 57113000
M.....13		0	not used	wire bridge SERDAT #3 INT 3 57113000
M.....14		0	not used	wire bridge SERDAT #4 INT 4 57113000
M.....15		0	not used	wire bridge SERDAT #5 INT 5 57113000
M.....16		0	not used	wire bridge SERDAT #6 INT 6 57113000
M.....20		57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSTB 0)
M.....21		0	not used	wire bridge SERDAT #1 TSTB 1 57113000
M.....22		0	not used	wire bridge SERDAT #2 TSTB 2 57113000
M.....23		0	not used	wire bridge SERDAT #3 TSTB 3 57113000
M.....24		0	not used	wire bridge SERDAT #4 TSTB 4 57113000
M.....25		0	not used	wire bridge SERDAT #5 TSTB 5 57113000
M.....26		0	not used	wire bridge SERDAT #6 TSTB 6 57113000
M.....30		57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)
M.....31		0	not used	wire bridge SERDAT #1 RXD 1 57113000
M.....32		0	not used	wire bridge SERDAT #2 RXD 2 57113000
M.....33		0	not used	wire bridge SERDAT #3 RXD 3 57113000
M.....34		0	not used	wire bridge SERDAT #4 RXD 4 57113000
M.....35		0	not used	wire bridge SERDAT #5 RXD 5 57113000
M.....36		0	not used	wire bridge SERDAT #6 RXD 6 57113000
M.....41		57.11.3000	0 Ohm	Bridge
M.....42		57.11.3000	0 Ohm	Bridge
M.....43		57.11.3000	0 Ohm	Bridge
M.....44		57.11.3000	0 Ohm	Bridge
M.....55		57.11.3000	0 Ohm	Bridge
M.....56		57.11.3000	0 Ohm	Bridge
M.....57		57.11.3000	0 Ohm	Bridge
M.....58		57.11.3000	0 Ohm	Bridge
M.....101		57.11.3000	0 Ohm	Bridge
M.....102		57.11.3000	0 Ohm	Bridge
M.....103		57.11.3000	0 Ohm	Bridge
M.....104		57.11.3000	0 Ohm	Bridge
RZ.....1		57.88.4104	100 kOhm	2k resistor-network
RZ.....2		57.88.4104	100 kOhm	2k resistor-network
RZ.....3		57.88.4104	100 kOhm	2k resistor-network
RZ.....5		57.88.2682	6.8 kOhm	2k resistor-network
RZ.....6		57.88.4104	100 kOhm	2k resistor-network
RZ.....7		57.88.2682	6.8 kOhm	2k resistor-network
RZ.....8		57.88.2682	6.8 kOhm	2k resistor-network
RZ.....9		57.88.4104	100 kOhm	2k resistor-network
RZ.....10		57.88.2682	6.8 kOhm	2k resistor-network
RZ.....12		57.88.4104	100 kOhm	2k resistor-network
RZ.....13		57.88.2682	6.8 kOhm	2k resistor-network
RZ.....15		57.88.4104	100 kOhm	2k resistor-network

CER-Ceramic, PE-Polyester
 MF-Metal Film, PNG-Cermet
 MANUFACTURER: Ex-Esar, NEC-Hipson Electric Corp., Ph-Philips, Ra-Raytheon, Sig-Sigmatics, St-Studer
 1.990.498.00 SOURCE SELECTOR SCA90/04/2700
 EMD

SOURCE SELECTOR SWITCH BOARD

1.990.499.00



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

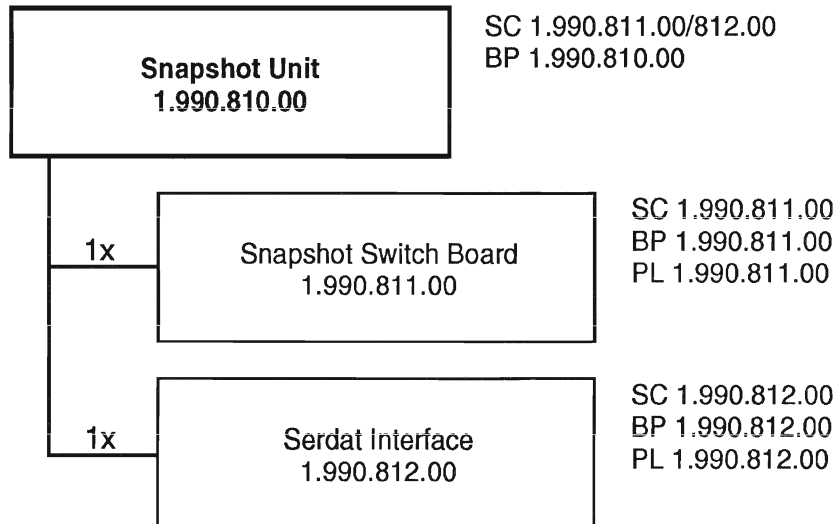
DL...1	. . 0	not used	see S 01
DL...2	. . 0	not used	see S 02
DL...3	. . 0	not used	see S 03
DL...4	. . 0	not used	see S 04
DL...5	. . 0	not used	see S 05
DL...6	. . 0	not used	see S 06
DL...7	. . 0	not used	see S 07
DL...8	. . 0	not used	see S 08
DL...9	. . 0	not used	see S 09
DL...10	. . 0	not used	see S 10
DL...11	. . 0	not used	see S 11
DL...12	. . 0	not used	see S 12
DL...13	. . 0	not used	see S 13
DL...14	. . 0	not used	see S 14
DL...15	. . 0	not used	see S 15
DL...16	. . 0	not used	see S 16
DL...17	. . 0	not used	see S 17
DL...18	. . 0	not used	see S 18
DL...19	. . 0	not used	see S 19
DL...20	. . 0	not used	see S 20
MP...1	1.990.429.11	1 pcs	CR MONITOR SWITCH PCB
MP...2	1.990.100.05	4 pcs	Querprintstuetze
MP...3	1.990.499.04	1 pcs	Nr-Etikette
S....1	55.15.0704		Taste 1*A, 12mm gelb /trans
S....2	55.15.0704		Taste 1*A, 12mm gelb /trans
S....3	55.15.0704		Taste 1*A, 12mm gelb /trans
S....4	55.15.0704		Taste 1*A, 12mm gelb /trans
S....5	55.15.0704		Taste 1*A, 12mm gelb /trans
S....6	55.15.0704		Taste 1*A, 12mm gelb /trans
S....7	55.15.0704		Taste 1*A, 12mm gelb/trans
S....8	55.15.0704		Taste 1*A, 12mm gelb/trans
S....9	55.15.0704		Taste 1*A, 12mm gelb/trans
S....10	55.15.0704		Taste 1*A, 12mm gelb/trans
S....11	55.15.0704		Taste 1*A, 12mm gelb/trans
S....12	55.15.0704		Taste 1*A, 12mm gelb/trans
S....13	55.15.0704		Taste 1*A, 12mm gelb/trans
S....14	55.15.0704		Taste 1*A, 12mm gelb/trans
S....15	55.15.0704		Taste 1*A, 12mm gelb/trans
S....16	55.15.0704		Taste 1*A, 12mm gelb/trans
S....17	55.15.0704		Taste 1*A, 12mm gelb/trans
S....18	55.15.0704		Taste 1*A, 12mm gelb/trans
S....19	55.15.0704		Taste 1*A, 12mm gelb/trans
S....20	55.15.0704		Taste 1*A, 12mm gelb/trans
RZ...32	57.88.4101	100 Ohm	2% ,8*
RZ...33	57.88.4101	100 Ohm	2% ,8*
RZ...34	57.88.4101	100 Ohm	2% ,8*
RZ...35	57.88.4101	100 Ohm	2% ,8*
RZ...36	57.88.4101	100 Ohm	2% ,8*
RZ...37	57.88.4101	100 Ohm	2% ,8*
RZ...38	57.88.4101	100 Ohm	2% ,8*
RZ...39	57.88.4101	100 Ohm	2% ,8*
RZ...40	57.88.4101	100 Ohm	2% ,8*
RZ...41	57.88.4101	100 Ohm	2% ,8*

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

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

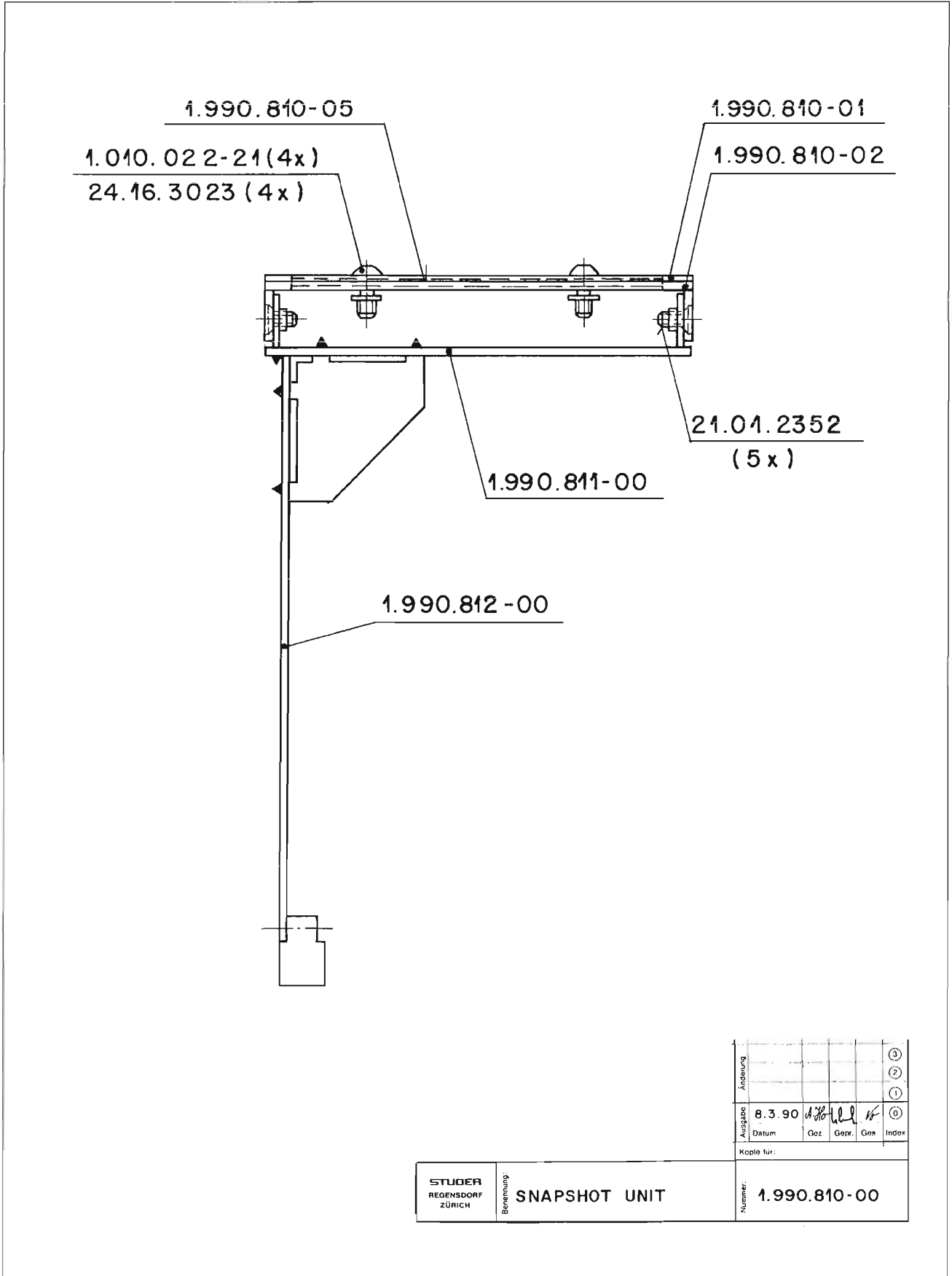
1.990.499.00 SOURCE SELECTOR SWITCH BOARD SCA88/12/1800

STUDER REGENSDORF ZÜRICH	Benennung	SOURCE SELECTOR SWITCH BOARD				
		Kopie für:				
		Datum		Gez.	Gez.	Index
		6.3.90		SA	SA	14
		Kopie für:		Nummer: 1.990.499-00		

Snapshot Unit**1.990.810.00**

SNAPSHOT UNIT

1.990.810.00



Änderung					③
					②
					①
Ausgabe	8.3.90	<i>A. H.</i>	<i>H. H.</i>	<i>H.</i>	①
Datum	Gez.	Gepr.	Ges.	Index	

Kopie für:

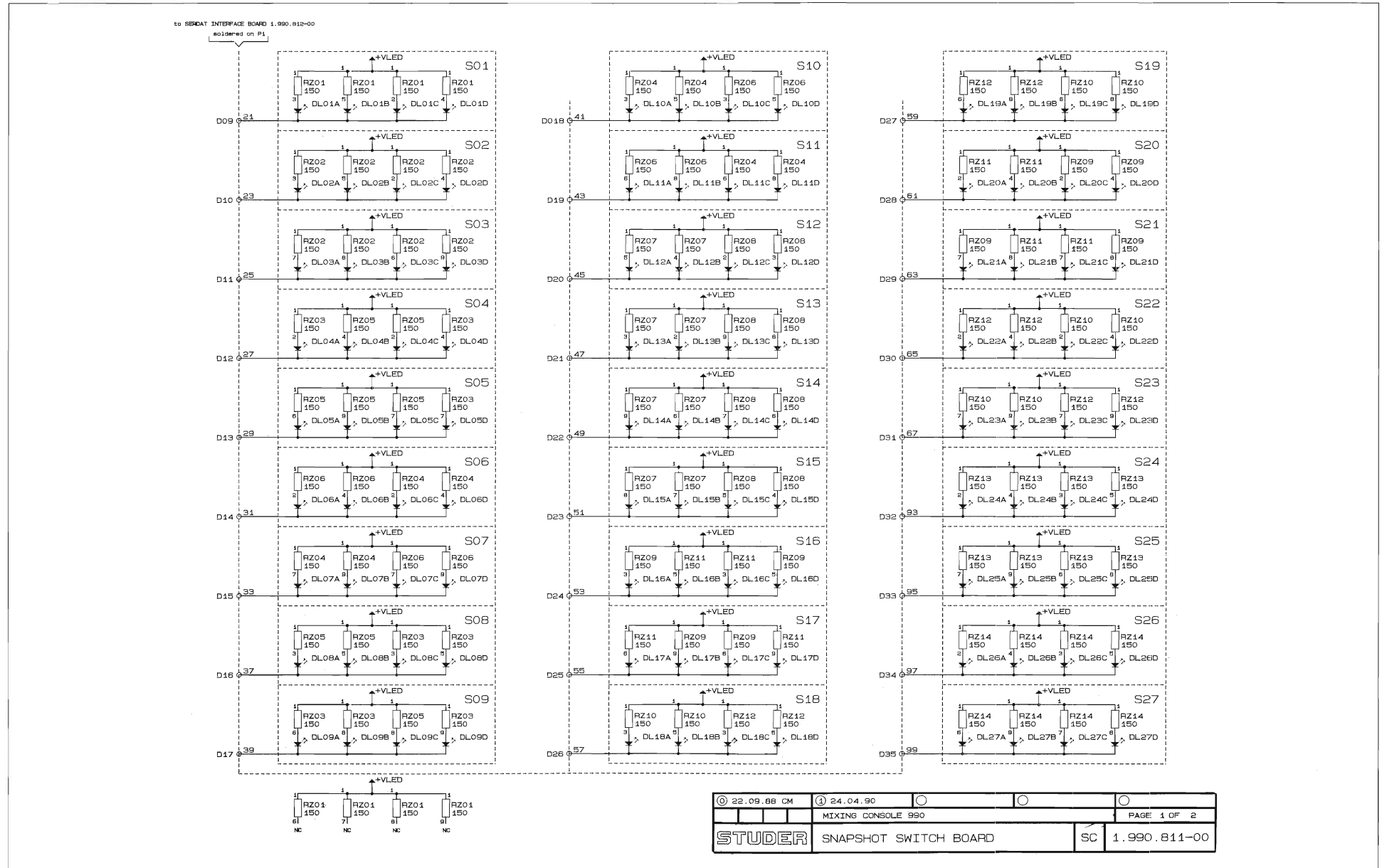
Nummer: 1.990.810-00

STUDER
REGENSDORF
ZÜRICH

Benennung: **SNAPSHOT UNIT**

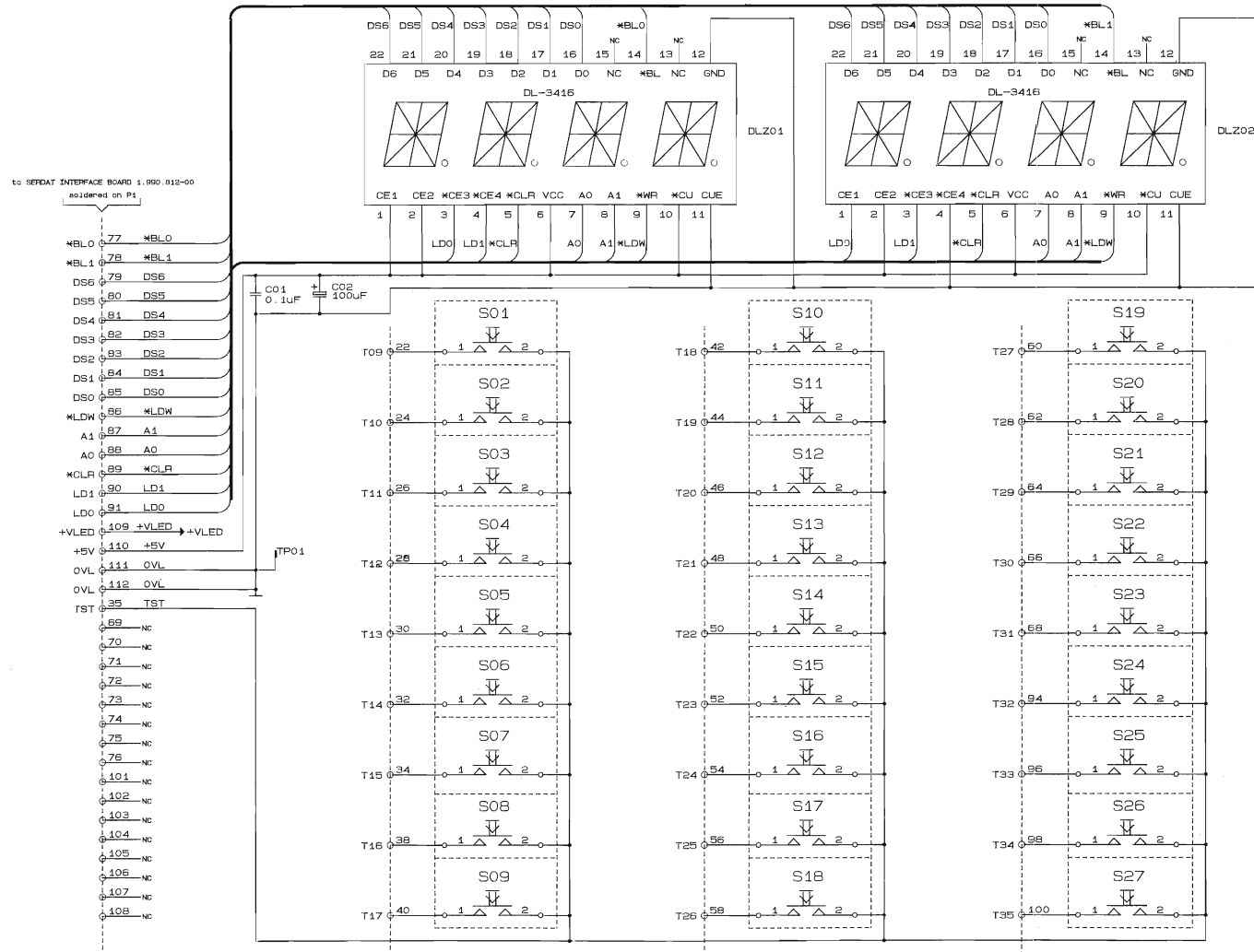
SNAPSHOT SWITCH BOARD

1.990.811.00



SNAPSHOT SWITCH BOARD

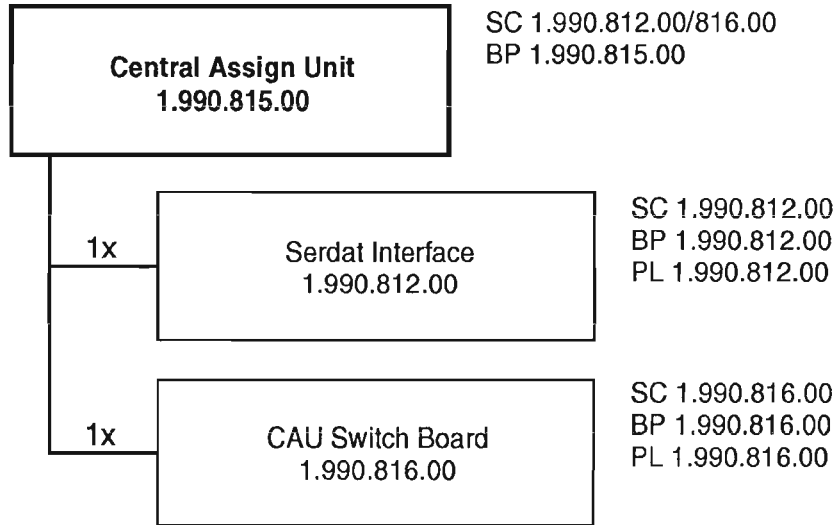
1.990.811.00



© 22.09.88 CM	① 24.04.90			
MIXING CONSOLE 990			PAGE 2 OF 2	
STUDER		SNAPSHOT SWITCH BOARD		SC 1.990.811-00

Central Assign Unit

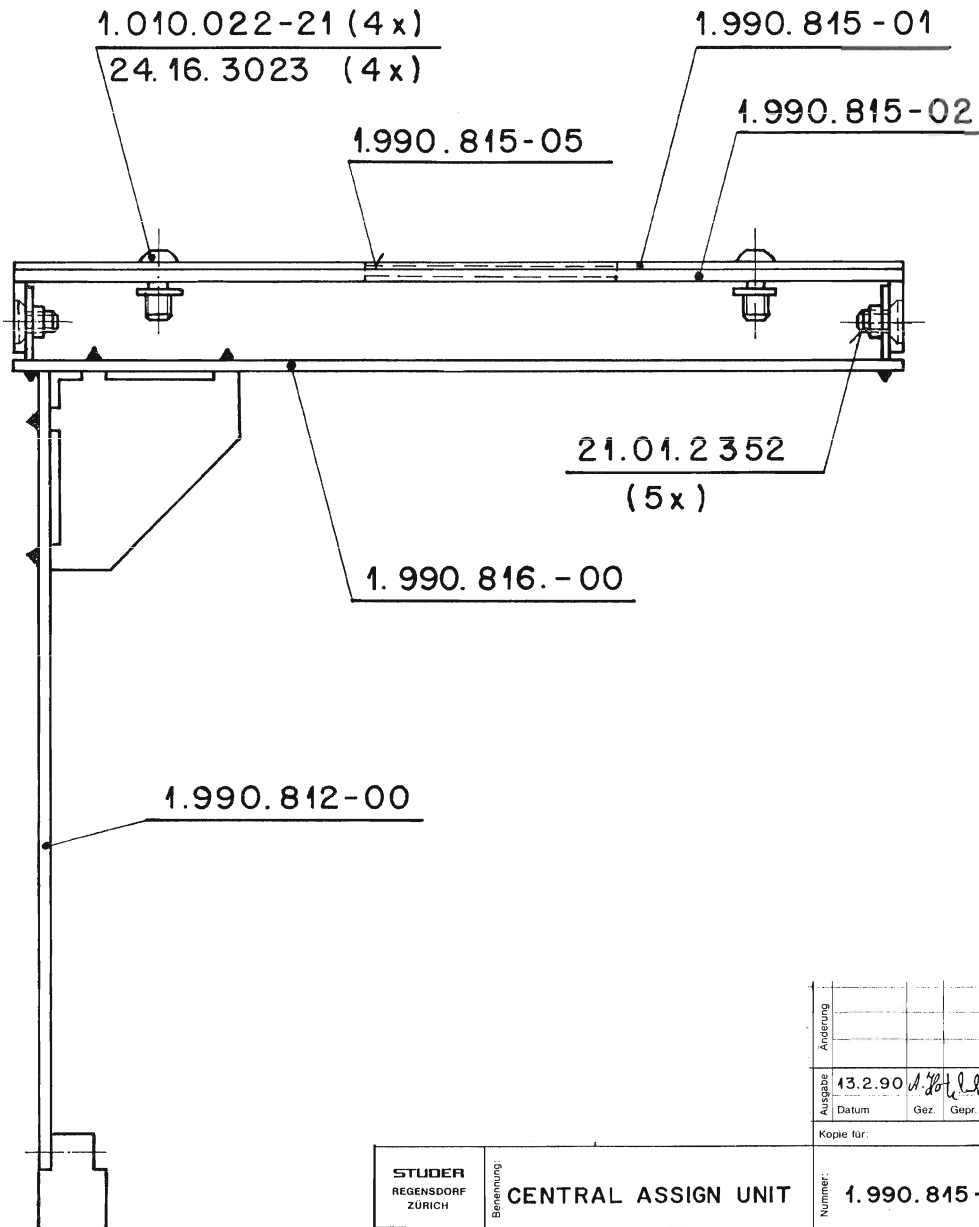
1.990.815.00



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

CENTRAL ASSIGN UNIT

1.990.815.00



STUDER REGENSDORF ZÜRICH	Benennung: CENTRAL ASSIGN UNIT	Kopie für:				③
		Nummer: 1.990.815-00				②
		Ausgabe				①
		13.2.90	<i>A. J. J.</i>	<i>A. J. J.</i>	<i>A. J. J.</i>	④
		Datum	Gez.	Gepr.	Ges.	Index

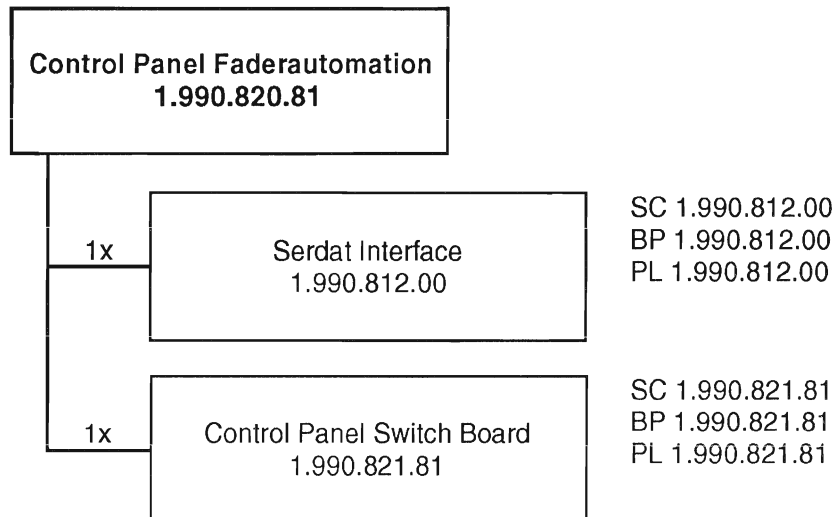
CENTRAL ASSIGN SWITCH BOARD



1.990.816.00



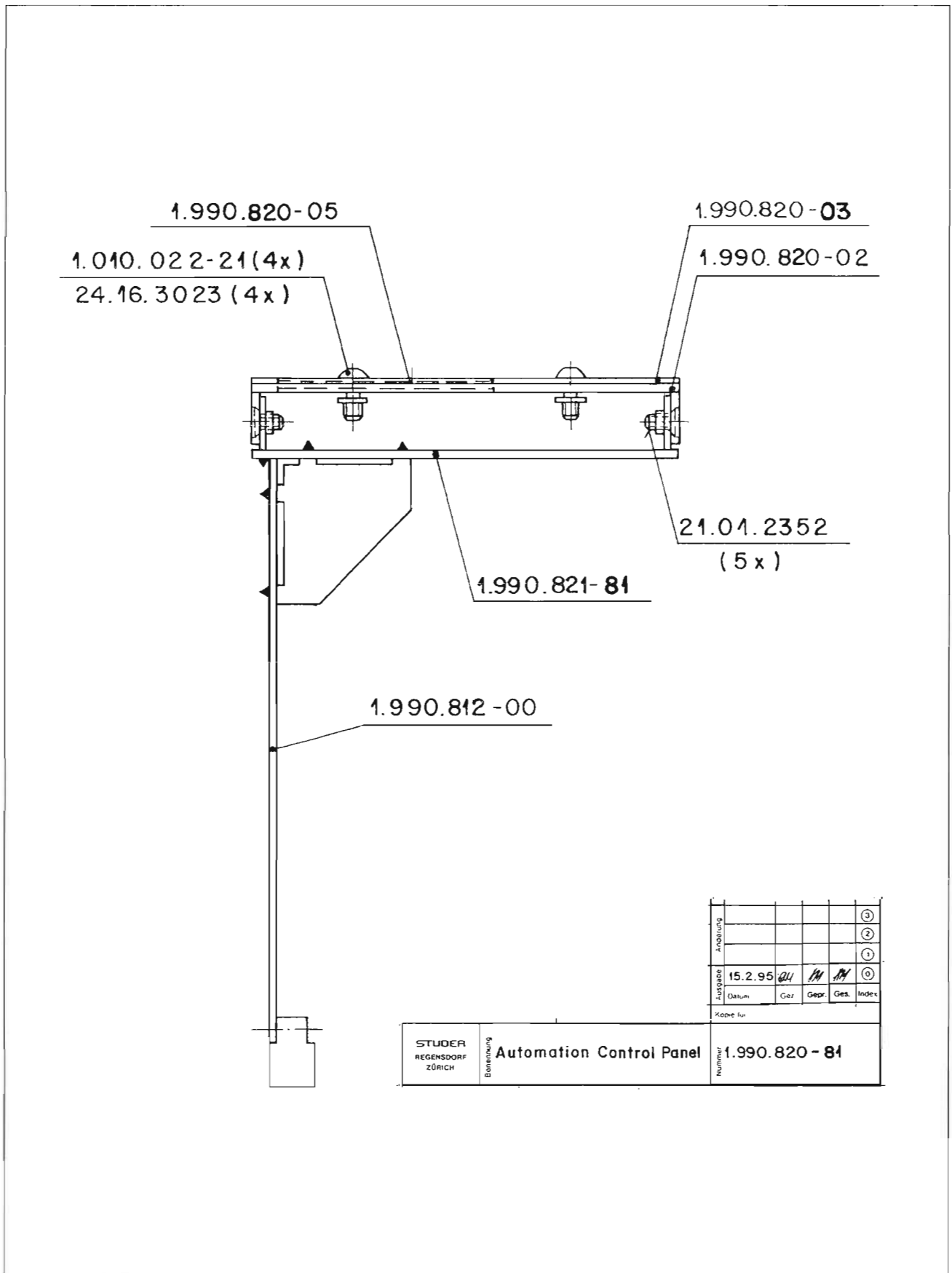
① 27.09.88 CM	① 24.04.90		
MIXING CONSOLE 990		PAGE 2 OF 2	
STUDER CENTRAL ASSIGN SWITCH BOARD		SC	1.990.816-00

Control Panel Faderautomation**1.990.820.81**

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

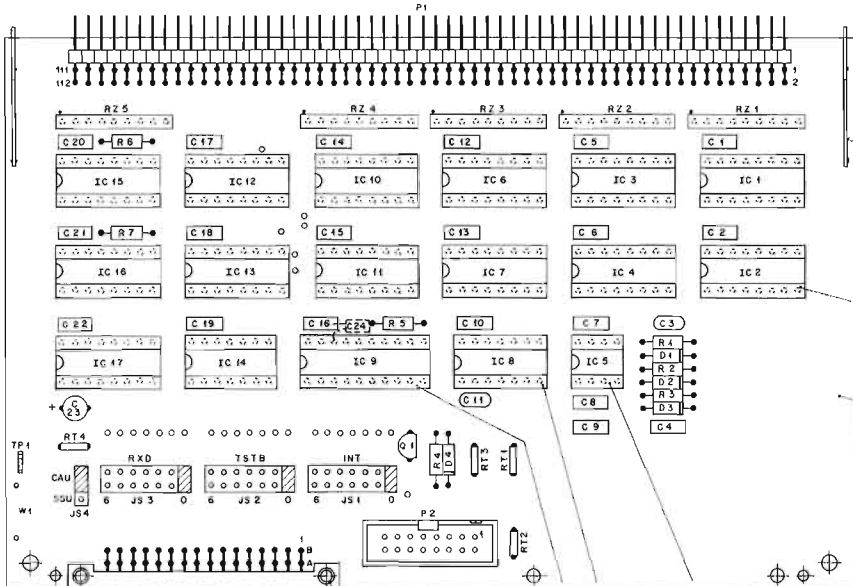
AUTOMATION CONTROL PANEL

1.990.820.81



SERDAT INTERFACE BOARD

1.990.812.00



1.990.100-01
(2 x)

53.03.0168
(43 x)

1.990.812-11

28.99.0119
(2 x)

53.03.0167
(2 x)

53.03.0166

53.03.0165

Ad . POS. REF. No. DESCRIPTION MANUFACTURER

C.....1	59.06.0683	.068 u	10%, 63V	PETP
C.....2	59.06.0683	.068 u	10%, 63V	PETP
C.....3	59.34.4151	150 p	5%, N750	CER
C.....4	59.06.0104	.1 u	10%, 63V	PETP
C.....5	59.06.0683	.068 u	10%, 63V	PETP
C.....6	59.06.0683	.068 u	10%, 63V	PETP
C.....7	59.06.0104	.1 u	10%, 63V	PETP
C.....8	59.06.0104	.1 u	10%, 63V	PETP
C.....9	59.06.0104	.1 u	10%, 63V	PETP
C.....10	59.06.0683	.068 u	10%, 63V	PETP
C.....11	59.34.5561	560 p	5%, N1500	CER
C.....12	59.06.0683	.068 u	10%, 63V	PETP
C.....13	59.06.0683	.068 u	10%, 63V	PETP
C.....14	59.06.0683	.068 u	10%, 63V	PETP
C.....15	59.06.0683	.068 u	10%, 63V	PETP
C.....16	59.06.0683	.068 u	10%, 63V	PETP
C.....17	59.06.0683	.068 u	10%, 63V	PETP
C.....18	59.06.0683	.068 u	10%, 63V	PETP
C.....19	59.06.0683	.068 u	10%, 63V	PETP
C.....20	59.06.0683	.068 u	10%, 63V	PETP
C.....21	59.06.0683	.068 u	10%, 63V	PETP
C.....22	59.06.0683	.068 u	10%, 63V	PETP
C.....23	59.22.3470	47 u	-20%, 10V	EL
01 C.....24	59.32.4331	330 p	20%, 50V	CER
D.....1	50.04.0125	1N 4448	75 V, 150 mA, 4 nS, Si.	
D.....2	50.04.0127	BAT 42	30 V, 100 mA, Schottky.	
D.....3	50.04.0127	BAT 42	30 V, 100 mA, Schottky.	
D.....4	50.04.0125	1N 4448	75 V, 150 mA, 4 nS, Si.	
IC.....1	50.17.1165	74 MC 165	8-Bit Paralel. Imp./Serial Out. Shift Register	
IC.....2	50.17.1895	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....3	50.17.1165	74 MC 165	8-Bit Paralel. Imp./Serial Out. Shift Register	
IC.....4	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....5	50.09.0119	TL 062 CP	Low Power JFET Operational Amplifier.	
IC.....6	50.17.1165	74 MC 165	8-Bit Paralel. Imp./Serial Out. Shift Register	
IC.....7	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....8	50.17.1014	74 MC 14	Hex Schmitt-Trigger Inverter.	
IC.....9	50.17.1541	74 MC 641	Octal 3-St. Noninv. Buf./Line Drv./Line Recv	
IC.....10	50.17.1165	74 MC 165	8-Bit Paralel. Imp./Serial Out. Shift Register	
IC.....11	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....12	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....13	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....14	50.17.1014	74 MC 14	Hex Schmitt-Trigger Inverter.	
IC.....15	50.17.1165	74 MC 165	8-Bit Paralel. Imp./Serial Out. Shift Register	
IC.....16	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
IC.....17	50.17.1595	74 MC 595	8-Bit S. Imp./Latch. 3-St. P. Out. Shift Reg	
JS.....1	54.01.0020	0.63*0.63	2 * 7 pcs. see Note 1.	
JS.....2	54.01.0020	0.63*0.63	2 * 7 pcs. see Note 1.	
JS.....3	54.01.0020	0.63*0.63	2 * 7 pcs. see Note 1.	
JS.....4	54.01.0020	0.63*0.63	1 * 3 pcs. see Note 2.	
P.....1	54.11.0131	0.63*0.63	56 pcs. Right Angled Double Row Pin Header.	
P.....2	54.14.2002		2*6 pins PCB Male Connector for Ribbon-Cable	
P.....3	54.11.2013		2*16 pins BK Angled Male Eurocard-Connector.	
Q.....1	50.03.0407	BC 550 C	45 V, 100 mA, MPW, Si.	
R.....1	57.11.3223	22 k	1%, 0207, MF	
R.....2	57.11.3334	330 k	1%, 0207, MF	
R.....3	57.11.3334	330 k	1%, 0207, MF	
R.....4	57.11.3104	100 k	1%, 0207, MF	
R.....5	57.11.3122	1.2 k	1%, 0207, MF	
R.....6	57.11.3103	10 k	1%, 0207, MF	
R.....7	57.11.3103	10 k	1%, 0207, MF	
RT.....1	57.92.7014		0.46 ohm / 0.650 A / 20 degr. C. PTC	
RT.....2	57.92.7016		0.14 ohm / 1.600 A / 20 degr. C. PTC	
RT.....3	57.92.7014		0.46 ohm / 0.650 A / 20 degr. C. PTC	
RT.....4	57.92.7014		0.46 ohm / 0.650 A / 20 degr. C. PTC	
RZ.....1	57.88.4101	8 * 100 k	2%, S1P 9	
RZ.....2	57.88.4101	8 * 100 k	2%, S1P 9	
RZ.....3	57.88.4101	8 * 100 k	2%, S1P 9	
RZ.....4	57.88.4101	8 * 100 k	2%, S1P 9	
RZ.....5	57.88.4101	8 * 100 k	2%, S1P 9	
TP.....1	54.02.0320	2.8 * 0.8	Straight PCB Male Faston-Connector.	
W.....1	00.00.0000		not used	

Note 1: 1 pc. bridge connector # 54.01.0021 must be plugged into the dual row pin-header at the needed position numbered from 0 to 6.

Note 2: 2-of-3 pins are bridged with bridge connector # 54.01.0021.

Index (01): C24 blocking capacitor (330 pf) is soldered on the print. (30.01.90)

CER=Ceramic, EL=Electrolytic, PETP=Polyester, MF=Metal Film.

1.990.812-00 SERDAT INTERFACE BOARD 0990/01/2001

STUDER
REGENSBOFF
ZÜRICH

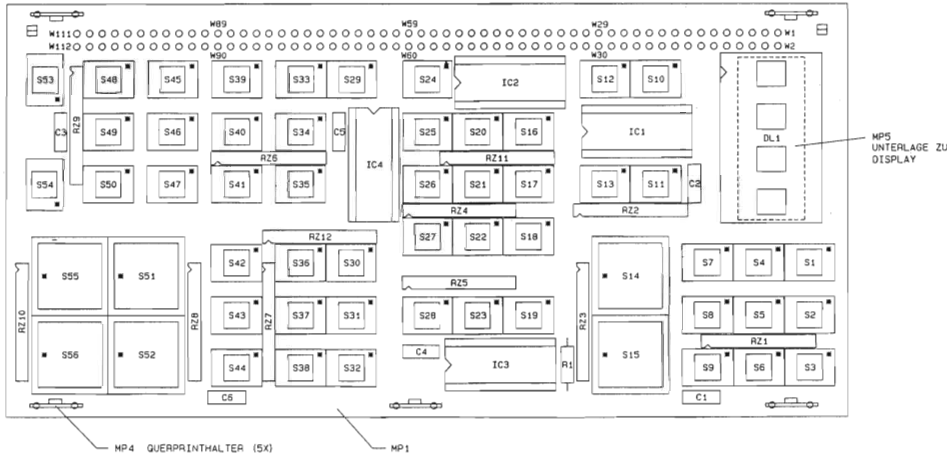
SERDAT INTERFACE BOARD
ESE

1.990.812-00

CONTROL PANEL SWITCH BOARD



1.990.821.81



MP2 + MP3 AUFGEKLEBT NACH FABRIKATIONSMUSTER

○			
○			
①			
②	15.01.95	PG	
END	DATUM	GEZ.	GEPR. GES.
	BLATT 1 VON 1		
STUDER	CONTROL PANEL SWITCH BOARD	ESE	BP 1.990.821.81

Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
C	1	59.06.0104	100n 10 %, 63V		01	S	38	0	not used
C	2	59.06.0104	100n 10 %, 63V		S	39	55.15.0644	1*A PUSH BUTTON + LED YEL	
C	3	59.06.0104	100n 10 %, 63V		01	S	39	55.15.0604	1*A PUSH BUTTON + LED YEL
C	4	59.06.0104	100n 10 %, 63V		S	40	55.15.0644	1*A PUSH BUTTON + LED YEL	
C	5	59.06.0104	100n 10 %, 63V		01	S	40	55.15.0604	1*A PUSH BUTTON + LED YEL
C	6	59.06.0104	100n 10 %, 63V		S	41	55.15.0644	1*A PUSH BUTTON + LED YEL	
DL	1	73.01.0250	4-DIG P35050, 17-SEG. LED		S	42	55.15.0605	1*A PUSH BUTTON + LED GRN	
IC	1	50.17.1595	74HC595 DIP16, 8 BIT SHIFT/OUT. REGISTER		01	S	42	55.15.0604	1*A PUSH BUTTON + LED YEL
IC	2	50.17.1165	74HC165 DIP16, 8 BIT SI/PO SHIFT REGISTER		S	43	55.15.0604	1*A PUSH BUTTON + LED YEL	
IC	3	50.17.1595	74HC595 DIP16, 8 BIT SHIFT/OUT. REGISTER		S	44	55.15.0604	1*A PUSH BUTTON + LED YEL	
IC	4	50.17.1165	74HC165 DIP16, 8 BIT SI/PO SHIFT REGISTER		S	45	55.15.0602	1*A PUSH BUTTON + LED RED	
MP	1	1.990.821.11	1 pcs EMPTY PCB		01	S	45	55.15.0604	1*A PUSH BUTTON + LED YEL
MP	2	43.01.0108	1 pcs ESE STICKER		S	46	55.15.0602	1*A PUSH BUTTON + LED RED	
MP	3	1.990.821.04	1 pcs NUMBER ETIQUETTE		01	S	46	55.15.0604	1*A PUSH BUTTON + LED YEL
MP	4	1.990.100.05	5 pcs PRINTHOLDER		S	47	55.15.0602	1*A PUSH BUTTON + LED RED	
MP	5	1.990.810.03	1 pcs FOUNDATION FOR DISPLAY		01	S	47	55.15.0604	1*A PUSH BUTTON + LED YEL
R	1	57.11.3103	10k 1 %, 0.6W, MF		S	48	55.15.0604	1*A PUSH BUTTON + LED YEL	
RZ	1	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	49	55.15.0604	1*A PUSH BUTTON + LED YEL	
RZ	2	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	50	55.15.0604	1*A PUSH BUTTON + LED YEL	
RZ	3	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	51	55.15.0704	1*A PUSH BUTTON + LED YEL	
RZ	4	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	52	55.15.0704	1*A PUSH BUTTON + LED YEL	
RZ	5	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	53	55.15.0644	1*A PUSH BUTTON + LED YEL	
RZ	6	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		01	S	53	0	not used
RZ	7	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	54	55.15.0655	1*A PUSH BUTTON + LED GRN	
RZ	8	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		01	S	54	55.15.0604	1*A PUSH BUTTON + LED YEL
RZ	9	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		S	55	55.15.0702	1*A PUSH BUTTON + LED RED	
RZ	10	57.88.4151	150E 2 %, 0.125W, SIPO9, 8 * 150E		01	S	55	55.15.0722	1*A PUSH BUTTON + LED RED
RZ	11	57.88.4104	100k 2 %, 0.125W, SIPO9, 8 * 100K		S	56	55.15.0705	1*A PUSH BUTTON + LED GRN	
RZ	12	57.88.4104	100k 2 %, 0.125W, SIPO9, 8 * 100K		01	S	56	55.15.0755	1*A PUSH BUTTON + LED GRN
S	1	55.15.0655	1*A PUSH BUTTON + LED GRN		XIC	1	53.03.0168	D116 SOCKET FOR IC1	
01	S	1	0		XIC	2	53.03.0168	D116 SOCKET FOR IC2	
S	2	55.15.0644	1*A PUSH BUTTON + LED YEL		XIC	3	53.03.0168	D116 SOCKET FOR IC3	
S	3	55.15.0622	1*A PUSH BUTTON + LED RED		XIC	4	53.03.0168	D116 SOCKET FOR IC4	
01	S	3	0						
S	4	55.15.0655	1*A PUSH BUTTON + LED GRN						
01	S	4	55.15.0604						
S	5	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	5	0						
S	6	55.15.0622	1*A PUSH BUTTON + LED RED						
01	S	6	55.15.0604						
S	7	55.15.0655	1*A PUSH BUTTON + LED GRN						
01	S	7	0						
S	8	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	8	0						
S	9	55.15.0622	1*A PUSH BUTTON + LED RED						
01	S	9	0						
S	10	55.15.0605	1*A PUSH BUTTON + LED GRN						
01	S	10	0						
S	11	55.15.0622	1*A PUSH BUTTON + LED RED						
01	S	11	0						
S	12	55.15.0602	1*A PUSH BUTTON + LED RED						
01	S	12	0						
S	13	55.15.0604	1*A PUSH BUTTON + LED YEL						
01	S	13	0						
S	14	55.15.0702	1*A PUSH BUTTON + LED RED						
S	15	55.15.0722	1*A PUSH BUTTON + LED RED						
01	S	15	55.15.0705						
S	16	55.15.0755	1*A PUSH BUTTON + LED GRN						
S	17	55.15.0655	1*A PUSH BUTTON + LED GRN						
01	S	17	55.15.0604						
S	18	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	19	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	19	0						
S	20	55.15.0655	1*A PUSH BUTTON + LED GRN						
S	21	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	22	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	23	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	23	0						
S	24	55.15.0605	1*A PUSH BUTTON + LED GRN						
01	S	24	55.15.0604						
S	25	55.15.0655	1*A PUSH BUTTON + LED GRN						
S	26	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	27	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	28	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	28	0						
S	29	55.15.0605	1*A PUSH BUTTON + LED GRN						
01	S	29	55.15.0604						
S	30	55.15.0655	1*A PUSH BUTTON + LED GRN						
01	S	30	55.15.0604						
S	31	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	32	55.15.0604	1*A PUSH BUTTON + LED YEL						
S	33	55.15.0602	1*A PUSH BUTTON + LED RED						
01	S	33	0						
S	34	55.15.0604	1*A PUSH BUTTON + LED YEL						
01	S	34	0						
S	35	55.15.0605	1*A PUSH BUTTON + LED GRN						
01	S	35	0						
S	36	55.15.0644	1*A PUSH BUTTON + LED YEL						
01	S	36	0						
S	37	55.15.0622	1*A PUSH BUTTON + LED RED						
01	S	37	0						
S	38	55.15.0602	1*A PUSH BUTTON + LED RED						

Section 6

Meter Panel and Top Panel Units

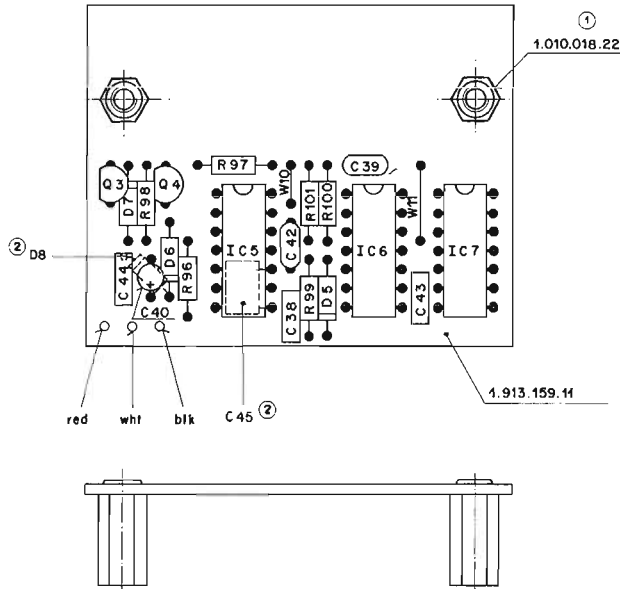
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Dynamics Unit Lim./Comp./Gate.....	1.990.510.00
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Bargraph Digital Board	1.990.602.20
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EI Mic/Display Control Unit.....	1.990.652.00
TB Mic Gooseneck Display Control Unit.....	1.990.653.00
TB Mic/Display Control Unit.....	1.990.653.00

DIGITAL NOISE GENERATOR



1.913.159.00



STUDER NEDENSDORF ZÜRICH	Betriebsart DIGITAL NOISE GENERATOR ESE	Number 1.913.159 - 00
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Abgefragt					③
28.9.87	JA	W	W	W	②
27.8.86	JA	W	W	W	①
14.11.85	JA	W	W	W	①
Datum	Erz	Emp	Gas	Index	

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

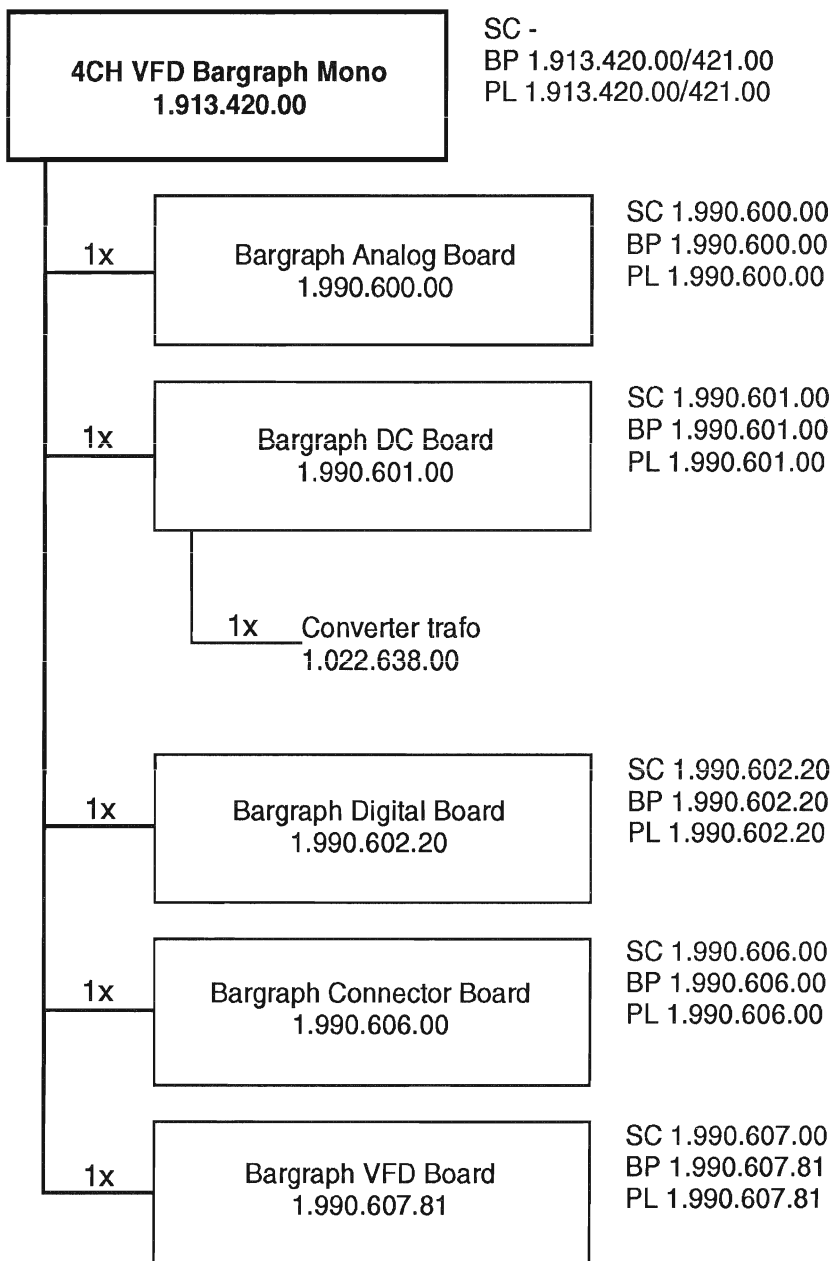
C....38	59.06.5102	1 nF	10%	PE	
C....39	59.34.2470	47 pF	5%	CE	
C....40	59.26.9109	1 uF	-20%	SAL	
01 C....40	59.22.3101	100 uF		EL	
C....41		not used			
C....42	59.34.2470	47 pF	5%	CE	
C....43	59.06.5104	100 nF	20%	PE	
C....44	59.06.5104	100 nF	20%	PE	
01 C....45	59.06.0222	2.2 nF	20%	PE	
D....5	50.04.1108	Z 5.6V	400mW		
01 D....5	50.04.1114	Z 10V	400mW		
D....6	50.04.0125	1N4448			any
D....7	50.04.0125	1N4448			any
01 D....8	50.04.0125	1N4448			any
IC....5	50.07.0070	CD4070	2-Input EXOR		Fc,Mot
IC....6	50.07.1006	CD4006	18 bit SHIFT-REGISTER		Fc,Mot
IC....7	50.07.1006	CD4006	18 bit SHIFT-REGISTER		Fc,Mot
MP....1	1.010.012.22	2 pcs	Nietmutter SW 6		
MP....2	1.913.159.11	1 pcs	Print		
Q....3	50.03.0436	BC 237	NPN IC>100mA, B>100		any
Q....4	50.03.0436	BC 237	NPN IC>100mA, B>100		any
R....94		not exist			
R....95		not exist			
R....96	57.11.4223	22 kOhm	2% 0.25W MF		
R....97	57.11.4103	10 kOhm	2% 0.25W MF		
R....98	57.11.4103	10 kOhm	2% 0.25W MF		
R....99	57.11.4105	1 MOhm	5% 0.25W MF		
R...100	57.11.4154	150 kOhm	2% 0.25W MF		
R...101	57.11.4103	10 kOhm	2% 0.25W MF		
W....10					
W....11					

(01) 87/09/28 improved start oscillation after power-on
 CE=Ceramic, CF=Carbon Film, EL=Electrolytic, MF=Metal Film,
 PE=Polyester, PP=Polypropylen, PS=Polystyrol, SAL=Solid aluminium
 lacquard
 MANUFACTURER: Bu=Burndy, Ex=Exar, Fc=Fairchild, GI=General Instrument
 HP=Hewlett Packard, IIT=Intermetall, Mot=Motorola,
 NS=National Semiconductors, Ph=Philips, Ra-Raytheon,
 Sig=Signetics, Six=Siliconix, St=Studer,
 TI=Texas Instrument, CK=C&K

1.913.159.00	DIGITAL NOISE GENERATOR	AE 85/11/1200
1.913.159.00	DIGITAL NOISE GENERATOR	AE 87/09/2801

4CH VFD Bargraph Mono

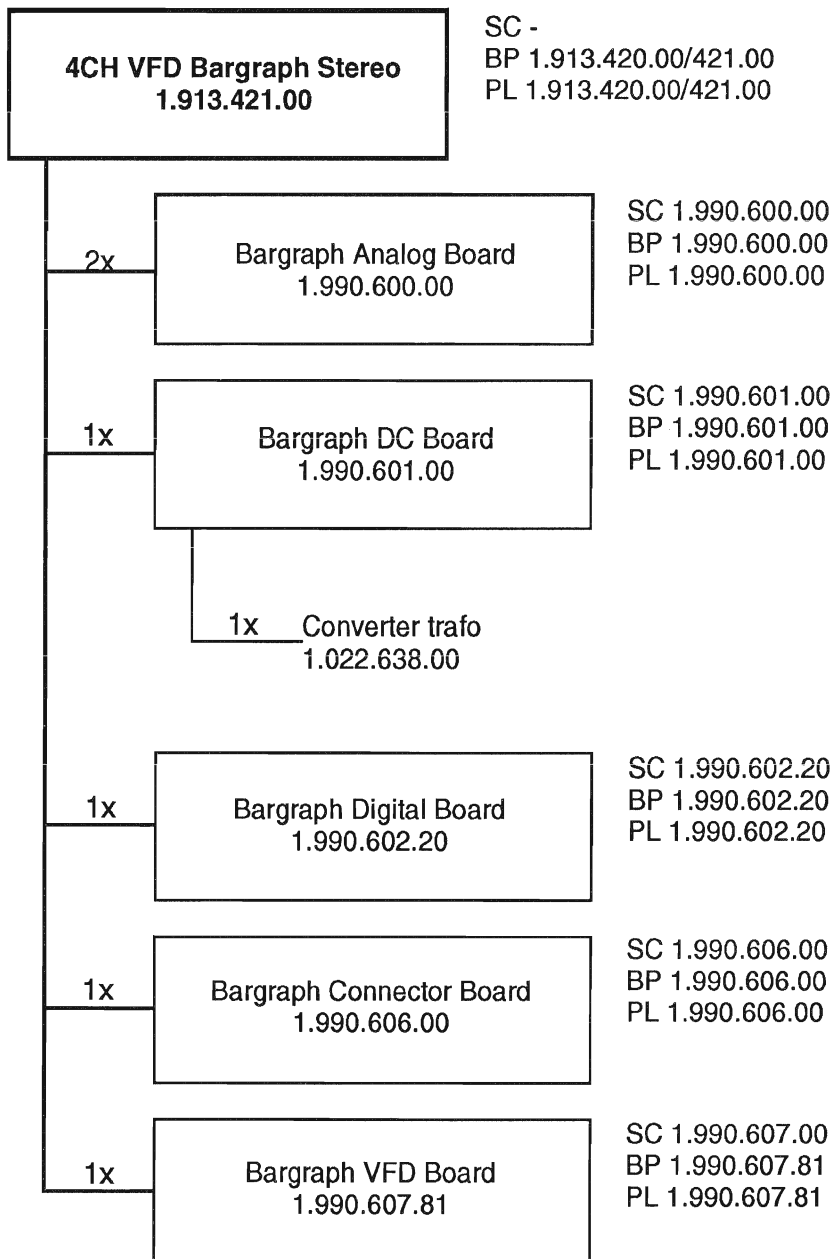
1.913.420.00



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

4CH VFD Bargraph Stereo

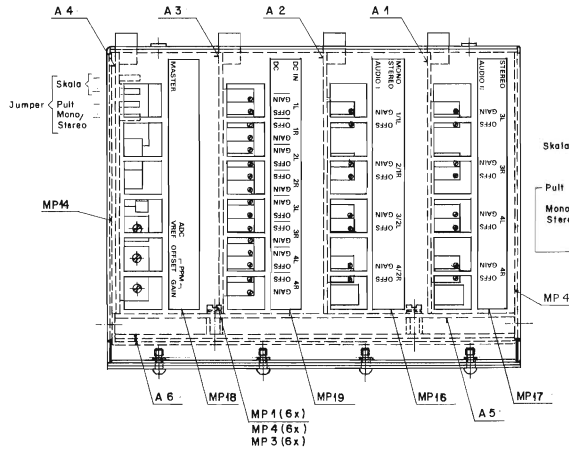
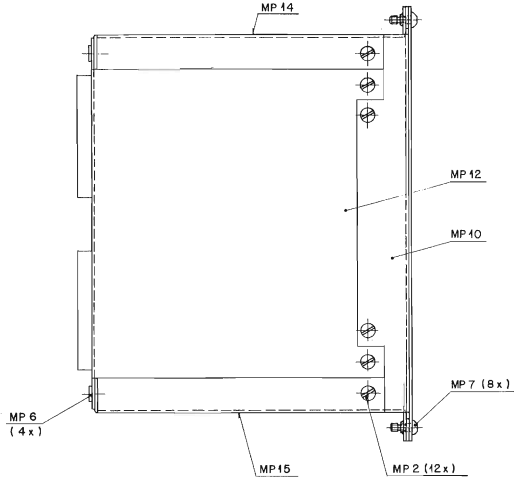
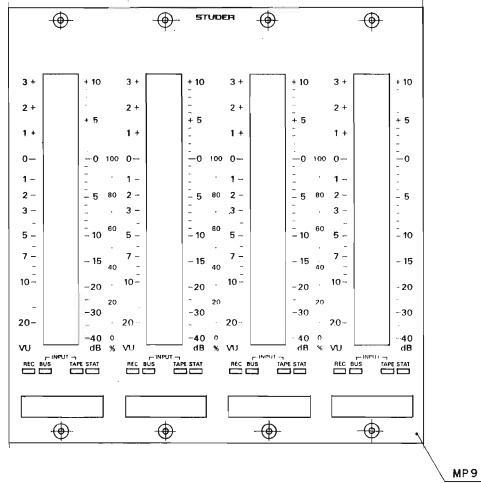
1.913.421.00



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

4CH BAR-GRAPH STEREO

1.913.421.00



Anordnung der Jumper 54.01.00.21 auf dem Digitalprint A 4

1.913.420.00	1.913.421.00	1.913.422.00	1.913.423.00	1.913.424.00	1.913.425.00	1.913.426.00	1.913.427.00
Mono 990	Stereo 990	Mono N 9	Stereo N 9	Mono IEC	Stereo IEC	Mono EBU	Stereo EBU
Skala	Skala	Skala	Skala	Skala	Skala	Skala	Skala
Pult	Pult	Pult	Pult	Pult	Pult	Pult	Pult
Mono/Stereo	Mono/Stereo	Mono/Stereo	Mono/Stereo	Mono/Stereo	Mono/Stereo	Mono/Stereo	Mono/Stereo

Bei Verwendung im Pult 990 diesen Jumper in der Pult-Endmontage entfernen.

36.91	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90
21.6.90	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90	11.11.90

STUDER RECHENWERK ZÜRICH
4 CH BAR-GRAPH STEREO
 Nummer: **1.913.421-00**

1.913.420.00

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
A....1		0	not used	
A....2		1.990.600.00	Bar-Graph Analog Board	St
A....3		1.990.601.00	Bar-Graph DC Board	St
A....4		1.990.602.21	Bar-Graph Digital Board	St
A....5		1.990.606.00	Bar-Graph Connector Board	St
A....6		1.990.607.81	Bar-Graph VFD Board	St
MP...1		21.01.0353	0006 pcs Z-Schr., 2N, M3 = 5	
MP...2		21.01.2352	0012 pcs S-Schr., 2N, M3 = 4	
MP...3		23.01.1032	0006 pcs U-Scheibe D 3.2/6 = 0.5	
MP...4		24.16.1030	0006 pcs Rippenscheibe D 3.2/5.5	
MP...5		0	not exist	
MP...6		28.31.0005	0004 pcs Blindniete D 3.2 * 6.1	
MP...7		1.010.022.21	0008 pcs Linsenschraube IS spez. M3 * 8 sw	
MP...8		1.010.080.43	0001 pcs Software Version Schild	
MP...9		1.913.420.01	0001 pcs Frontschild VFD Bar-Graph	
MP...10		1.913.420.02	0001 pcs Traeger VFD Bar-Graph	
MP...11		1.913.420.04	0000 pcs Studer-Nr.-Etikette 10 * 20	
MP...12		1.913.420.05	0001 pcs Mantel VFD Bar-Graph	
MP...13		0	not exist	
MP...14		1.913.420.06	0002 pcs Isolation Mantel VFD Bar-Graph	
MP...15		1.990.620.09	0002 pcs Stirrmantel VFD Bar-Graph	
MP...16		1.990.620.21	0001 pcs Schild Potm. Beschr. AUDIO 1	
MP...17		0	not exist	
MP...18		1.990.620.23	0001 pcs Schild Potm. Beschr. MASTER	
MP...19		1.990.620.24	0001 pcs Schild Potm. Beschr. DC	
MP...20		54.01.0021	0003 pcs Jumper Bruecke	

Index 1: U-Scheiben und Rippenscheiben dazu.
 Index 2: Aenderung von 1.990.607.00 nach 1.990.607.81
 Index 3: Uebertragung der Jumperbruecken von 1.990.602.20
 Index 4: 1.990.602.21 neue SW

MANUFACTURER St=Studer

1.913.420.00	4CH BAR-GRAPH MONO (990)	VOL90/02/0600
1.913.420.00	4CH BAR-GRAPH MONO (990)	VOL90/05/0801
1.913.420.00	4CH BAR-GRAPH MONO (990)	VOL90/06/2702
1.913.420.00	4CH BAR-GRAPH MONO (990)	VOL91/06/2603
1.913.420.00	4CH BAR-GRAPH MONO (990)	FR194/04/2804

1.913.421.00

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
A....1		1.990.600.00	Bar-Graph Analog Board	St
A....2		1.990.600.00	Bar-Graph Analog Board	St
A....3		1.990.601.00	Bar-Graph DC Board	St
A....4		1.990.602.21	Bar-Graph Digital Board	St
A....5		1.990.606.00	Bar-Graph Connector Board	St
A....6		1.990.607.81	Bar-Graph VFD Board	St
MP...1		21.01.0353	0006 pcs Z-Schr., 2N, M3 = 5	
MP...2		21.01.2352	0012 pcs S-Schr., 2N, M3 = 4	
MP...3		23.01.1032	0006 pcs U-Scheibe D 3.2/6 = 0.5	
MP...4		24.16.1030	0006 pcs Rippenscheibe D 3.2/5.5	
MP...5		0	not exist	
MP...6		28.31.0005	0004 pcs Blindniete D 3.2 * 6.1	
MP...7		1.010.022.21	0008 pcs Linsenschraube IS spez. M3 * 8 sw	
MP...8		1.010.080.43	0001 pcs Software Version Schild	
MP...9		1.913.420.01	0001 pcs Frontschild VFD Bar-Graph	
MP...10		1.913.420.02	0001 pcs Traeger VFD Bar-Graph	
MP...11		1.913.421.04	0000 pcs Studer-Nr.-Etikette 10 * 20	
MP...12		1.913.420.05	0001 pcs Mantel VFD Bar-Graph	
MP...13		0	not exist	
MP...14		1.913.420.06	0002 pcs Isolation Mantel VFD Bar-Graph	
MP...15		1.990.620.09	0002 pcs Stirrmantel VFD Bar-Graph	
MP...16		1.990.620.21	0001 pcs Schild Potm. Beschr. AUDIO 1	
MP...17		1.990.620.22	0001 pcs Schild Potm. Beschr. AUDIO 2	
MP...18		1.990.620.23	0001 pcs Schild Potm. Beschr. MASTER	
MP...19		1.990.620.24	0001 pcs Schild Potm. Beschr. DC	
MP...20		54.01.0021	0003 pcs Jumper Bruecke	

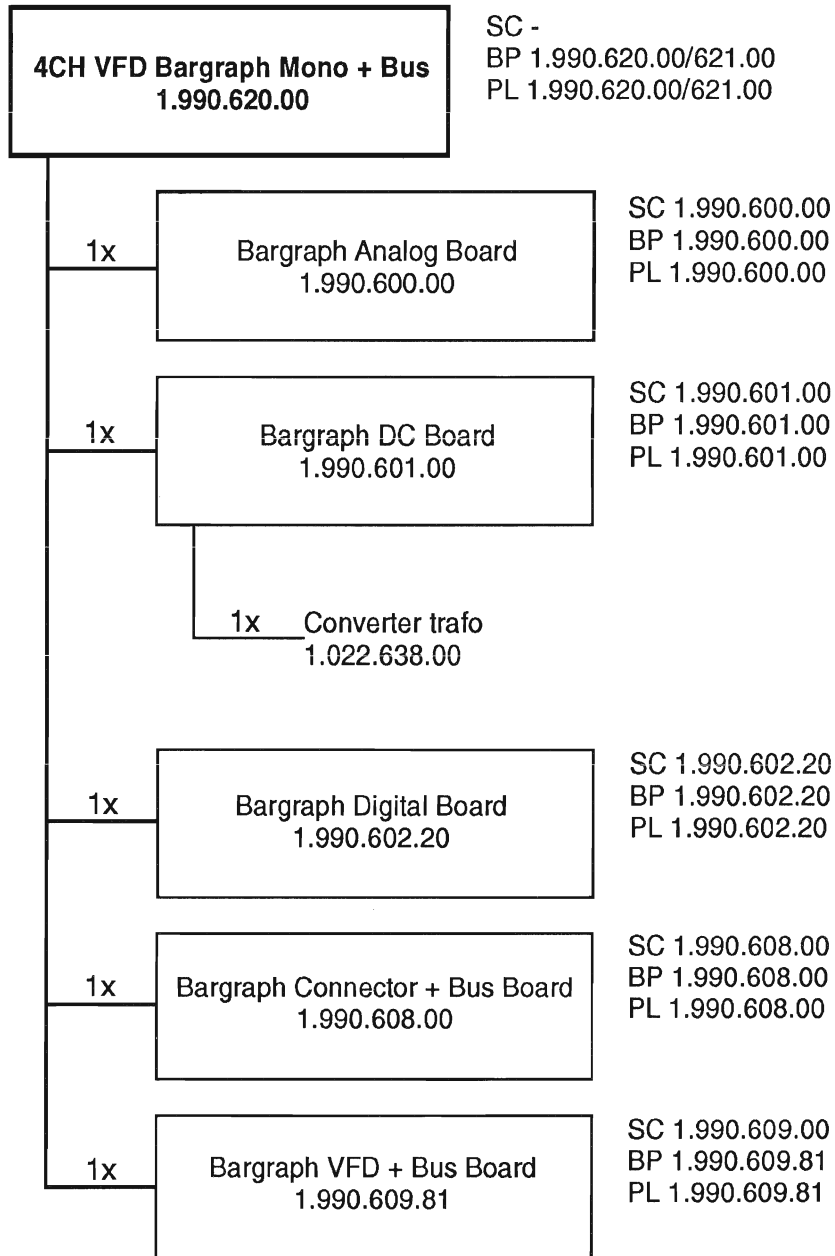
Index 1: U-Scheiben und Rippenscheiben dazu.
 Index 2: Aenderung von 1.990.607.00 nach 1.990.607.81
 Index 3: Uebertragung der Jumperbruecken von 1.990.602.20
 Index 4: 1.990.602.21 neue SW

MANUFACTURER St=Studer

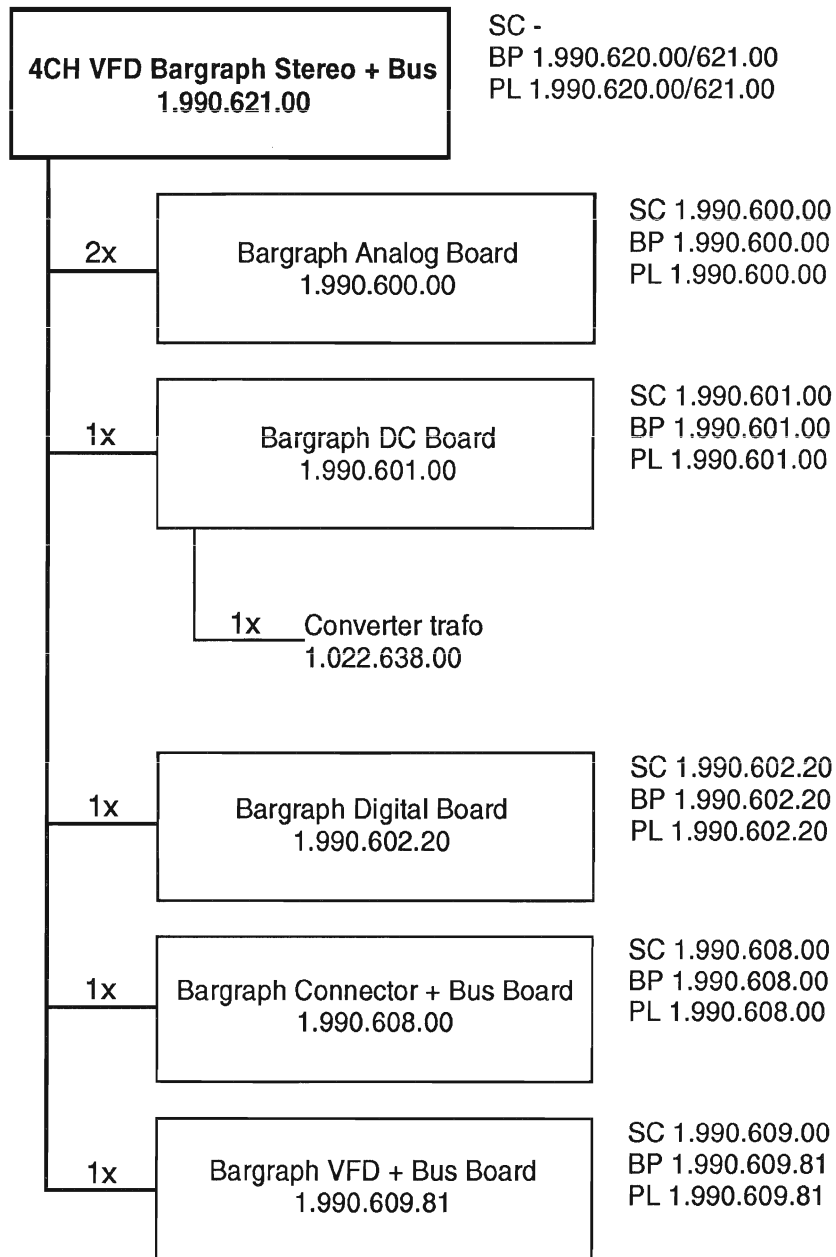
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1.913.421.00	4CH BAR-GRAPH STEREO (990)	VOL90/06/2702
1.913.421.00	4CH BAR-GRAPH STEREO (990)	VOL91/06/2603
1.913.421.00	4CH BAR-GRAPH STEREO (990)	FR194/04/2804

4CH VFD Bargraph Mono + Bus

1.990.620.00



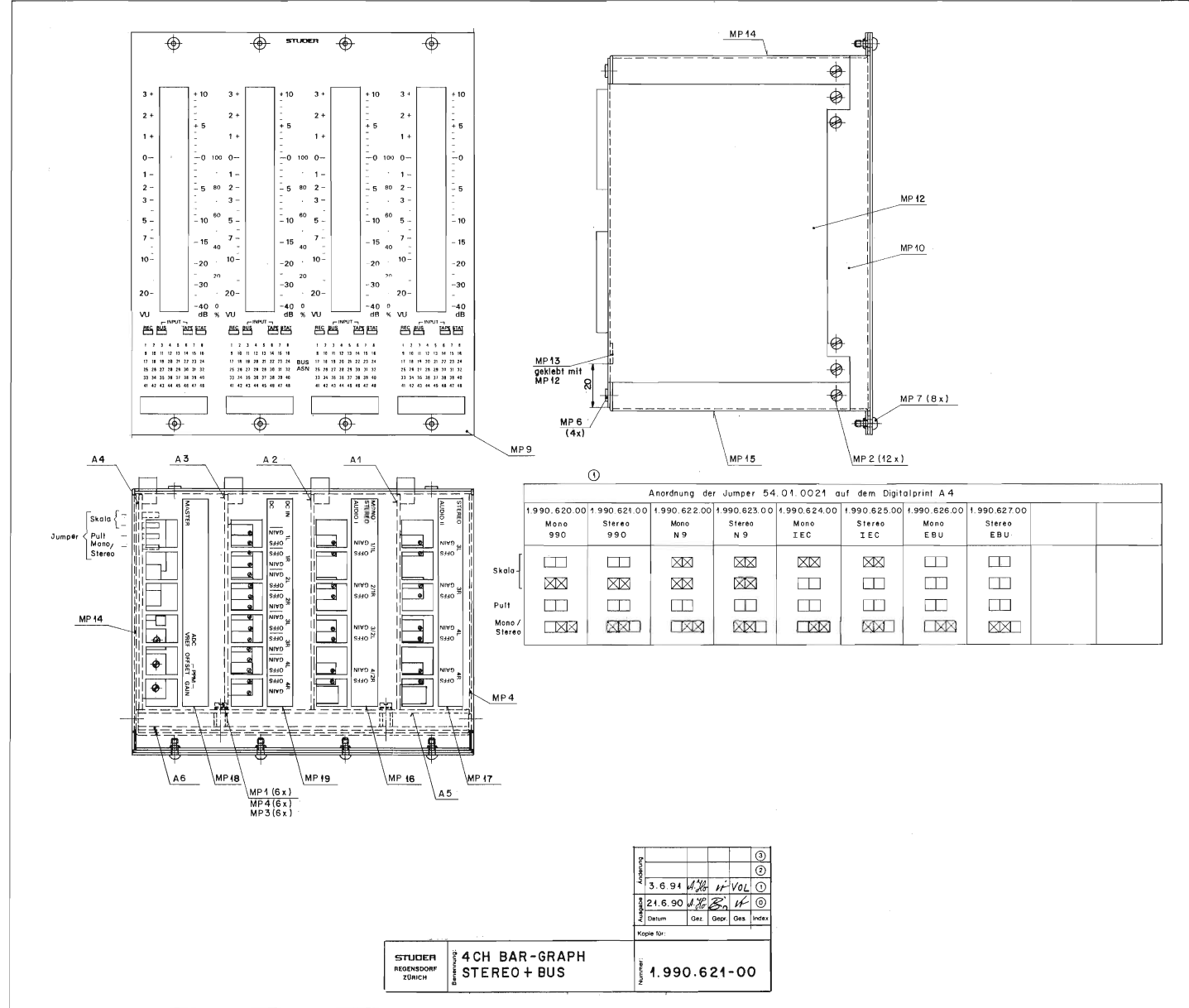
SC: Schema Circuit Diagram
BP: Bestückungsplan PCB Layout
PL: Positionsliste Positional List

4CH VFD Bargraph Stereo + Bus**1.990.621.00**

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

4CH BAR-GRAPH STEREO + BUS

1.990.621.00



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....1	0		not used	
A.....2	1.990.600.00		Bar-Graph Analog Board	St
A.....3	1.990.601.00		Bar-Graph DC Board	St
04 A.....4	1.990.602.21		Bar-Graph Digital Board	St
A.....5	1.990.608.00		Bar-Graph Connector+Bus Board	St
02 A.....6	1.990.609.81		Bar-Graph VFD+Bus Board	St
MP...1	21.01.0353	0006	pcs Z-Schr. , ZN , M3 * 5	
MP...2	21.01.2352	0012	pcs S-Schr. , ZN , M3 * 4	
01 MP...3	23.01.1032	0006	pcs U-Scheibe D 3.2/6 * 0.5	
01 MP...4	24.16.1030	0006	pcs Rippenscheibe D 3.2/5.5	
MP...5	0		not exist	
MP...6	28.31.0005	0004	pcs Blindniete D 3.2 * 6.1	
MP...7	1.010.022.21	0008	pcs Linsenschraube IS spez. M3 * 8 sw	
MP...8	1.010.080.43	0001	pcs Software Version Schild	
MP...9	1.990.620.01	0001	pcs Frontschild 1 VFD Bar-Graph + Bus	
MP...10	1.990.620.02	0001	pcs Traeger VFD Bar-Graph + Bus	
MP...11	1.990.621.04	0000	pcs Studer-Nr.-Etikette 10 * 20	
MP...12	1.990.620.05	0001	pcs Mantel VFD Bar-Graph + Bus	
MP...13	1.990.620.06	0001	pcs Distanzstreifen	
MP...14	1.990.620.08	0002	pcs Isolation Mantel VFD Bar-Graph	
MP...15	1.990.620.09	0002	pcs Stirnmantel VFD Bar-Graph	
MP...16	1.990.620.21	0001	pcs Schild Potm. Beschr. AUDIO 1	
MP...17	0		not exist	
MP...18	1.990.620.23	0001	pcs Schild Potm. Beschr. MASTER	
MP...19	1.990.620.24	0001	pcs Schild Potm. Beschr. DC	
03 MP...20	54.01.0021	0002	pcs Jumper Bruecke	

Index 1: U-Scheiben und Rippenscheiben dazu.
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 Index 4: 1.990.602.21 neue SW

MANUFACTURER St=Studer

1.990.620.00	4CH BAR-GRAPH MONO+BUS (990)	VOL90/02/0600
1.990.620.00	4CH BAR-GRAPH MONO+BUS (990)	VOL90/05/0801
1.990.620.00	4CH BAR-GRAPH MONO+BUS (990)	VOL90/06/2702
1.990.620.00	4CH BAR-GRAPH MONO+BUS (990)	VOL91/06/2603
1.990.620.00	4CH BAR-GRAPH MONO+BUS (990)	FR194/04/2804

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....1	1.990.600.00		Bar-Graph Analog Board	St
A.....2	1.990.600.00		Bar-Graph Analog Board	St
A.....3	1.990.601.00		Bar-Graph DC Board	St
04 A.....4	1.990.602.21		Bar-Graph Digital Board	St
A.....5	1.990.608.00		Bar-Graph Connector+Bus Board	St
02 A.....6	1.990.609.81		Bar-Graph VFD+Bus Board	St
MP...1	21.01.0353	0006	pcs Z-Schr. , ZN , M3 * 5	
MP...2	21.01.2352	0012	pcs S-Schr. , ZN , M3 * 4	
01 MP...3	23.01.1032	0006	pcs U-Scheibe D 3.2/6 * 0.5	
01 MP...4	24.16.1030	0006	pcs Rippenscheibe D 3.2/5.5	
MP...5	0		not exist	
MP...6	28.31.0005	0004	pcs Blindniete D 3.2 * 6.1	
MP...7	1.010.022.21	0008	pcs Linsenschraube IS spez. M3 * 8 sw	
MP...8	1.010.080.43	0001	pcs Software Version Schild	
MP...9	1.990.620.01	0001	pcs Frontschild 1 VFD Bar-Graph + Bus	
MP...10	1.990.620.02	0001	pcs Traeger VFD Bar-Graph + Bus	
MP...11	1.990.621.04	0000	pcs Studer-Nr.-Etikette 10 * 20	
MP...12	1.990.620.05	0001	pcs Mantel VFD Bar-Graph + Bus	
MP...13	1.990.620.06	0001	pcs Distanzstreifen	
MP...14	1.990.620.08	0002	pcs Isolation Mantel VFD Bar-Graph	
MP...15	1.990.620.09	0002	pcs Stirnmantel VFD Bar-Graph	
MP...16	1.990.620.21	0001	pcs Schild Potm. Beschr. AUDIO 1	
MP...17	1.990.620.22	0001	pcs Schild Potm. Beschr. AUDIO 2	
MP...18	1.990.620.23	0001	pcs Schild Potm. Beschr. MASTER	
MP...19	1.990.620.24	0001	pcs Schild Potm. Beschr. DC	
03 MP...20	54.01.0021	0002	pcs Jumper Bruecke	

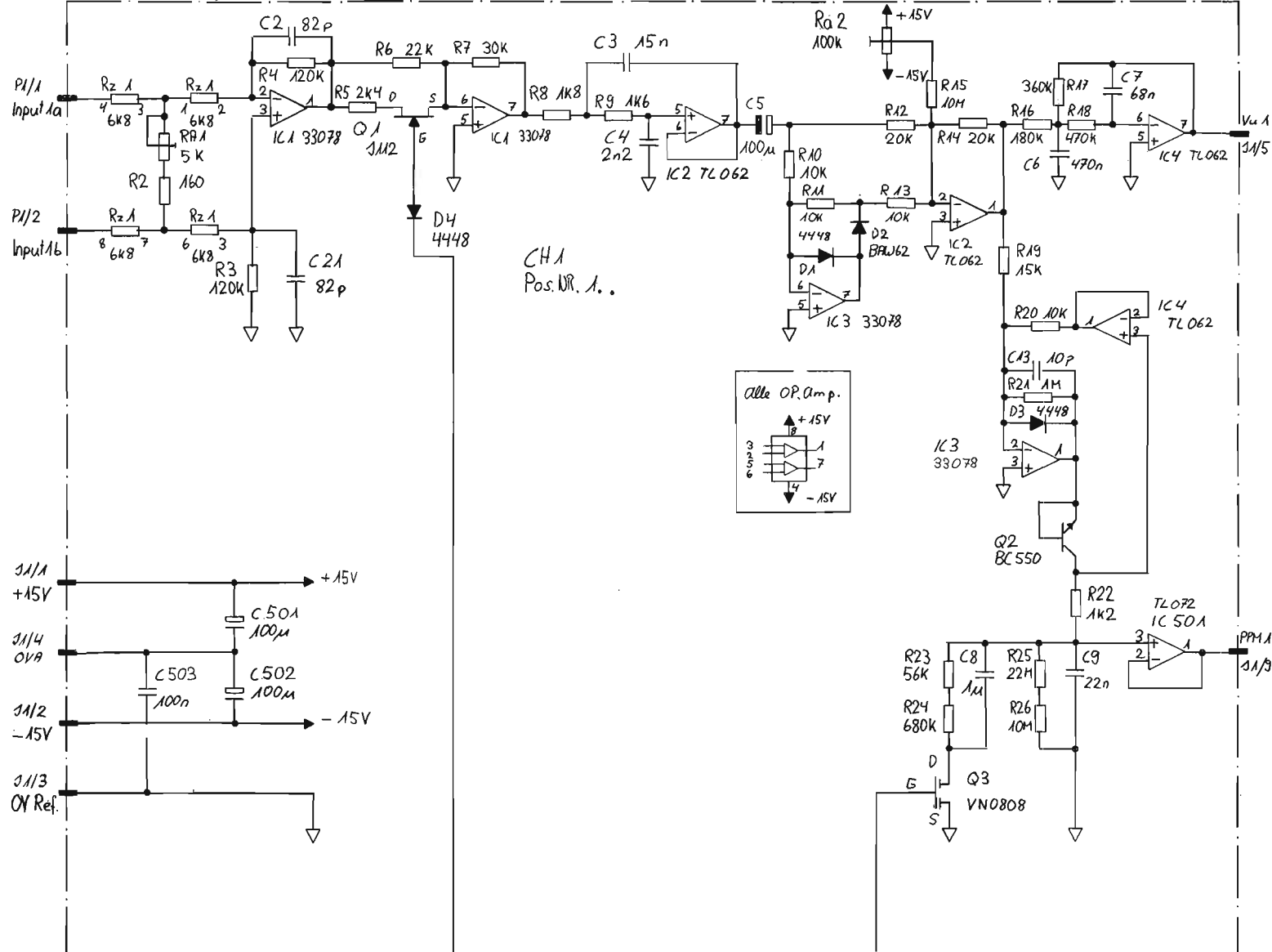
Index 1: U-Scheiben und Rippenscheiben dazu.
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MANUFACTURER St=Studer

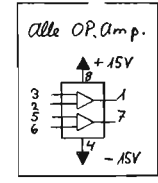
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1.990.621.00	4CH BAR-GRAPH STEREO+BUS (990)	VOL90/06/2702
1.990.621.00	4CH BAR-GRAPH STEREO+BUS (990)	VOL91/06/2603
1.990.621.00	4CH BAR-GRAPH STEREO+BUS (990)	FR194/04/2804

ANALOG BOARD

1.990.600.00



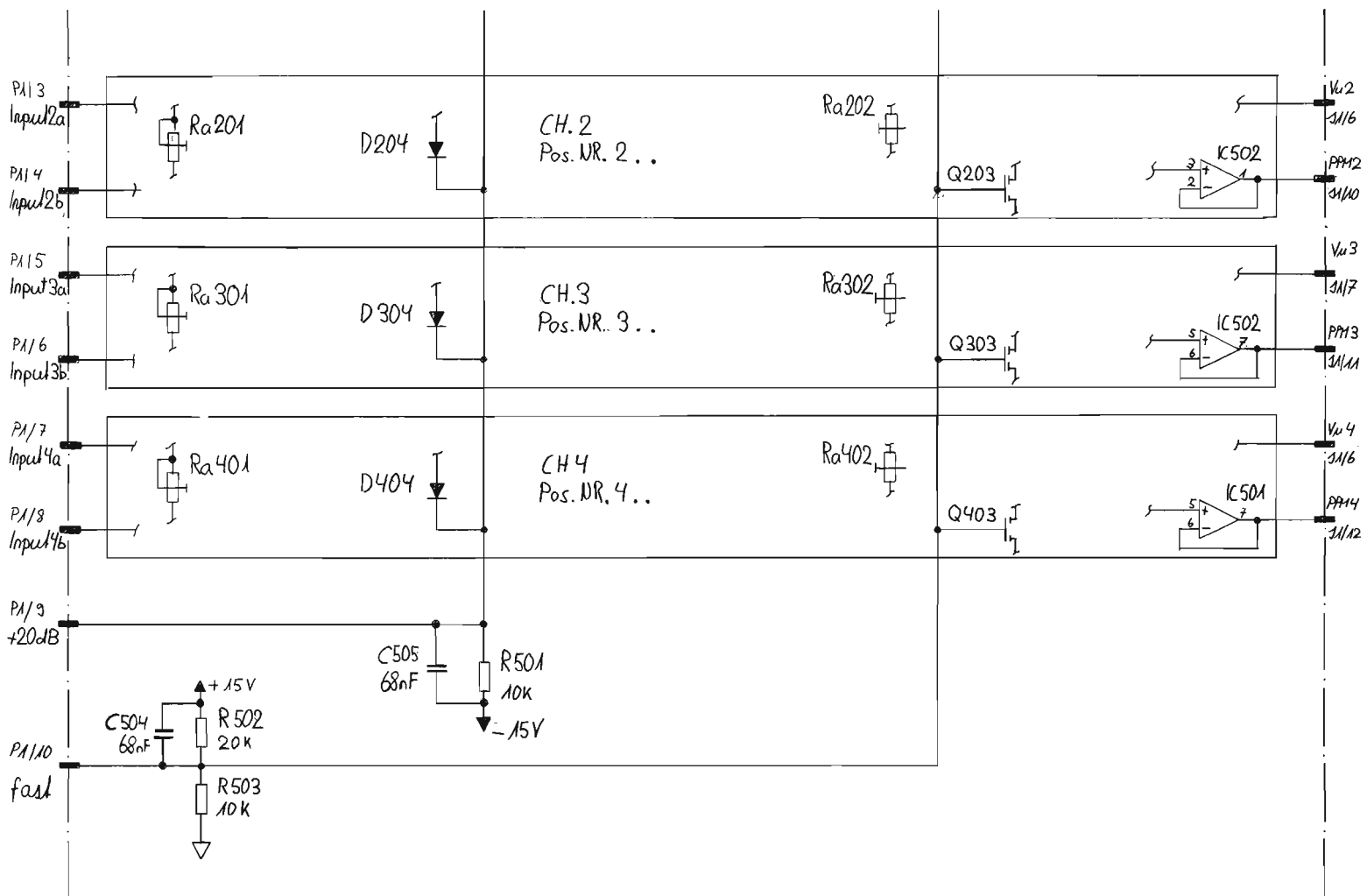
CH1 Pos. NR. 1.



181285 Emi
 1.990.600.00
 ANALOG BOARD
 1.990.600.00
 PAGE 1 OF 2

ANALOG BOARD

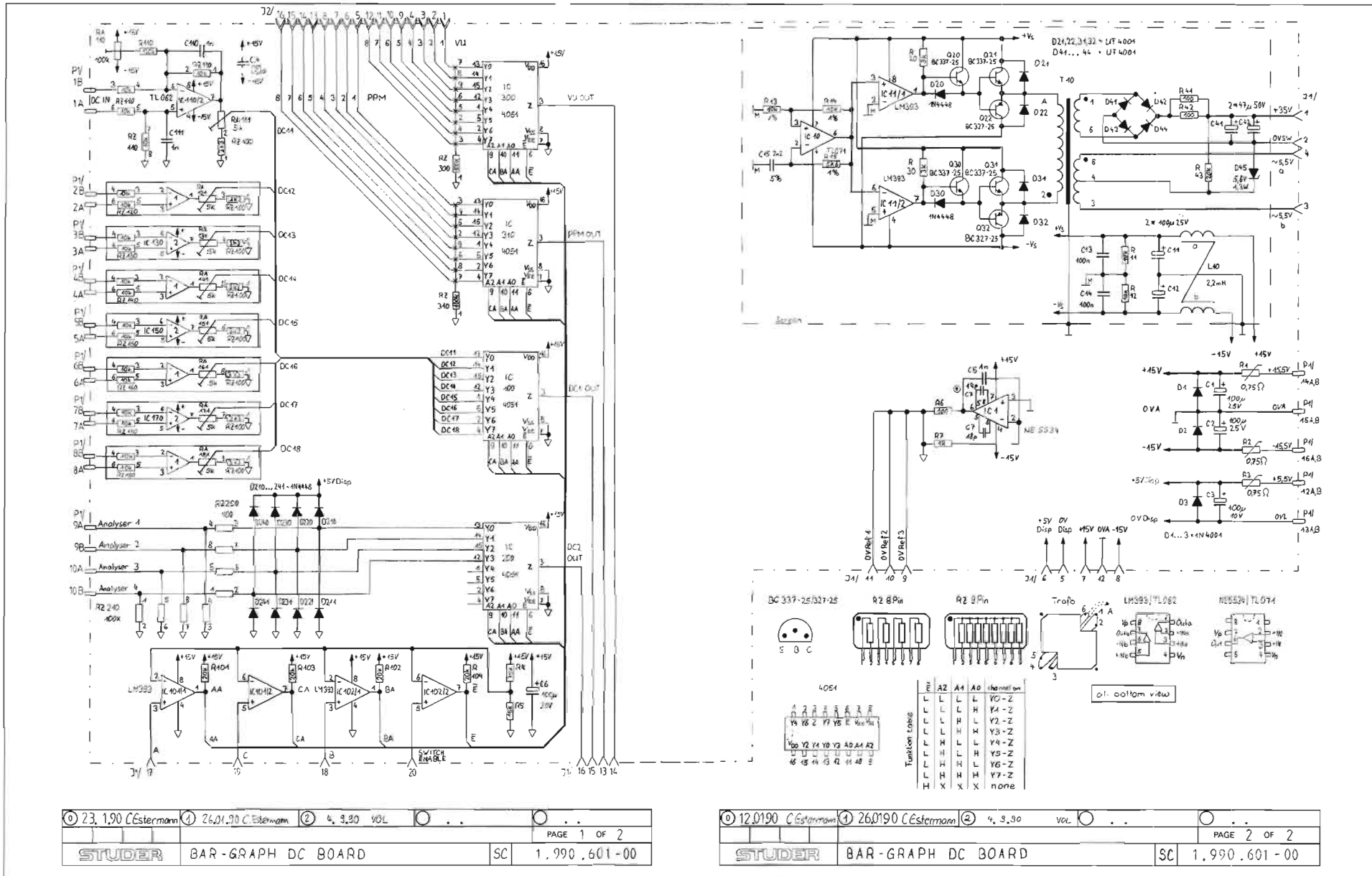
1.990.600.00



181289 Emi	11.9.90 Emi	PAGE 2 OF 2	1.990.600.00
STUDER		ANALOG BOARD	

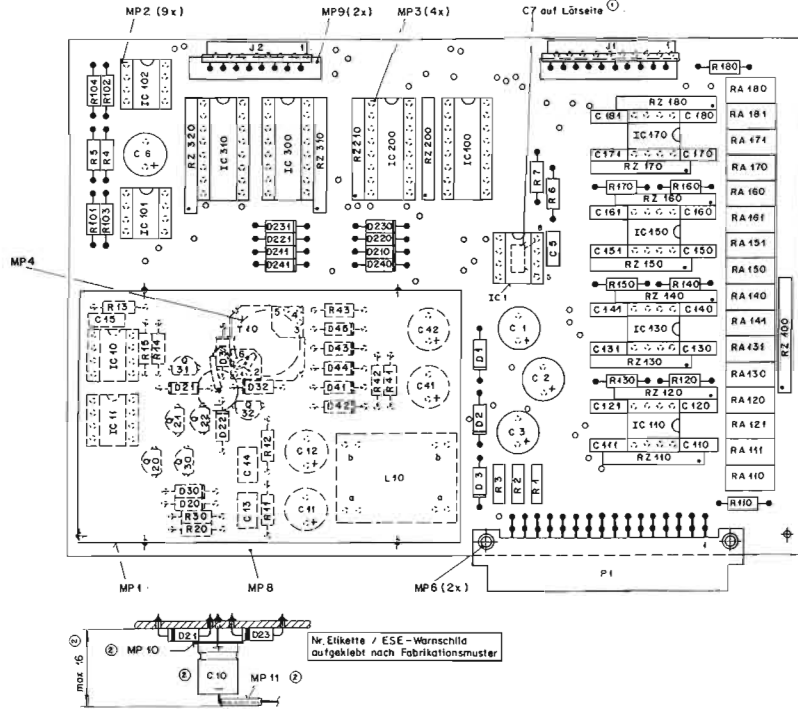
BAR-GRAPH DC BOARD

1.990.601.00



BAR-GRAPH DC BOARD

1.990.601.00



STUDER
REGENSDORF
ZÜRICH

BAR-GRAPH DC BOARD
ESE

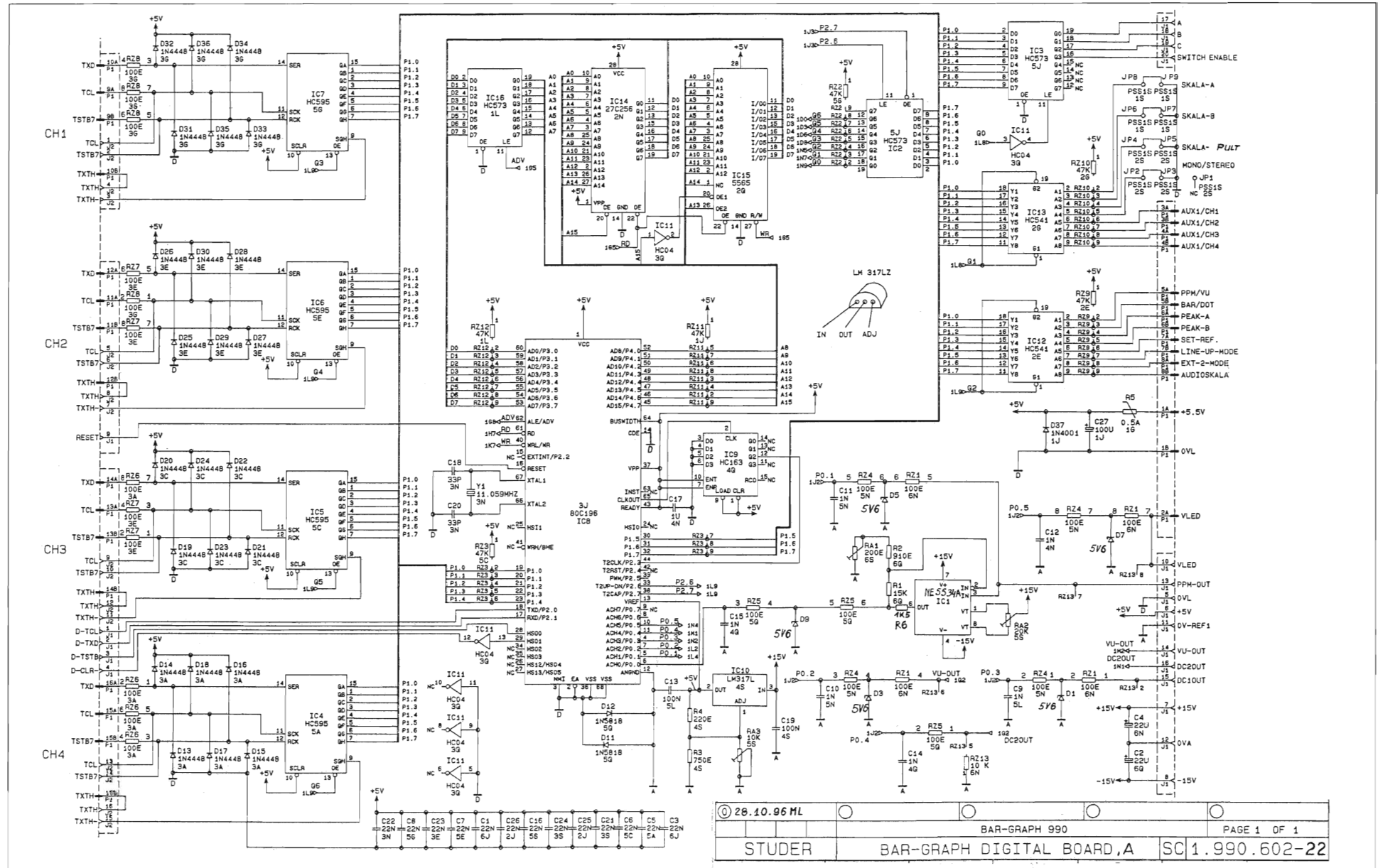
1.990.601-00

Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
C....1	59.22.5101	100 uf	25V EL	
C....2	59.22.5101	100 uf	25V EL	
C....3	59.22.5101	100 uf	10V EL	
C....4	0	not used		
C....5	59.06.5102	1 nf	5V PE	
C....6	59.22.5101	100 uf	25V EL	
C....7	59.34.1180	18 pf	5V CER (auf Loetseite: IC1 zw. Pin 5 & 8)	
C....10	59.39.1721	220 uf	10V EL stehend	
C....11	59.22.5101	100 uf	25V EL	
C....12	59.22.5101	100 uf	25V EL	
C....13	59.06.0104	100 nf	PE	
C....14	59.06.0104	100 nf	PE	
C....15	59.06.5222	2.2 nf	5V PE	
C....41	59.22.8470	47 uf	50V EL	
C....42	59.22.8470	47 uf	50V EL	
C....110	59.06.0102	1 nf	PE	
C....111	59.06.0102	1 nf	PE	
C....120	59.06.0102	1 nf	PE	
C....121	59.06.0102	1 nf	PE	
C....130	59.06.0102	1 nf	PE	
C....131	59.06.0102	1 nf	PE	
C....140	59.06.0102	1 nf	PE	
C....141	59.06.0102	1 nf	PE	
C....150	59.06.0102	1 nf	PE	
C....151	59.06.0102	1 nf	PE	
C....160	59.06.0102	1 nf	PE	
C....161	59.06.0102	1 nf	PE	
C....170	59.06.0102	1 nf	PE	
C....171	59.06.0102	1 nf	PE	
C....180	59.06.0102	1 nf	PE	
C....181	59.06.0102	1 nf	PE	
D....1	50.04.0122	1M4001	any	
D....2	50.04.0122	1M4001	any	
D....3	50.04.0122	1M4001	any	
D....20	50.04.0125	1M4448	any	
D....21	50.04.0138	UF4004	any	
D....22	50.04.0138	UF4004	any	
D....30	50.04.0125	1M4448	any	
D....31	50.04.0138	UF4004	any	
D....32	50.04.0138	UF4004	any	
D....41	50.04.0138	UF4004	any	
D....42	50.04.0138	UF4004	any	
D....43	50.04.0138	UF4004	any	
D....44	50.04.0138	UF4004	any	
D....45	50.04.1504	Z 5.6V	1.3M	
D....210	50.04.0125	1M4448	any	
D....221	50.04.0125	1M4448	any	
D....221	50.04.0125	1M4448	any	
D....221	50.04.0125	1M4448	any	
D....230	50.04.0125	1M4448	any	
D....231	50.04.0125	1M4448	any	
D....240	50.04.0125	1M4448	any	
D....241	50.04.0125	1M4448	any	
IC....1	50.05.0243	NE 5534N	single Op-Amp	Ex,Ra,Sig TI
IC....10	50.09.0103	TL 071	single Op-Amp	
IC....11	60.05.0283	LM 393	dual Comparator	Sig,Tho,TI
IC....100	50.07.0051	4051	CMOS 8-Channel analog Mux	Ph,Mot,SGS
IC....101	50.05.0283	LM 393	dual Comparator	Sig,Tho,TI
IC....102	50.05.0283	LM 393	dual Comparator	Sig,Tho,TI
IC....110	50.09.0119	TL 062	low power Op-Amp	SGS,Tho,TI
IC....130	50.09.0119	TL 062	low power Op-Amp	SGS,Tho,TI
IC....150	50.09.0119	TL 062	low power Op-Amp	SGS,Tho,TI
IC....170	50.09.0119	TL 062	low power Op-Amp	SGS,Tho,TI
IC....200	50.07.0051	4051	CMOS 8-Channel analog Mux	Ph,Mot,SGS
IC....300	50.07.0051	4051	CMOS 8-Channel analog Mux	Ph,Mot,SGS
IC....310	50.07.0051	4051	CMOS 8-Channel analog Mux	Ph,Mot,SGS
J....1	54.14.5540		Micro-Match, 20 pin	AMP
J....2	54.14.5536		Micro-Match, 16 pin	AMP
L....10	62.03.0100	2.2 mH	Toroidal Choïe 180mOhm	Sia
P....1	54.11.2013		Euroconnector, 2*16 pin	
Q....20	50.03.0340	BC 337-25	NPN	any
Q....21	50.03.0340	BC 337-25	NPN	any
Q....22	50.03.0351	BC 337-25	PNP	any
Q....30	50.03.0340	BC 337-25	NPN	any
Q....31	50.03.0340	BC 337-25	NPN	any
Q....32	50.03.0351	BC 337-25	PNP	any
R....1	57.92.7013	0.75 Ohm	PTC 0.5A	
R....2	57.92.7013	0.75 Ohm	PTC 0.5A	
R....3	57.92.7013	0.75 Ohm	PTC 0.5A	
R....4	57.11.3753	75 Kohm		
R....5	57.11.3153	15 Kohm		
R....6	57.11.3101	100 Kohm		
R....7	57.11.3102	1 Kohm		
R....11	57.11.3103	10 Kohm		
R....12	57.11.3103	10 Kohm		
R....13	57.11.3103	10 Kohm	1%	
R....14	57.11.3103	10 Kohm	1%	
R....15	57.11.3562	5.6 Kohm	1%	
R....20	57.11.3302	3 Kohm		
R....30	57.11.3302	3 Kohm		
R....41	57.11.3101	100 Ohm		
R....42	57.11.3101	100 Ohm		
R....43	57.11.3103	20 Kohm		
R....101	57.11.3203	20 Kohm		
R....102	57.11.3203	20 Kohm		
R....103	57.11.3203	20 Kohm		
R....104	57.11.3203	20 Kohm		
R....110	57.11.3124	120 Kohm		
R....120	57.11.3124	120 Kohm		
R....130	57.11.3124	120 Kohm		
R....140	57.11.3124	120 Kohm		
R....150	57.11.3124	120 Kohm		
R....160	57.11.3124	120 Kohm		
R....170	57.11.3124	120 Kohm		
R....180	57.11.3124	120 Kohm		
RA....110	58.05.0104	100 Kohm	trim pot lin	
RA....111	58.05.0502	5 Kohm	trim pot lin	
RA....120	58.05.0104	100 Kohm	trim pot lin	
RA....121	58.05.0502	5 Kohm	trim pot lin	
RA....130	58.05.0104	100 Kohm	trim pot lin	
RA....131	58.05.0502	5 Kohm	trim pot lin	
RA....140	58.05.0104	100 Kohm	trim pot lin	
RA....141	58.05.0502	5 Kohm	trim pot lin	
RA....150	58.05.0104	100 Kohm	trim pot lin	
RA....151	58.05.0502	5 Kohm	trim pot lin	
RA....160	58.05.0104	100 Kohm	trim pot lin	
RA....161	58.05.0502	5 Kohm	trim pot lin	
RA....170	58.05.0104	100 Kohm	trim pot lin	
RA....171	58.05.0502	5 Kohm	trim pot lin	
RA....180	58.05.0104	100 Kohm	trim pot lin	
RA....181	58.05.0502	5 Kohm	trim pot lin	
RZ....100	57.88.4332	3.3 Kohm	2% *B	
RZ....110	57.88.2103	10 Kohm	2% *A	
RZ....120	57.88.2103	10 Kohm	2% *A	
RZ....130	57.88.2103	10 Kohm	2% *A	
RZ....140	57.88.2103	10 Kohm	2% *A	
RZ....150	57.88.2103	10 Kohm	2% *A	
RZ....160	57.88.2103	10 Kohm	2% *A	
RZ....170	57.88.2103	10 Kohm	2% *A	
RZ....180	57.88.2103	10 Kohm	2% *A	
RZ....200	57.88.2101	100 Ohm	2% *A	
RZ....210	57.88.2104	100 Kohm	2% *A	
RZ....300	57.88.4104	100 Kohm	2% *B	
RZ....310	57.88.4104	100 Kohm	2% *B	
T....10	1.022.638.00	10 mH	Konvertiertrafo YFD-Bargraph	St
NP....1	1.913.117.01	1 pcs	Abschirmhaube	
NP....2	53.03.0166	9 pcs	IC socket 8 pin	
NP....3	53.03.0168	4 pcs	IC socket 16 pin	
NP....4	1.010.001.61	1 pcs	Unterlage zu RM6	
NP....5	43.01.0108	1 pcs	ESE-Schiff	
NP....6	28.99.0119	2 pcs	Rohrleiste DZ.5*9*0.15	
NP....7	1.990.601.04	1 pcs	Mr.-Etikette 5 * 20	
NP....8	1.990.601.11	1 pcs	Bargraph DC PCB	
NP....9	1.990.600.01	2 pcs	Isolierunterlage Micro Match	
NP....10	1.010.027.23	1 pcs	Isolierschleibe 9/3,2x0,25 PTFE	
OZ NP....11	1.010.101.65	1 pcs	Schraupfschlauch 1,2/0,6 x 9	
09.10.90 Index 1)			New: C7	000000
30.11.92 Index 2)			New: C10 DC isolation of T10	

Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
R....3	57.92.7013	0.75 Ohm	PTC 0.5A	
R....4	57.11.3753	75 Kohm		
R....5	57.11.3153	15 Kohm		
R....6	57.11.3101	100 Kohm		
R....7	57.11.3102	1 Kohm		
R....11	57.11.3103	10 Kohm		
R....12	57.11.3103	10 Kohm		
R....13	57.11.3103	10 Kohm	1%	
R....14	57.11.3103	10 Kohm	1%	
R....15	57.11.3562	5.6 Kohm	1%	
R....20	57.11.3302	3 Kohm		
R....30	57.11.3302	3 Kohm		
R....41	57.11.3101	100 Ohm		
R....42	57.11.3101	100 Ohm		
R....43	57.11.3103	20 Kohm		
R....101	57.11.3203	20 Kohm		
R....102	57.11.3203	20 Kohm		
R....103	57.11.3203	20 Kohm		
R....104	57.11.3203	20 Kohm		
R....110	57.11.3124	120 Kohm		
R....120	57.11.3124	120 Kohm		
R....130	57.11.3124	120 Kohm		
R....140	57.11.3124	120 Kohm		
R....150	57.11.3124	120 Kohm		
R....160	57.11.3124	120 Kohm		
R....170	57.11.3124	120 Kohm		
R....180	57.11.3124	120 Kohm		
RA....110	58.05.0104	100 Kohm	trim pot lin	
RA....111	58.05.0502	5 Kohm	trim pot lin	
RA....120	58.05.0104	100 Kohm	trim pot lin	
RA....121	58.05.0502	5 Kohm	trim pot lin	
RA....130	58.05.0104	100 Kohm	trim pot lin	
RA....131	58.05.0502	5 Kohm	trim pot lin	
RA....140	58.05.0104	100 Kohm	trim pot lin	
RA....141	58.05.0502	5 Kohm	trim pot lin	
RA....150	58.05.0104	100 Kohm	trim pot lin	
RA....151	58.05.0502	5 Kohm	trim pot lin	
RA....160	58.05.0104	100 Kohm	trim pot lin	
RA....161	58.05.0502	5 Kohm	trim pot lin	
RA....170	58.05.0104	100 Kohm	trim pot lin	
RA....171	58.05.0502	5 Kohm	trim pot lin	
RA....180	58.05.0104	100 Kohm	trim pot lin	
RA....181	58.05.0502	5 Kohm	trim pot lin	
RZ....100	57.88.4332	3.3 Kohm	2% *B	
RZ....110	57.88.2103	10 Kohm	2% *A	
RZ....120	57.88.2103	10 Kohm	2% *A	
RZ....130	57.88.2103	10 Kohm	2% *A	
RZ....140	57.88.2103	10 Kohm	2% *A	
RZ....150	57.88.2103	10 Kohm	2% *A	
RZ....160	57.88.2103	10 Kohm	2% *A	
RZ....170	57.88.2103	10 Kohm	2% *A	
RZ....180	57.88.2103	10 Kohm	2% *A	
RZ....200	57.88.2101	100 Ohm	2% *A	
RZ....210	57.88.2104	100 Kohm	2% *A	
RZ....300	57.88.4104	100 Kohm	2% *B	
RZ....310	57.88.4104	100 Kohm	2% *B	
T....10	1.022.638.00	10 mH	Konvertiertrafo YFD-Bargraph	St
NP....1	1.913.117.01	1 pcs	Abschirmhaube	

BAR-GRAPH DIGITAL BOARD

1.990.602.22

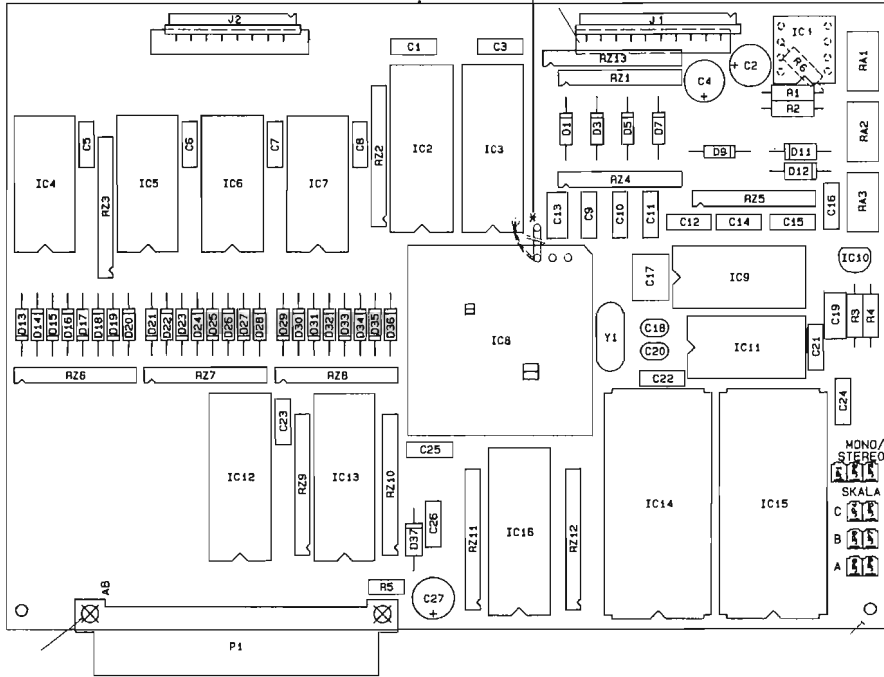


BAR-GRAPH DIGITAL BOARD

1.990.602.22



Cut track to IC8 pin 14 and add wire on solder side between IC3 pin 1 and IC8 pin 14.



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 2	59 22 6220	22n	EL. 35V, 20%, RMS	
0	C 3	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 4	59 22 6220	22n	EL. 35V, 20%, RMS	
0	C 5	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 6	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 7	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 8	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 9	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 10	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 11	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 12	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 13	59 06 0104	100n	PETP. 63V, 10%, RMS	
0	C 14	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 15	59 06 0102	1n0	PETP. 63V, 10%, RMS	
0	C 16	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 17	59 06 0105	1u0	PETP. 50V, 10%, RMS	
0	C 18	59 21 2330	33p	GER 63V, 5%, N150	
0	C 19	59 06 0104	100n	PETP. 63V, 10%, RMS	
0	C 20	59 34 2330	33p	GER 63V, 5%, N150	
0	C 21	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 22	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 23	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 24	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 25	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 26	59 06 0223	22n	PETP. 63V, 10%, RMS	
0	C 27	59 22 3101	100u	EL. 10V, 20%, RMS	
0	D 1	50 04 1108	5V6	Zener. 5%, 0.5W, DO-35	
0	D 2	not used			
0	D 3	50 04 1108	5V6	Zener. 5%, 0.5W, DO-35	
0	D 4	not used			
0	D 5	50 04 1108	5V6	Zener. 5%, 0.5W, DO-35	
0	D 6	not used			
0	D 7	50 04 1108	5V6	Zener. 5%, 0.5W, DO-35	
0	D 8	not used			
0	D 9	50 04 1108	5V6	Zener. 5%, 0.5W, DO-35	
0	D 10	not used			
0	D 11	50 04 0812	1N5818	D 1N 5818, 1N 5819	
0	D 12	50 04 0812	1N5818	D 1N 5818, 1N 5819	
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	D 17	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 18	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 19	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 20	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 21	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 22	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 23	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 24	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 25	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 26	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 27	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 28	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 29	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 30	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 31	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 32	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 33	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 34	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 35	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 36	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 37	50 04 0122	1N4001	1A, DO 41	
0	IC 1	50 05 0244	NE5534AN	IC 5534 ANB, NE 5534 SAN, A	
0	IC 2	50 17 1573	74HC573	IC .. 74 HC 573 .. A	
0	IC 3	50 17 1573	74HC573	IC .. 74 HC 573 .. A	
0	IC 4	50 17 1595	74HC595	IC .. 74 HC 595 .. A	
0	IC 5	50 17 1595	74HC595	IC .. 74 HC 595 .. A	
0	IC 6	50 17 1595	74HC595	IC .. 74 HC 595 .. A	
0	IC 7	50 17 1595	74HC595	IC .. 74 HC 595 .. A	
0	IC 8	89 63 0003	80C196	N 80 C 196 KB-16	
0	IC 9	50 17 1163	74HC163	IC .. 74 HC 163 .. A	
0	IC 10	50 10 0108	LM317L	IC LM 317 LZ	
0	IC 11	50 17 1004	74HC04	IC .. 74 HC 04 .. A	
0	IC 12	50 17 1541	74HC541	IC .. 74 HC 541 .. A	
0	IC 13	50 17 1541	74HC541	IC .. 74 HC 541 .. A	
0	IC 14	50 14 2004	27C256	IC 27 C 256 - 25 .. A	
0	IC 15	50 14 0133	5565	BAR-GRAPH 990 04/93 1 990 699 21	
0	IC 16	50 17 1573	74HC573	IC .. 74 HC 573 .. A	
0	J 1	54 14 5540	20p	J PCB-BUCHSE WINKEL 20 P	
0	J 2	54 14 5530	16p	J PCB-BUCHSE WINKEL 16 P	

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	MP 1	28 99 0118	2 pcs		ROHRLEITE D 2.5*0 15* 9
0	MP 2	43 01 0108			ESE-WARNRSCHILD
0	MP 3	1 101 901 22			TEXT-ETIK 5*20 HARDWARE .32
0	MP 4	1 990 600 01			ISOLIERUNTERLAGE MICRO-MATCH
0	MP 5	1 990 602 04			NR-ETIKETTE 5 * 20
0	MP 6	1 990 602 11			BARGRAPH DIGITAL PCB
0	MP 7	1 990 999 01			TEXT - ETIKETTE 10 * 20
0	MP 8	54 01 0220	9 pcs	1p	Pin 0 63*0 63
0	P 1	54 11 2013	32p		EU-BK 2*16p
0	R 1	57 11 3153	15k		MF, 1%, 0207
0	R 2	57 11 3811	910R		MF, 1%, 0207
0	R 3	57 11 3151	750R		MF, 1%, 0207
0	R 4	57 11 3221	220R		MF, 1%, 0207
0	R 5	57 02 7013	0.5A		POLY-PTC, 63V
0	R 6	57 11 3152	1k5		MF, 1%, 0207
0	RA 1	58 01 9201	200R		Cermet, 10%, 0.5W, vertical
0	RA 2	58 01 9203	20k		Cermet, 10%, 0.5W, vertical
0	RA 3	58 01 9103	10k		Cermet, 10%, 0.5W, vertical
0	RZ 1	57 88 2101	4*100R		2%, SIP 8
0	RZ 2	57 88 4473	8*47k		2%, SIP 9
0	RZ 3	57 88 4473	8*47k		2%, SIP 9
0	RZ 4	57 88 2101	4*100R		2%, SIP 8
0	RZ 5	57 88 2101	4*100R		2%, SIP 8
0	RZ 6	57 88 2101	4*100R		2%, SIP 8
0	RZ 7	57 88 2101	4*100R		2%, SIP 8
0	RZ 8	57 88 2101	4*100R		2%, SIP 8
0	RZ 9	57 88 4473	8*47k		2%, SIP 9
0	RZ 10	57 88 4473	8*47k		2%, SIP 9
0	RZ 11	57 88 4473	8*47k		2%, SIP 9
0	RZ 12	57 88 4473	8*47k		2%, SIP 9
0	RZ 13	57 88 4103	8*10k		2%, SIP 0
0	XIC 1	53 03 0166	8p		DIL 0.3" lot, gerade
0	XIC 2	53 03 0165	20p		DIL 0.3" lot, gerade
0	XIC 3	53 03 0165	20p		DIL 0.3" lot, gerade
0	XIC 4	53 03 0168	16p		DIL 0.3" lot, gerade
0	XIC 5	53 03 0168	16p		DIL 0.3" lot, gerade
0	XIC 6	53 03 0168	16p		DIL 0.3" lot, gerade
0	XIC 7	53 03 0168	16p		DIL 0.3" lot, gerade
0	XIC 8	53 03 2268	PLCC68p		PLCC-68pin Flip
0	XIC 9	53 03 0168	16p		DIL 0.3" lot, gerade
0	XIC 10	53 03 0167	14p		DIL 0.3" lot, gerade
0	XIC 11	53 03 0165	20p		DIL 0.3" lot, gerade
0	XIC 12	53 03 0165	20p		DIL 0.3" lot, gerade
0	XIC 13	53 03 0165	20p		DIL 0.3" lot, gerade
0	XIC 14	53 03 0173	28p		DIL 0.8" lot, gerade
0	XIC 15	53 03 0173	28p		DIL 0.8" lot, gerade
0	XIC 16	53 03 0165	20p		DIL 0.3" lot, gerade
0	Y 1	89 01 1004	11 059MHz	Y 11 059 MHz, RW 43	

End of List

Comments:

STÜCKER
ALZHEIMER
LÜNBACH

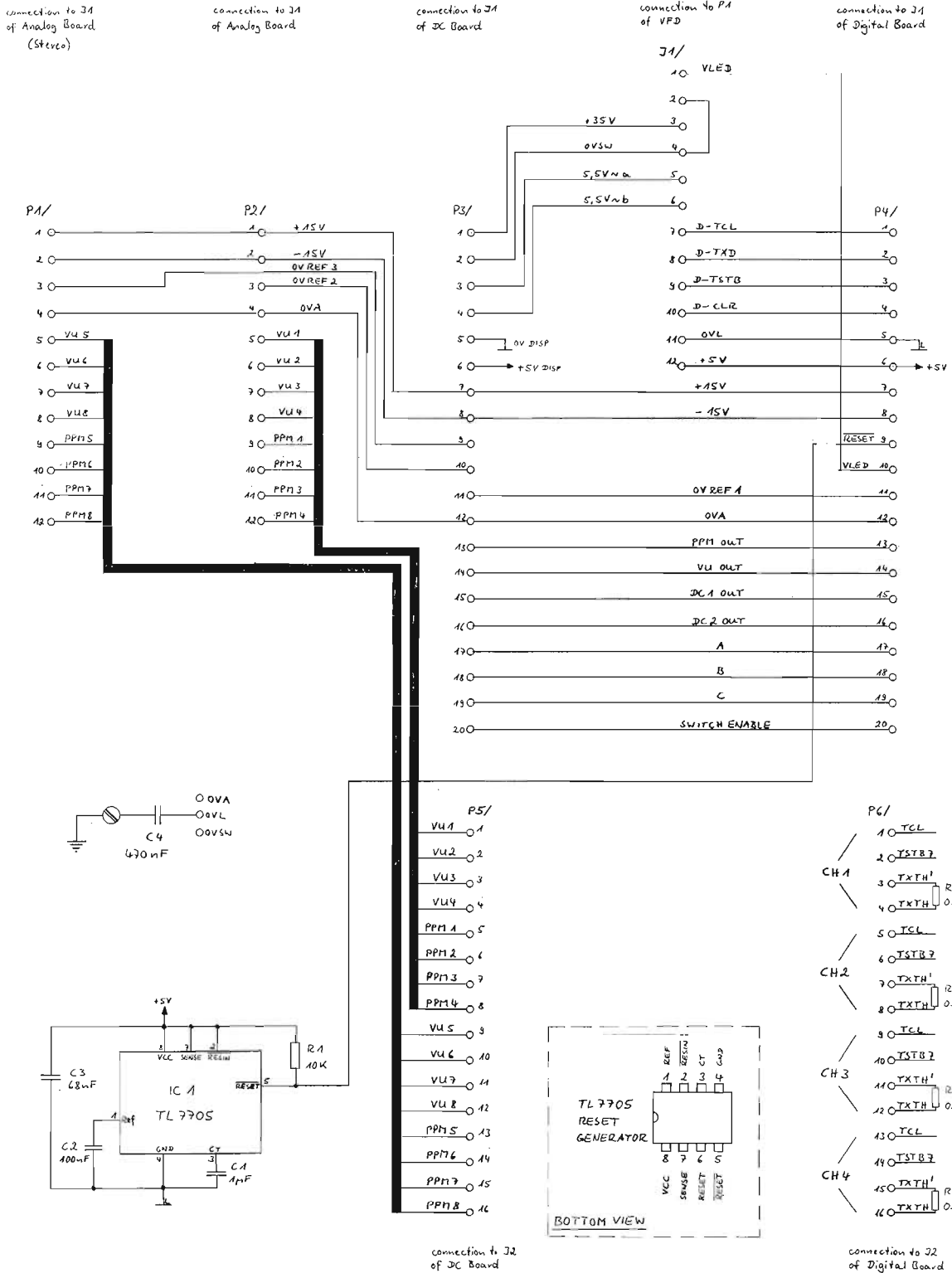
Bargraph Digital Board
ESE

1.990.602-22

BAR-GRAPH CONNECTOR BOARD



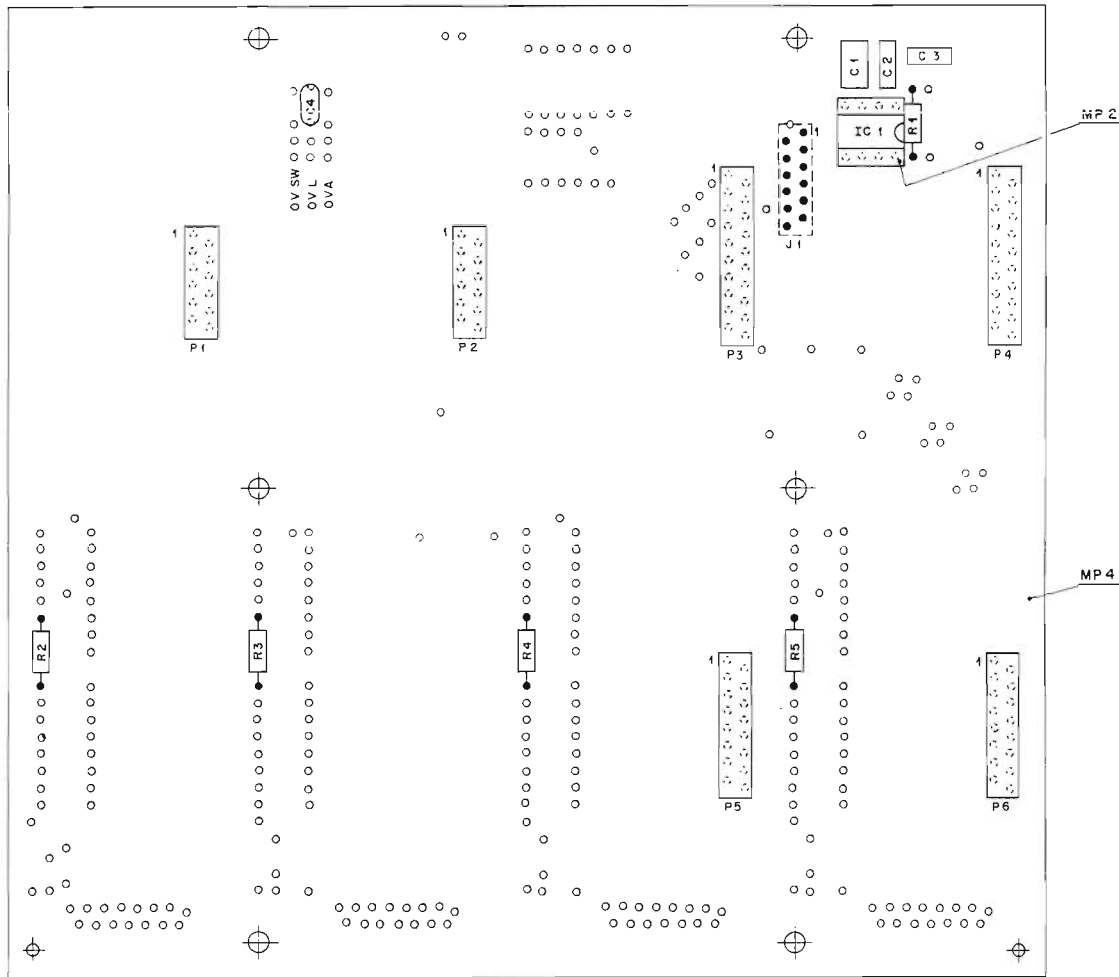
1.990.606.00



0	6.12.83	VOL	1	9.12.90	VOL				
STUDER					Bar-Graph Connector Board			SC	1.990.606.00
BAR-GRAPH 990							PAGE 1 OF 1		

BAR-GRAPH CONNECTOR BOARD

1.990.606.00



Ersatz für:		Ersetzt durch:		Kopie für:	
STUDER REGENSDORF ZÜRICH		BARGRAPH CONNECTOR BOARD		ESE 1.990.606-00	
Ausgegeben		Anzahl		Index	
8.6.90		A. Hasler VOL			
Datum		Gez.		Gez.	

Ad	..PDS..	..REF.No...	DESCRIPTION.....	MANUFACTURER
C.....1		59.06.0105	1 uF 10% PE	
C.....2		59.06.0104	100 nF 10% PE	
C.....3		59.06.0683	68 nF 10% PE	
C.....4		59.32.1152	1.5 nF CER 400V	
01 C.....4		59.06.0474	470 nF 10% PE	
IC....1		50.11.0122	TL7705ACP Reset generator	SGS, TI
J.....1		54.14.5512	Micro-Match, 12 pin	AMP
P.....1		54.14.5582	Micro-Match, 12 pin	AMP
P.....2		54.14.5582	Micro-Match, 12 pin	AMP
P.....3		54.14.5590	Micro-Match, 20 pin	AMP
P.....4		54.14.5590	Micro-Match, 20 pin	AMP
P.....5		54.14.5586	Micro-Match, 16 pin	AMP
P.....6		54.14.5586	Micro-Match, 16 pin	AMP
R.....1		57.11.3103	10 kOhm 1%	
R.....2		57.11.3000	0 Ohm	
R.....3		57.11.3000	0 Ohm	
R.....4		57.11.3000	0 Ohm	
R.....5		57.11.3000	0 Ohm	
MP....1		43.01.0108	0001 pcs ESE-Warnschild	
MP....2		53.03.0166	0001 pcs IC-Socket, DIL 8	
MP....3		1.990.606.04	0000 pcs Mr.-Etikette 5 * 20	
MP....4		1.990.608.11	0001 pcs Bar-Graph Connector+Bus PCB	St

9.10.90 Index 1) Aenderung bei: C4

PE = polyester

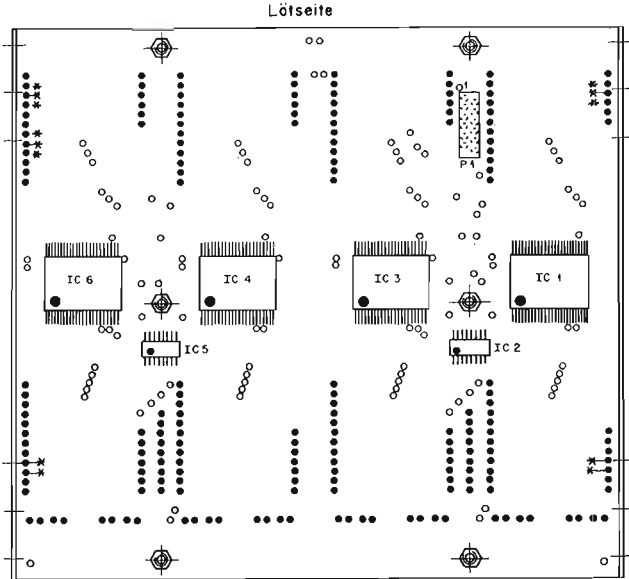
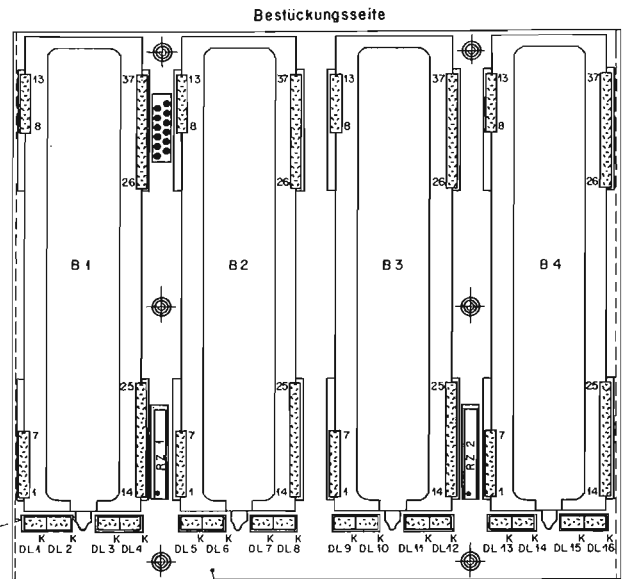
MANUFACTURER AMP=AMP Incorporated, SGS=SGS/Thomson, St=Studer, TI=Texas Instruments

1.990.606.00 BAR-GRAPH CONNECTOR BOARD VOL90/02/0600

1.990.606.00 BAR-GRAPH CONNECTOR BOARD HOR90/10/0901

BAR-GRAPH VFD BOARD

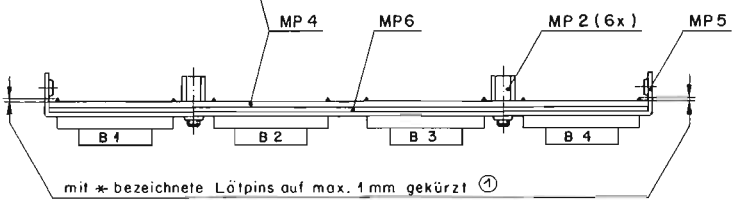
1.990.607.81



Ad.	POS.	REF. No.	DESCRIPTION	MANUFACTURER
B.....1	73.01.0300	F6202S42	Fluorescent bargraph display	Itron
B.....2	73.01.0300	F6202S42	Fluorescent bargraph display	Itron
B.....3	73.01.0300	F6202S42	Fluorescent bargraph display	Itron
B.....4	73.01.0300	F6202S42	Fluorescent bargraph display	Itron
DL....1	50.04.2119	MV5124A	LED, red	GI
DL....2	50.04.2118	MV53124A	LED, yellow	GI
DL....3	50.04.2146	MV54124A	LED, green	GI
DL....4	50.04.2118	MV53124A	LED, yellow	GI
DL....5	50.04.2119	MV5124A	LED, red	GI
DL....6	50.04.2118	MV53124A	LED, yellow	GI
DL....7	50.04.2146	MV54124A	LED, green	GI
DL....8	50.04.2118	MV53124A	LED, yellow	GI
DL....9	50.04.2119	MV5124A	LED, red	GI
DL....10	50.04.2118	MV53124A	LED, yellow	GI
DL....11	50.04.2146	MV54124A	LED, green	GI
DL....12	50.04.2118	MV53124A	LED, yellow	GI
DL....13	50.04.2119	MV5124A	LED, red	GI
DL....14	50.04.2118	MV53124A	LED, yellow	GI
DL....15	50.04.2146	MV54124A	LED, green	GI
DL....16	50.04.2118	MV53124A	LED, yellow	GI
IC....1	50.62.0005	MSC1162G3K	VFD driver	OKI
IC....2	60.62.1595	74 HC 595	8 bit shift register (SMD)	NS, TI
IC....3	60.62.0005	MSC1162G3K	VFD driver	OKI
IC....4	50.62.0005	MSC1162G3K	VFD driver	OKI
IC....5	60.62.1595	74 HC 595	8 bit shift register (SMD)	NS, TI
IC....6	60.62.0005	MSC1162G3K	VFD driver	OKI
P.....1	54.14.5582		Micro-Match, 12 pin	AMP
RZ....1	57.88.4101	100 Ohm	2% .8"	
RZ....2	57.88.4101	100 Ohm	2% .8"	
MP....1	43.01.0100	0001 pcs	ESE-Metrischild	
MP....2	1.010.123.27	0006 pcs	Gewindebolzen M3/M3 = 6.5	
MP....3	1.990.607.04	0000 pcs	Mr.-Etikette 5 = 20	
MP....4	1.990.607.12	0001 pcs	Bar-Graph VFD PCS	St
MP....5	1.913.420.03	0001 pcs	Chassis VFD Bar-Graph	
MP....6	1.913.420.07	0001 pcs	Isolation VFD-Bar-Graph	
MP....7	1.990.620.10	0008 pcs	Unterlage 2*LED VFD Bar-Graph	

MANUFACTURER AMP=AMP Incorporated, GI=General Instruments, NS=National Semiconductors, OKI=OKI Semiconductors, St=Studer, TI=Texas Instruments

1.990.607.81 BAR-GRAPH VFD BOARD VOL90/05/0900



4.9.92	1/4	1/4	1/4	1/4
6.6.90	1/4	1/4	1/4	1/4
Datum	Gez.	Gepr.	Stek.	Stempel

STUDER
HEGENSDORF
ZÜRICH

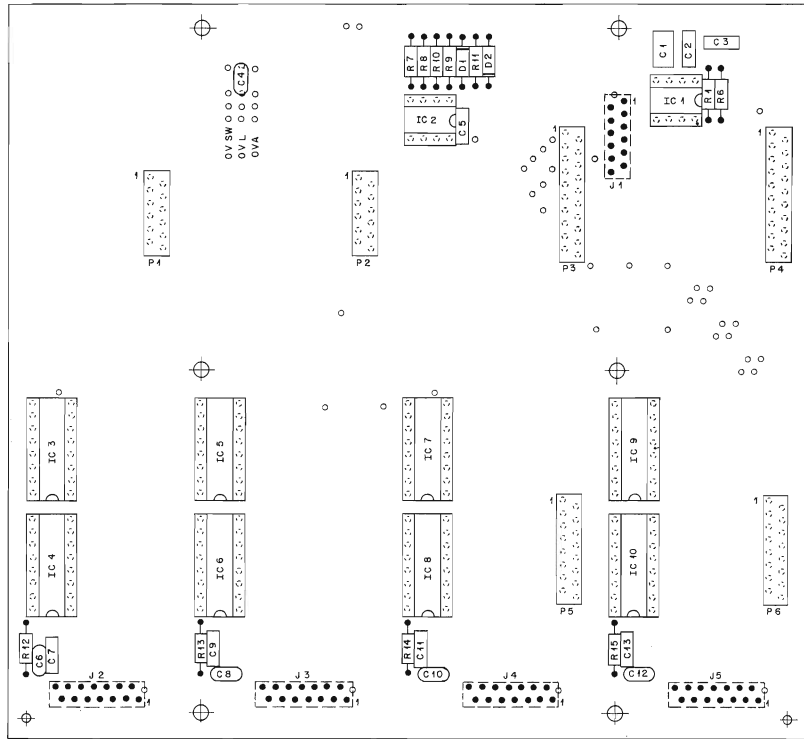
BAR-GRAPH
VFD BOARD ESE

1.990.607-81

BAR-GRAPH CONNECTOR + BUS BOARD



1.990.608.00



Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
C....1		59.06.0105	1 uF	10% PE
C....2		59.06.0104	100 nF	10% PE
C....3		59.06.0683	68 nF	10% PE
C....4		59.32.1182	1.5 nF	CER 400V
01 C....4		59.06.0474	470 nF	10% PE
C....5		59.06.0683	68 nF	10% PE
C....6		59.34.4101	100 pF	5% CER
C....7		59.06.0683	68 nF	10% PE
C....8		59.34.4101	100 pF	5% CER
C....9		59.06.0683	68 nF	10% PE
C....10		59.34.4101	100 pF	5% CER
C....11		59.06.0683	68 nF	10% PE
C....12		59.34.4101	100 pF	5% CER
C....13		59.06.0683	68 nF	10% PE
D....1		50.04.0125	IN4448	any
D....2		50.04.1504	BZX 85	5.6V ITT, Mot, Phi, Tf, SGS
IC....1		50.11.0122	TL7705ACP	Reset generator SGS, TI
IC....2		50.09.0103	TL 071 CP	Single FET op-amp TI
IC....3		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....4		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....5		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....6		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....7		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....8		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....9		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
IC....10		50.17.1595	74 HC 595	8 bit shift register NS, SGS, TI
J....1		54.14.5512	Micro-Match, 12 pin	AMP
J....2		54.14.5514	Micro-Match, 14 pin	AMP
J....3		54.14.5514	Micro-Match, 14 pin	AMP
J....4		54.14.5514	Micro-Match, 14 pin	AMP
J....5		54.14.5514	Micro-Match, 14 pin	AMP
P....1		54.14.5582	Micro-Match, 12 pin	AMP
P....2		54.14.5582	Micro-Match, 12 pin	AMP
P....3		54.14.5590	Micro-Match, 20 pin	AMP
P....4		54.14.5590	Micro-Match, 20 pin	AMP
P....5		54.14.5586	Micro-Match, 16 pin	AMP
P....6		54.14.5586	Micro-Match, 16 pin	AMP
R....1		57.11.3103	10 kOhm	1%
R....2		0	not used	
R....3		0	not used	
R....4		0	not used	
R....5		0	not used	
R....6		57.11.3103	10 kOhm	1%
R....7		57.11.3114	110 kOhm	1%
R....8		57.11.3363	36 kOhm	1%
R....9		57.11.3183	18 kOhm	1%
R....10		57.11.3513	51 kOhm	1%
R....11		57.11.3471	470 Ohm	1%
R....12		57.11.3101	100 Ohm	1%
R....13		57.11.3101	100 Ohm	1%
R....14		57.11.3101	100 Ohm	1%
R....15		57.11.3101	100 Ohm	1%
MP....1		43.01.0108	0001 pcs	ESE-Wernschild
MP....2		53.03.0166	0002 pcs	IC-Sockel, DIL 8
MP....3		53.03.0166	0008 pcs	IC-Sockel, DIL 16
MP....4		1.990.608.04	0000 pcs	Nr.-Etikette 5 * 20
MP....5		1.990.608.11	0001 pcs	Bar-Graph Connector+Bus PCB

9.10.90 Index 1) Aenderung bei: C4

CER = ceramic, PE = polyester

MANUFACTURER AMP=AMP Incorporated, ITT=Intermetall
 Mot=Motorola, NS=National Semiconductors
 Phi=Phillips, SGS=SGS/Thomson, St=Studer,
 Tf=Telefunken, TI=Texas Instruments

1.990.608.00 BAR-GRAPH CONNECTOR+BUS BOARD VOL90/02/0600

1.990.608.00 BAR-GRAPH CONNECTOR+BUS BOARD HOR90/10/0901

Angabe	1	2	3	4	5	6	7	8	9	10
Datum	Gez.	Gepr.	Gez.	Index						

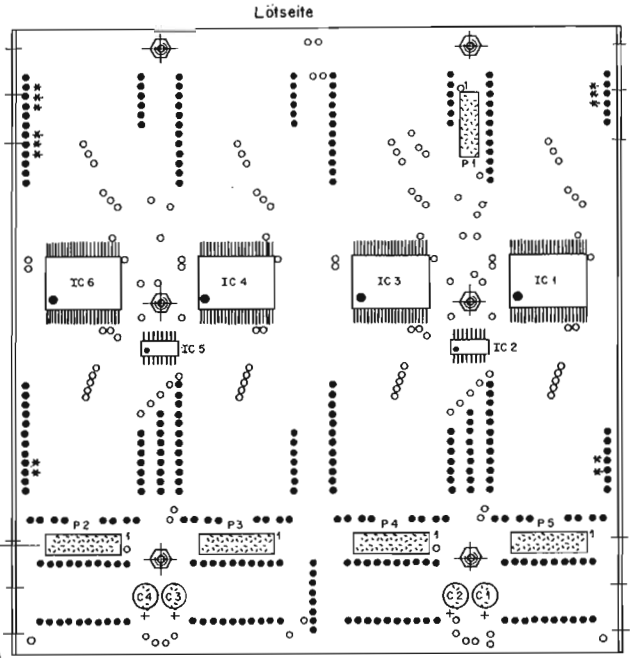
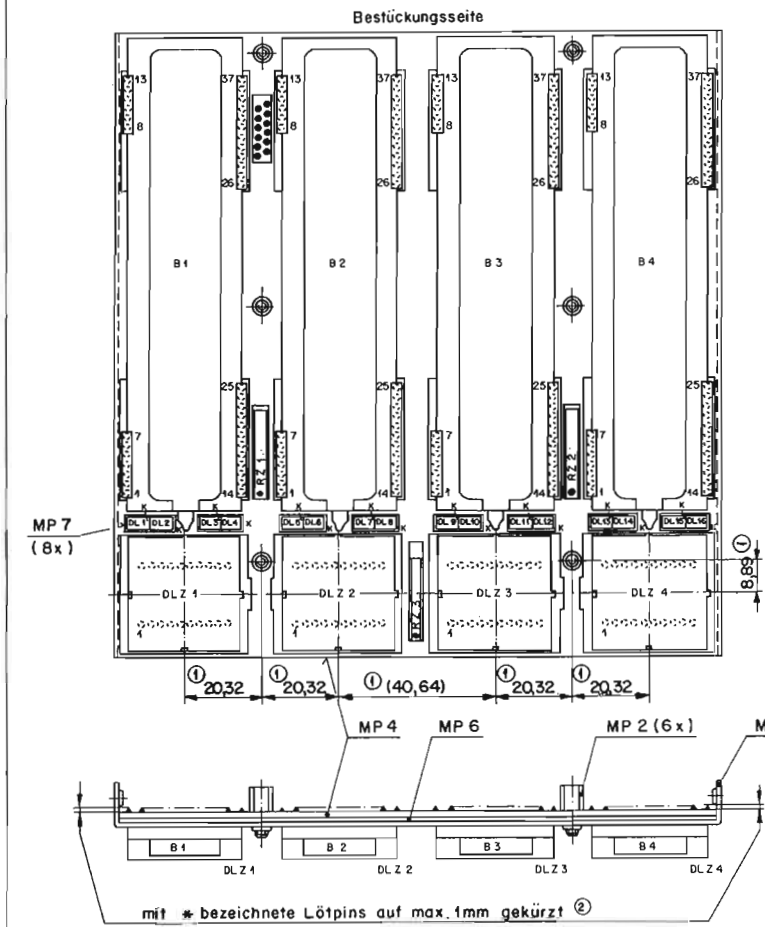
STUDER
 REGISDRUF
 ZÜRICH

BARGRAPH CONNECTOR+
 BUS BOARD
 ESE

1.990.608-00

BAR-GRAPH VFD + BUS BOARD

1.990.609.81



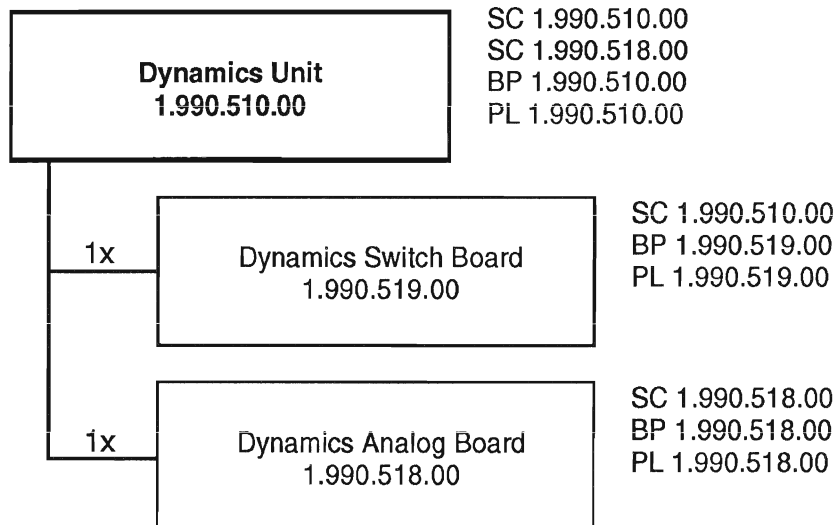
Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
B....1	73.01.0300	FG202SA2	Fluorescent bargraph display	Itron
B....2	73.01.0300	FG202SA2	Fluorescent bargraph display	Itron
B....3	73.01.0300	FG202SA2	Fluorescent bargraph display	Itron
B....4	73.01.0300	FG202SA2	Fluorescent bargraph display	Itron
C....1	59.22.3101	100 uF	10V EL	
C....2	59.22.3101	100 uF	10V EL	
C....3	59.22.3101	100 uF	10V EL	
C....4	59.22.3101	100 uF	10V EL	
DL...1	50.04.2119	MY5124A	LED, red	GI
DL...2	50.04.2118	MY5124A	LED, yellow	GI
DL...3	50.04.2146	MY5124A	LED, green	GI
DL...4	50.04.2118	MY5124A	LED, yellow	GI
DL...5	50.04.2119	MY5124A	LED, red	GI
DL...6	50.04.2118	MY5124A	LED, yellow	GI
DL...7	50.04.2146	MY5124A	LED, green	GI
DL...8	50.04.2118	MY5124A	LED, yellow	GI
DL...9	50.04.2119	MY5124A	LED, red	GI
DL...10	50.04.2118	MY5124A	LED, yellow	GI
DL...11	50.04.2146	MY5124A	LED, green	GI
DL...12	50.04.2118	MY5124A	LED, yellow	GI
DL...13	50.04.2119	MY5124A	LED, red	GI
DL...14	50.04.2118	MY5124A	LED, yellow	GI
DL...15	50.04.2146	MY5124A	LED, green	GI
DL...16	50.04.2118	MY5124A	LED, yellow	GI
DLZ...1	73.01.0400	PD 1165	8*8 dot matrix display	Sie
DLZ...2	73.01.0400	PD 1165	8*8 dot matrix display	Sie
DLZ...3	73.01.0400	PD 1165	8*8 dot matrix display	Sie
DLZ...4	73.01.0400	PD 1165	8*8 dot matrix display	Sie
IC....1	50.62.0005	MSC1162GSK	VFD driver	OKI
IC....2	50.62.1595	74 MC 595	8 bit shift register (SMD)	NS, TI
IC....3	50.62.0005	MSC1162GSK	VFD driver	OKI
IC....4	50.62.0005	MSC1162GSK	VFD driver	OKI
IC....5	50.62.1595	74 MC 595	8 bit shift register (SMD)	NS, TI
IC....6	50.62.0005	MSC1162GSK	VFD driver	OKI
P....1	54.14.5582		Micro-Match, 12 pin	AMP
P....2	54.14.5584		Micro-Match, 14 pin	AMP
P....3	54.14.5584		Micro-Match, 14 pin	AMP
P....4	54.14.5584		Micro-Match, 14 pin	AMP
P....5	54.14.5584		Micro-Match, 14 pin	AMP
RZ...1	57.88.4101	100 Ohm	2% 8*	
RZ...2	57.88.4101	100 Ohm	2% 8*	
RZ...3	57.88.2332	3,3 kOhm	2% 4*	
MP...1	43.01.0108	0001 pcs	ESE-Warnschild	
MP...2	1.010.123.27	0006 pcs	Gewindebolzen M3/M3 x 6,5	
MP...3	1.990.609.04	0000 pcs	Nr.-Etikette 5 x 20	
MP...4	1.990.609.12	0001 pcs	Bar-Graph VFD+Bus PCB	St
MP...5	1.990.620.03	0001 pcs	Chassis VFD Bar-Graph + Bus	
MP...6	1.990.620.07	0001 pcs	Isolation VFD Bar-Graph + Bus	
MP...7	1.990.620.10	0008 pcs	Unterlage 2"LED VFD Bar-Graph	

P 2 ÷ 5 Steckerbeine kürzen auf max. 1 mm vorstehend.

mit * bezeichnete Lötpins auf max. 1mm gekürzt

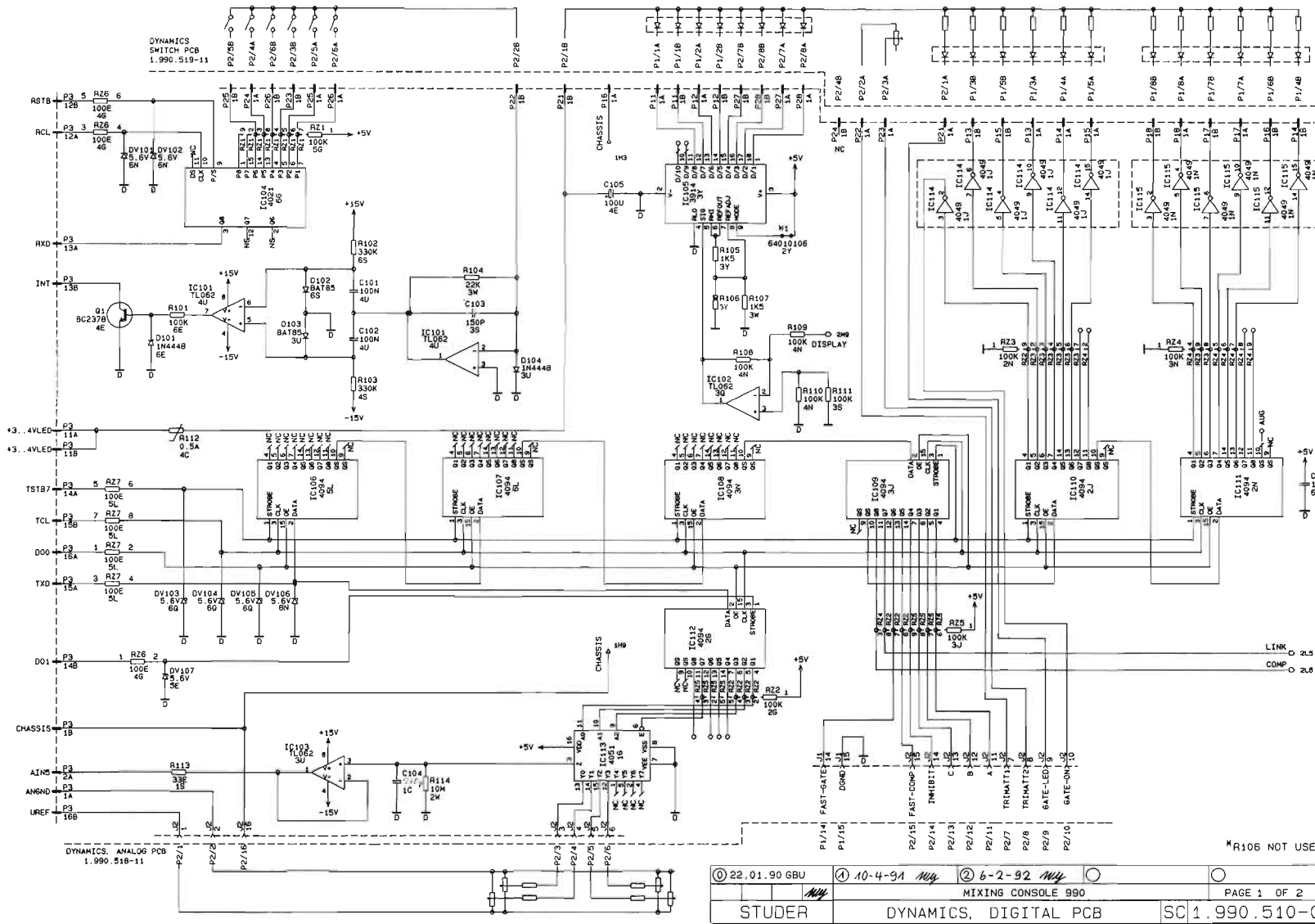
STUDER REGELROHR FÜRCH	BAR-GRAPH VFD+BUS BOARD ESE	1.990.609-81
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4 9 9 2	7 6 9 1	7 6 9 0
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31	32	33
34	35	36
37	38	39
40	41	42
43	44	45
46	47	48
49	50	51
52	53	54
55	56	57
58	59	60
61	62	63
64	65	66
67	68	69
70	71	72
73	74	75
76	77	78
79	80	81
82	83	84
85	86	87
88	89	90
91	92	93
94	95	96
97	98	99
100		

Dynamics Unit**1.990.510.00**

DYNAMICS, DIGITAL PCB

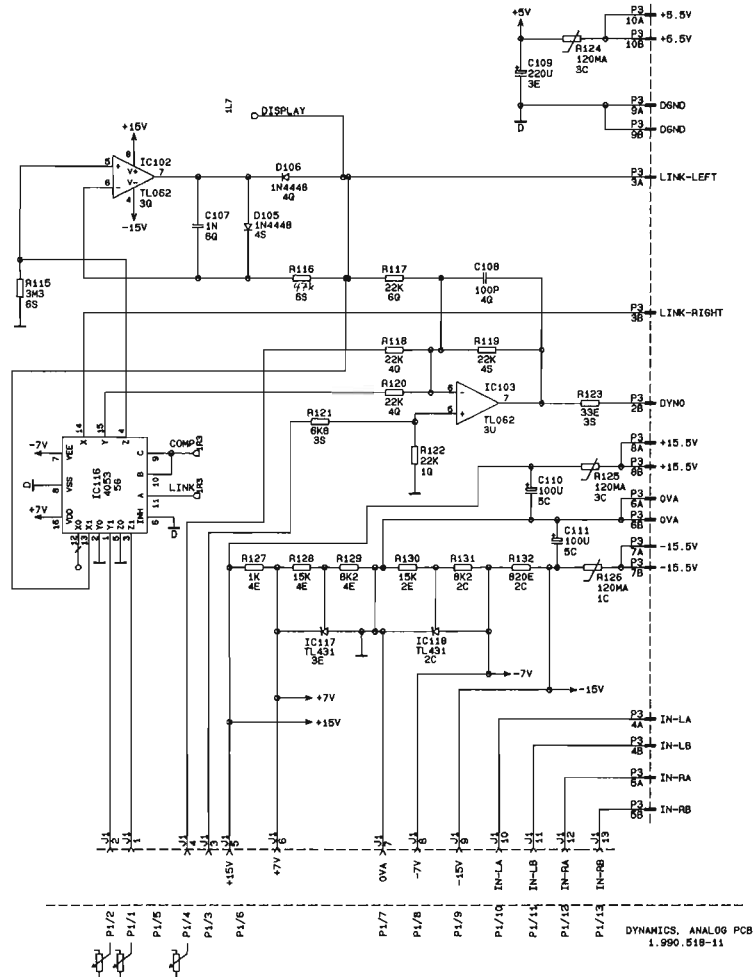
1.990.510.00



① 22.01.90 GBU	① 10-4-91 <i>ML</i>	② 6-2-92 <i>ML</i>	
MIXING CONSOLE 990			PAGE 1 OF 2
STUDER	DYNAMICS, DIGITAL PCB		SC 1.990.510-00

DYNAMICS, DIGITAL PCB

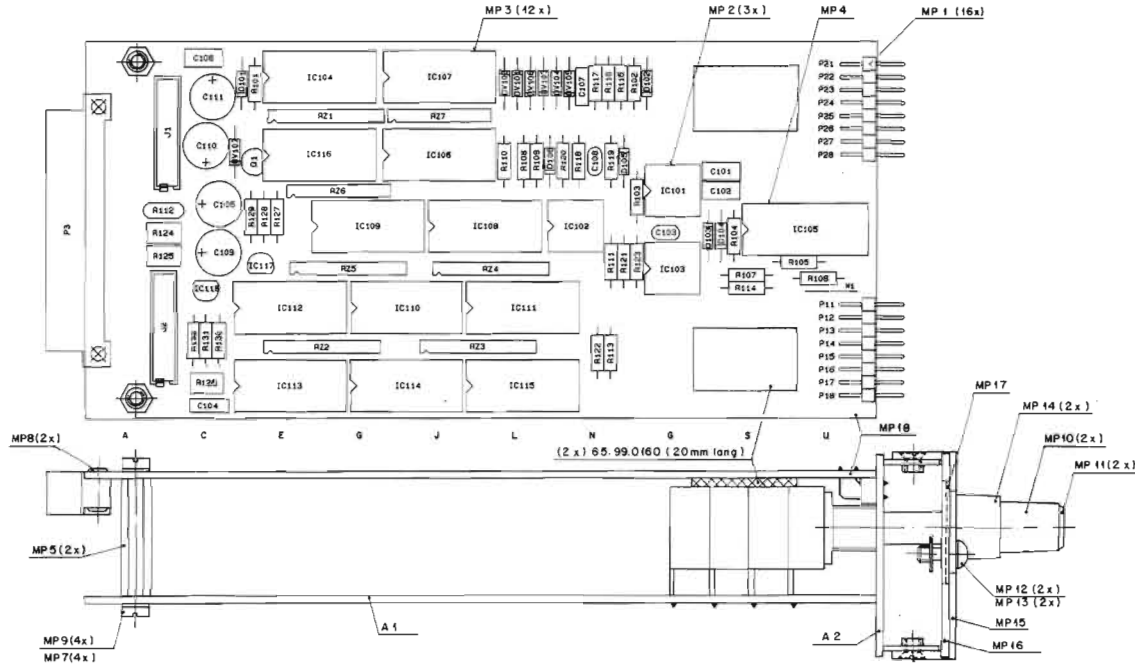
1.990.510.00



© 22.01.90	GBU	① 10-4-91 <i>my</i>	② 6-2-92 <i>my</i>	○
MIXING CONSOLE 990			PAGE 2 OF 2	
STUDER	DYNAMICS, DIGITAL PCB		SC	1.990.510-00

DYNAMICS UNIT LIM./COMP./GATE ESE

1.990.510.00



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
IC..111	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC..112	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC..113	50.07.0051	CD4051	8-channel analog mux/demux	Ph,Not,RCA
IC..114	50.07.0049	CD4049	hex inverting buffer CMOS	Ph,To
IC..115	50.07.0049	CD4049	hex inverting buffer CMOS	Ph,To
IC..116	50.07.0015	CD4053	3*2-ch.analog mux/demux	Ph,Not,RCA
IC..117	50.10.0106	TL431CLP		Not,TI
IC..118	50.10.0106	TL431CLP		Not,TI
J....1	54.14.5516		micro-match, 16p	
J....2	54.14.5516		micro-match, 16p	
MP....1	54.11.0131	16 pcs	Steckerstifte 2-reihig, gebogen	
MP....2	53.03.0166	3 pcs	IC-socket 8 pin	
MP....3	53.03.0166	12 pcs	IC-socket 16 pin	
MP....4	53.03.0175	1 pcs	IC-socket 18 pin	
MP....5	1.010.047.27	2 pcs	Mutterbolzen M3x23	
MP....6	21.01.2352	4 pcs	5-Schraube M3x4	
MP....7	24.16.1030	4 pcs	Rippen-schraube 3.2/5.5	
MP....8	28.99.0319	2 pcs	Rohrriete	
MP....9	21.01.0354	4 pcs	Z-Schraube M3x6	
MP....10	42.01.0203	2 pcs	Druckknopf	
MP....11	42.01.0251	2 pcs	Deckel	
MP....12	24.16.3023	2 pcs	Mellensicherung	
MP....13	1.010.022.21	2 pcs	Linse-schraube M3x8 spez.	
MP....14	1.912.000.03	2 pcs	Drehring	
MP....15	1.990.510.01	1 pcs	Frontschild	
MP....16	1.990.510.02	1 pcs	Träger	
MP....17	1.990.510.03	1 pcs	Fenster	
MP....18	1.990.510.11	1 pcs	PCB	
P.....3	54.11.2013	2*16 pin	astrocard connector, male	
Q.....1	50.03.0436	BC237B	NPN TO92-1	
R...101	57.11.3104	100 kOhm		
R...102	57.11.3334	330 kOhm		
R...103	57.11.3334	330 kOhm		
R...104	57.11.3223	22 kOhm		
R...105	57.11.3152	1.5 kOhm		
R...106			not installed	
R...107	57.11.3152	1.5 kOhm		
R...108	57.11.3104	100 kOhm		
R...109	57.11.3104	100 kOhm		
R...110	57.11.3104	100 kOhm		
R...111	57.11.3104	100 kOhm		
R...112	57.92.7013		PTC 0.5A	Raychem
R...113	57.11.3330	33 Ohm		
R...114	57.11.5106	10 MOhm		
R...115	57.11.5335	3.3 MOhm		
R...116	57.11.3822	8.2 kOhm		
R...117	57.11.3473	47 kOhm		
R...118	57.11.3223	22 kOhm		
R...119	57.11.3223	22 kOhm		
R...120	57.11.3223	22 kOhm		
R...121	57.11.3582	6.8 kOhm		
R...122	57.11.3223	22 kOhm		
R...123	57.11.3330	33 kOhm		
R...124	57.92.1121		PTC 120mA	Ph
R...125	57.92.1121		PTC 120mA	Ph
R...126	57.92.1121		PTC 120mA	Ph
R...127	57.11.3102	1 kOhm		
R...128	57.11.3153	15 kOhm		
R...129	57.11.3822	8.2 kOhm		
R...130	57.11.3153	15 kOhm		
R...131	57.11.3822	8.2 kOhm		
R...132	57.11.3821	820 Ohm		
RZ....1	57.88.4104	8*100kOhm		
RZ....2	57.88.4104	8*100kOhm		
RZ....3	57.88.4104	8*100kOhm		
RZ....4	57.88.4104	8*100kOhm		
RZ....5	57.88.4104	8*100kOhm		
RZ....6	57.88.2101	4*100 Ohm		
RZ....7	57.88.2101	4*100 Ohm		
W.....1	64.01.0105		wire bridge	
CER	ceramic, EL	electrolytic, PE	- polyester	
MANUFACTURER				
Not=Motorola, NS=National Semiconductors, Ph=Philips, Sia=Siemens, SGS=SGS/Thomson, TI=Texas Instruments, To=Toshiba				
HISTORY				
01	91-04-10	C104	10nF replaced by 270pF	
02	92-02-05	R116	8.2k replaced by 47k	
		1.990.510.00	DYNAMICS DIGITAL BOARD	WY 90/01/2500
		1.990.510.00	DYNAMICS DIGITAL BOARD	WY 91/04/1001
		1.990.510.00	DYNAMICS DIGITAL BOARD	WY 92/02/0402

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A....1	1.990.518.00		dynamics analog board	
A....2	1.990.519.00		dynamics switch board	
C...101	59.06.0104	100 nF	10k PE	
C...102	59.06.0104	100 nF	10k PE	
C...103	59.34.4151	150 pF	CER	
C...104	59.06.0103	10 nF	10k PE	
C...104	59.34.4271	270 pF	CER	
C...105	59.22.5101	100 uF	25V EL	
C...106	59.06.0104	100 nF	10k PE	
C...107	59.06.0102	1 nF	10k PE	
C...108	59.34.4101	100 pF	CER	
C...109	59.22.3221	220 uF	10V EL	
C...110	59.22.5101	100 uF	25V EL	
C...111	59.22.5101	100 uF	25V EL	
D...101	50.04.0125	1M4448		any
D...102	50.04.0127	BAT85	BAT42 schottly	Sia,Ph,SGS
D...103	50.04.0127	BAT85	BAT42 schottly	Sia,Ph,SGS
D...104	50.04.0125	1M4448		any
D...105	50.04.0125	1M4448		any
D...106	50.04.0125	1M4448		any
DV...101	50.04.1108	5.6V	Z-diode	any
DV...102	50.04.1108	5.6V	Z-diode	any
DV...103	50.04.1108	5.6V	Z-diode	any
DV...104	50.04.1108	5.6V	Z-diode	any
DV...105	50.04.1108	5.6V	Z-diode	any
DV...106	50.04.1108	5.6V	Z-diode	any
DV...107	50.04.1108	5.6V	Z-diode	any
IC...101	50.09.0119	T1062	dual FET-op.amp.	Ti,Not,SGS
IC...102	50.09.0119	T1062	dual FET-op.amp.	Ti,Not,SGS
IC...103	50.09.0119	T1062	dual FET-op.amp.	Ti,Not,SGS
IC...104	50.07.1021	CD4021	8-bit static shift register	Ph,Not,RCA
IC...105	50.11.0119	1K9314	display driver	NS
IC...106	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC...107	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC...108	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC...109	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA
IC...110	50.07.0018	CD4094	shift and store bus register	Ph,Not,RCA

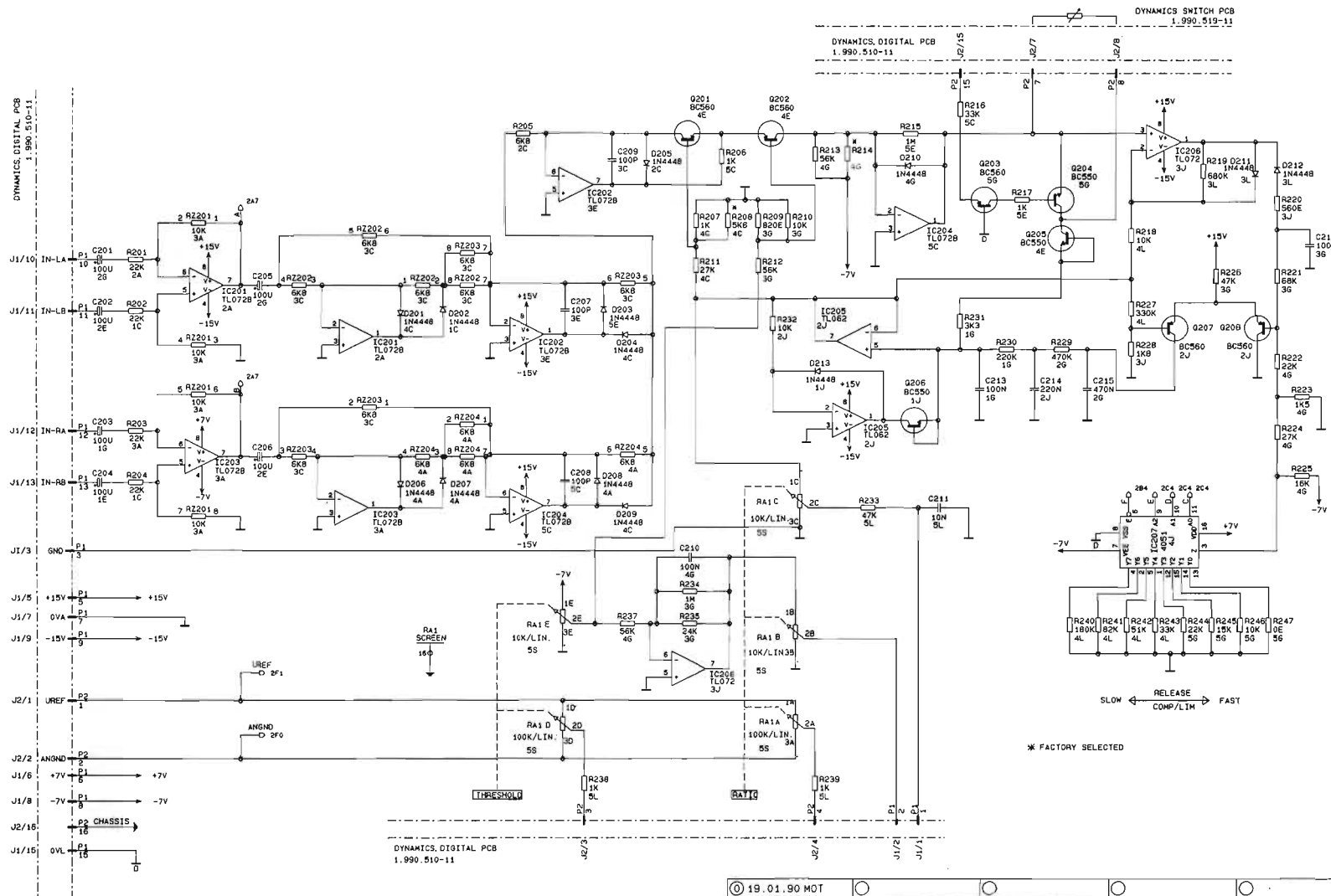
3.4.90

Elabor: Date: Rev: Date: Status:

STUDER REGISDRUM ZÜRICH	DYNAMICS UNIT LIM./COMP./GATE ESE	1.990.510-00
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DYNAMICS ANALOG PCB

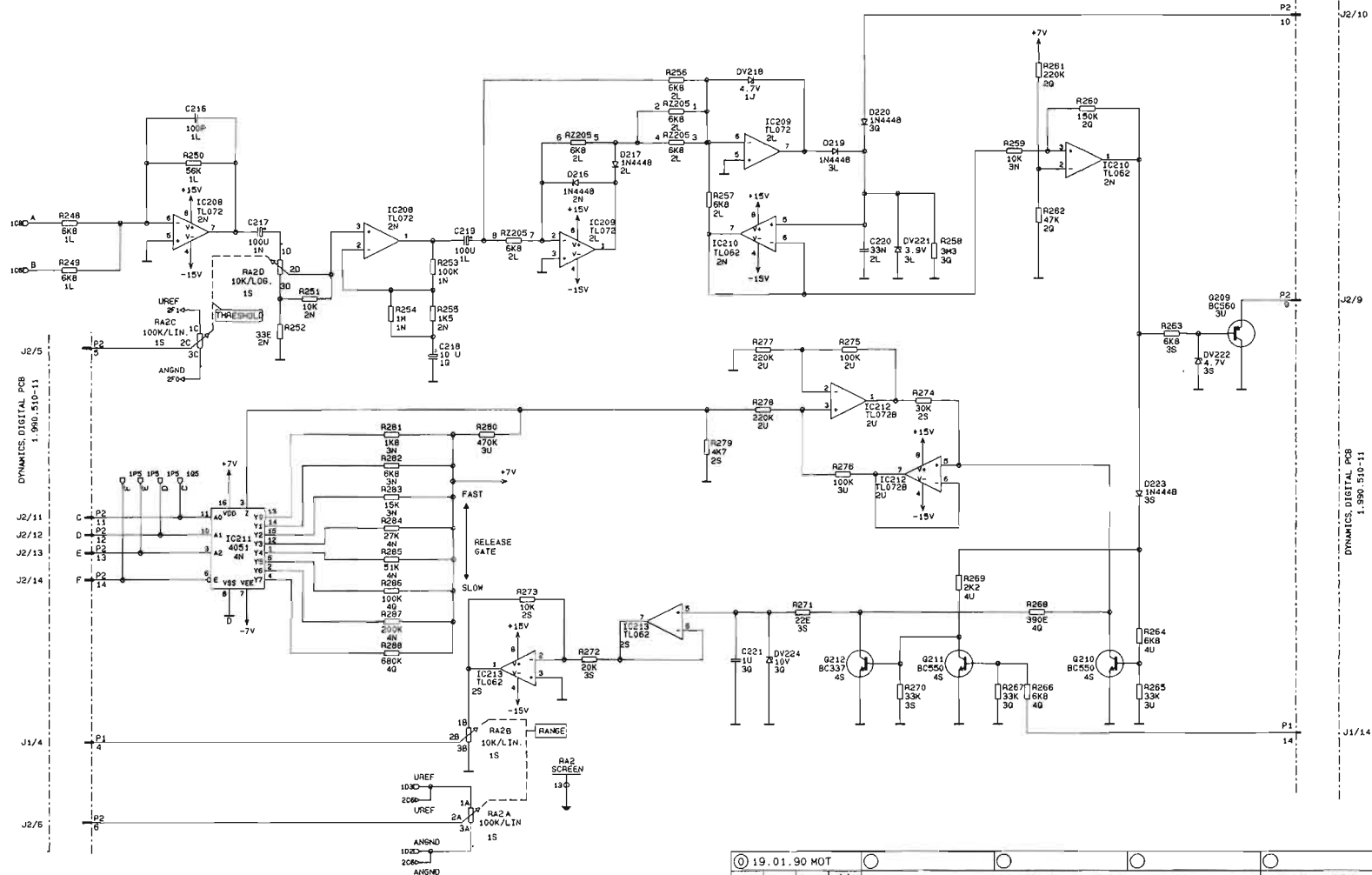
1.990.518.00



© 19.01.90 MOT			
STUDER	MIXING CONSOLE 990	PAGE 1 OF 2	
DYNAMICS ANALOG PCB	SC 1.990.518-00		

DYNAMICS ANALOG PCB

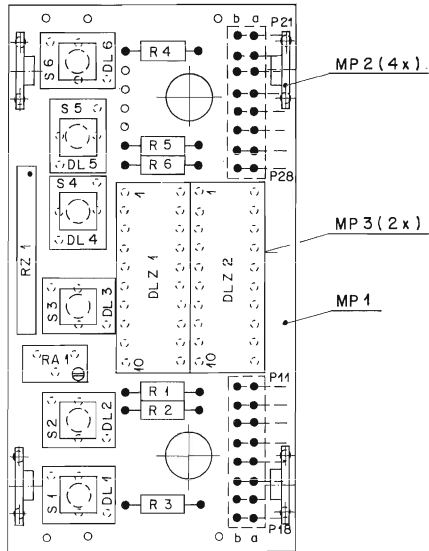
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19.01.90 MOT	MIXING CONSOLE 990	PAGE 2 OF 2
STUDER	DYNAMICS ANALOG PCB	SC 1.990.518-00

DYNAMICS SWITCH BOARD

1.990.519.00



Änderung					
3.4.90					
Datum	Gez.	Gespr.	Gespr.	Index	
Kopie-Nr.					
Nummer	1.990.519-00				

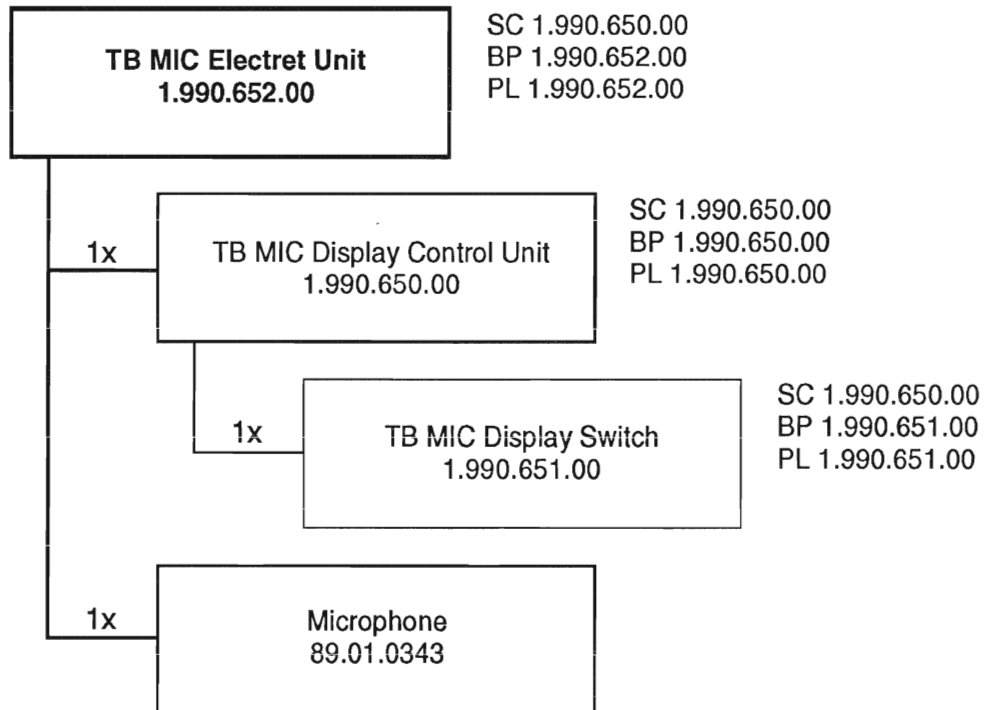
STUDER
REGENSDORF
ZÜRICH

Bezeichnung: DYNAMICS SWITCH BOARD

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
	DLZ...1	50.04.2161	10*D green	MV54164 (GI)
	DLZ...2	50.04.2150	10*D red	MV57164 (GI)
	R....1	57.11.3101	100 Ohm 0207 MF	
	R....2	57.11.3101	100 Ohm 0207 MF	
	R....3	57.11.3101	100 Ohm 0207 MF	
	R....4	57.11.3101	100 Ohm 0207 MF	
	R....5	57.11.3101	100 Ohm 0207 MF	
	R....6	57.11.3101	100 Ohm 0207 MF	
	RA....1	58.05.1104	100 kOhm adjustable	
	RZ....1	57.88.4101	SIP9 8*100 Ohm	
	S....1	55.15.0622	red, LED red	
	S....2	55.15.0604	colourless, LED yei	
	S....3	55.15.0604	colourless, LED yei	
	S....4	55.15.0602	colourless, LED red	
	S....5	55.15.0604	colourless, LED yei	
	S....6	55.15.0622	red, LED red	
	MP....1	1.990.519.11	1 pcs PCB	
	MP....2	1.990.100.05	4 pcs Querprinthalter	
	MP....3	53.99.0135	2 pcs XIC DILZOP ultra low prof.	

MANUFACTURER: GI=General Instruments, HP=Hewlett-Packard

1.990.519.00 DYNAMICS SWITCH BOARD WY 90.01.1000

TB MIC Electret Display Control Unit**1.990.652.00**

EL MIC / DISPLAY CONTROL UNIT

1.990.652.00

MP 10
MP 15
R 29
R 30
C 17
C 18
C 19
R 32
R 31
blk
wht
blu

MP 8
MP 7
MP 5 (2x)
MP 9 (2x)
MP 11
MP 12
MP 1 (6x)
A 1

MP 13
MIC 1
MP 2, MP 3,
MP 4
MP 6
blu
wht
blk
4
5
6

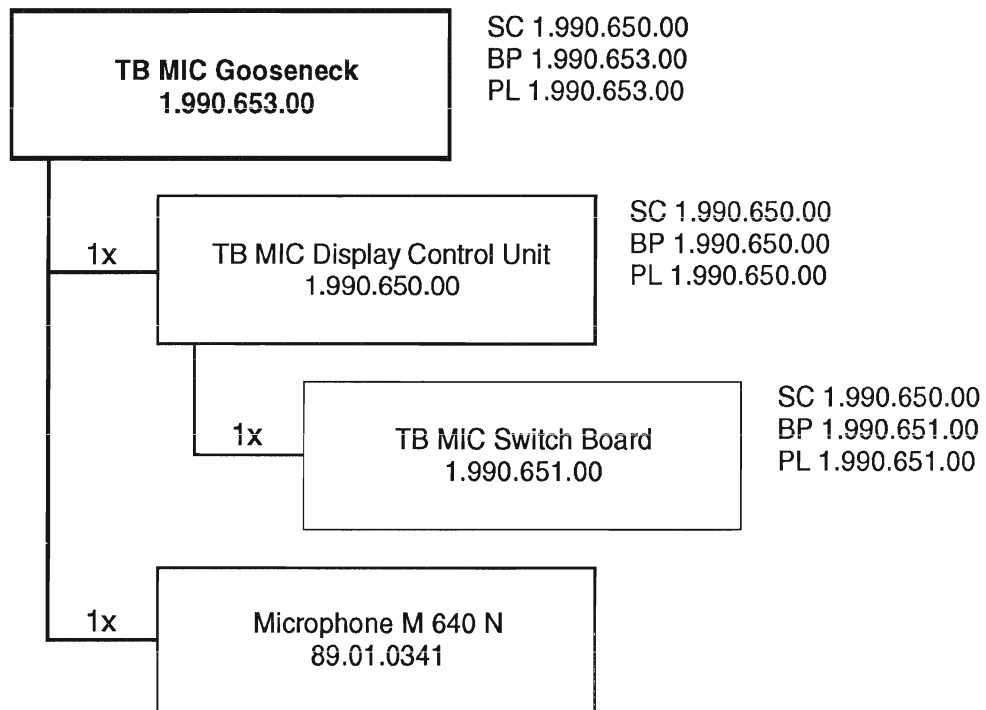
MIC 1 89.01.3450
blu
wht
blk
4
5
6

Ad	..POS..	..REF.No...	DESCRIPTION.....	MANUFACTURER
A....1	1.990.650.00		TB MIC/DISPLAY CONTROL BOARD	St
C....16	59.22.3101	100 uF	10V EL	
C....16			n.c.	
C....17	59.06.0104	100 nF	10% PE	
C....18	59.34.4221	220 pF	5% CER	
C....19	59.22.5220	22 uF	25V EL	
MIC...1	89.01.0343	EM 60	Electret Microphone	
01 MIC...1	89.01.3540		electret microphone	
R....29	57.11.3103	10 kOhm	1%	
01 R....29	57.11.3182	1.8 kOhm	1%	
R....30	57.11.3682	6.8 kOhm	1%	
01 R....30	57.11.3272	2.7 kOhm	1%	
R....31	57.11.3103	10 kOhm	1%	
R....32	57.11.3000	0 Ohm		
MP...1	21.01.2352	0006 pcs	S - Schr. , ZN , M3 * 4	
MP...2	21.53.0354	0001 pcs	Z - Schr. IS , ZN , M3 * 6	
MP...3	23.01.3032	0001 pcs	U - Scheibe D 3.2/9 * 0.8	
MP...4	24.16.1030	0001 pcs	Rippenscheibe D 3.2/5.5	
MP...5	24.16.3023	0002 pcs	Wellensicherung 2.3	
MP...6	35.05.0314	0001 pcs	Kabelbride D 9.5	
MP...7	42.01.0228	0001 pcs	Knebelknopf grau D10/ 4	
MP...8	42.01.0250	0001 pcs	Deckel hellgrau zu Knopf D10	
MP...9	1.010.022.21	0002 pcs	Linsenschraube IS spez. M3 * 8 SW	
MP...10	1.169.500.02	0001 pcs	Gewebe	
MP...11	1.990.650.01	0001 pcs	Frontschild TB MIC/DISPLAY CONTROL	
MP...12	1.990.650.02	0001 pcs	Traeger TB MIC/DISPLAY CONTROL	
MP...13	1.990.650.03	0001 pcs	Halblech TB MIC/DISPLAY CONTROL	
MP...14	1.990.652.04	0000 pcs	Nr.-Etikette 5 * 20	
MP...15	1.990.652.93	0001 pcs	Litzenliste EL Mic/Display Control Unit	St

01 New electret microphone. EM 60 89.01.0343 will be replaced by 89.01.3450. New: two connections. C 16 delete, R26 1k8, R30 2k7.
MANUFACTURER St=Studer

STUODER REGENSDORF ZÜRICH	Benennung EL MIC / DISPLAY CONTROL UNIT	Nummer: 1.990.652-00
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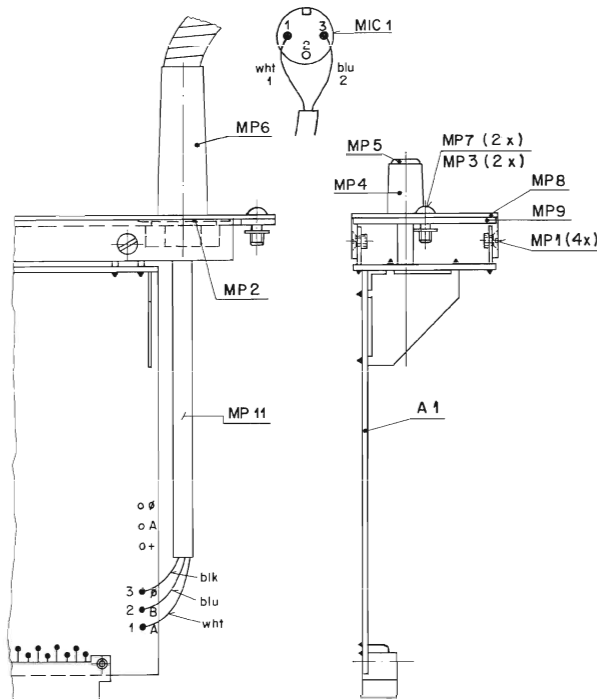
Änderung									
Datum	16.11.93	GM	HF	VE					
Änderung	5.4.90	A. H.	VOL	14					
Kopie für									

TB MIC Gooseneck Display Control Unit**1.990.653.00**

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

TB MIC / DISPLAY CONTROL UNIT

1.990.653.00



Änderung						(3)
Änderung						(2)
Änderung						(1)
Änderung	5.4.90	1/16	VOL	1/4		(n)
Datum	Gez	Gepr	Get	Index		

STUDER REGENSDORF ZÜRICH	Bereitgestellt	TB MIC / DISPLAY CONTROL UNIT	Nummer	1.990.653-00
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Ad ..POS.. ..REF.No... DESCRIPTION.....MANUFACTURER

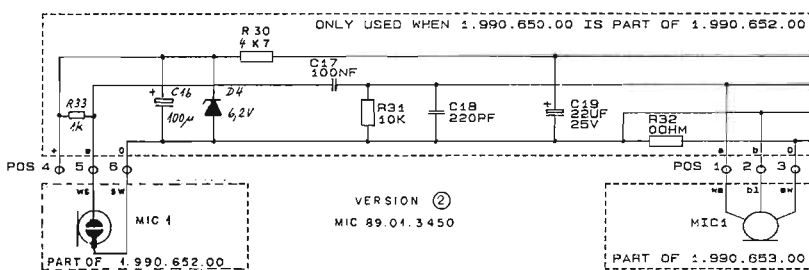
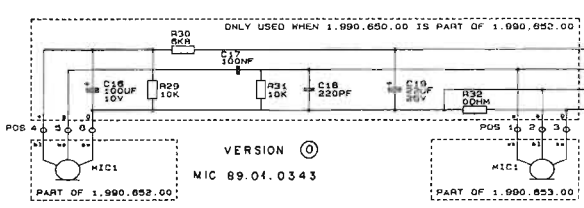
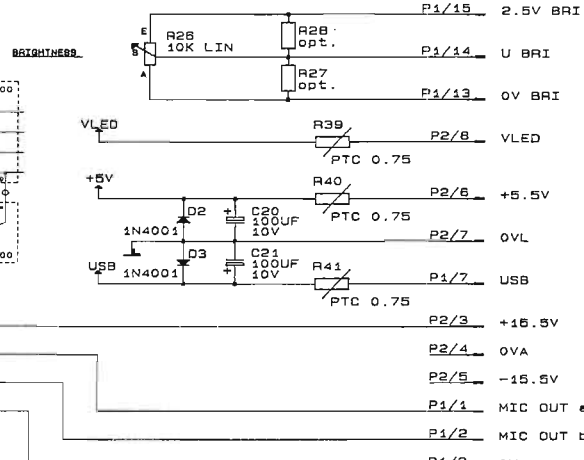
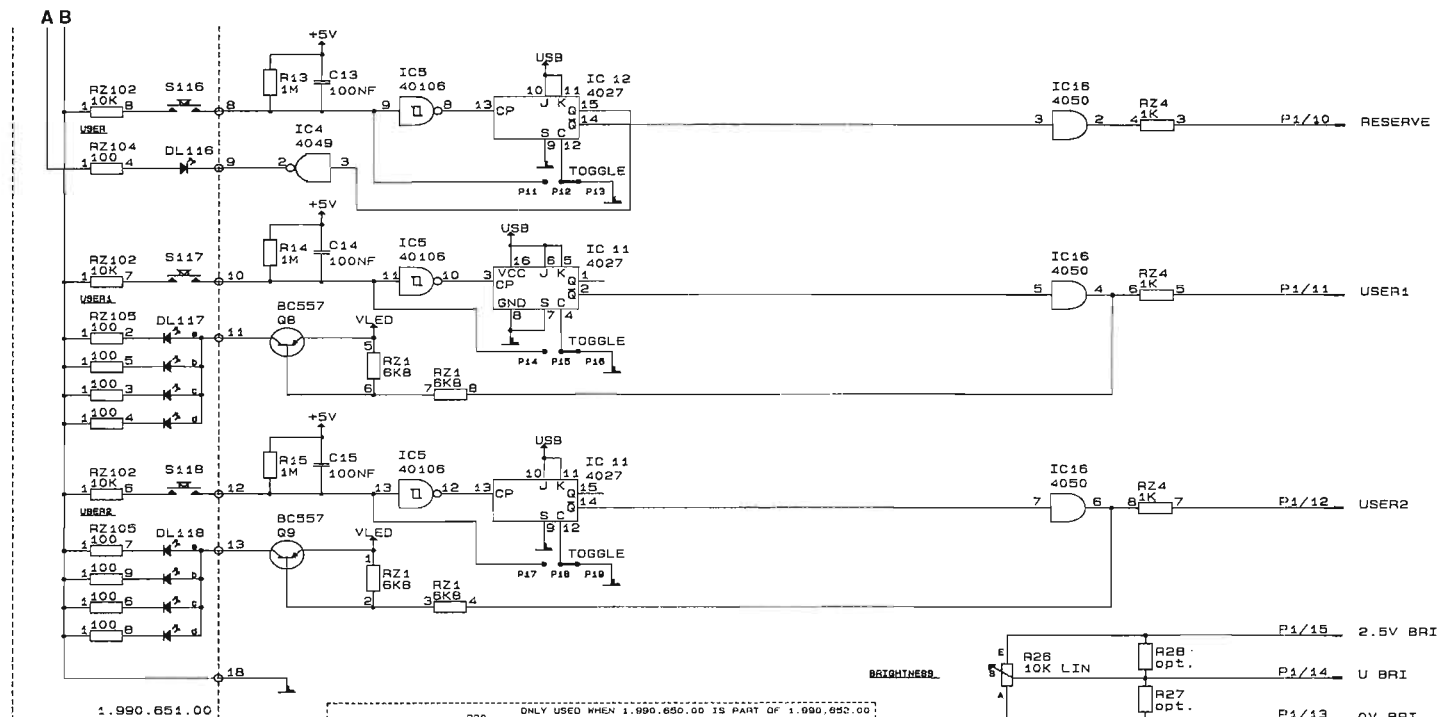
A....1	1.990.650.00			TB MIC/DISPLAY CONTROL BOARD	St
MIC...1	89.01.0341	M 640 N		Talkback Microphone	Beyer
MP...1	21.01.2352	0004 pcs		S - Schr. , ZN , M3 * 4	
MP...2	23.99.0123	0001 pcs		U - Scheibe D 10.1/15 * 0.5 PREH	
MP...3	24.16.3023	0002 pcs		Wellensicherung 2.3	
MP...4	42.01.0228	0001 pcs		Knebelknopf grau D10/ 4	
MP...5	42.01.0250	0001 pcs		Deckel hellgrau zu Knopf D10	
MP...6	89.01.0342	0001 pcs		Schwanenhals SH11-200N HCR	Beyer
MP...7	1.010.022.21	0002 pcs		Linsenschraube IS spez. M3 * 8 SW	
MP...8	1.990.650.01	0001 pcs		Frontschild TB MIC/DISPLAY CONTROL	
MP...9	1.990.650.02	0001 pcs		Traeger TB MIC/DISPLAY CONTROL	
MP...10	1.990.653.04	0000 pcs		Nr.-Etikette 5 * 20	
MP...11	1.990.653.94	0001 pcs		Kabelliste TB Mic/Display Control Unit	St

MANUFACTURER St=Studer

1.990.653.00 TB MIC/DISPLAY CONTROL UNIT VOL90/02/2700

TB MIC / DISPLAY CONTROL BOARD

1.990.650.00

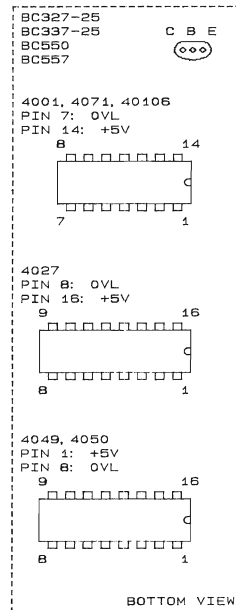
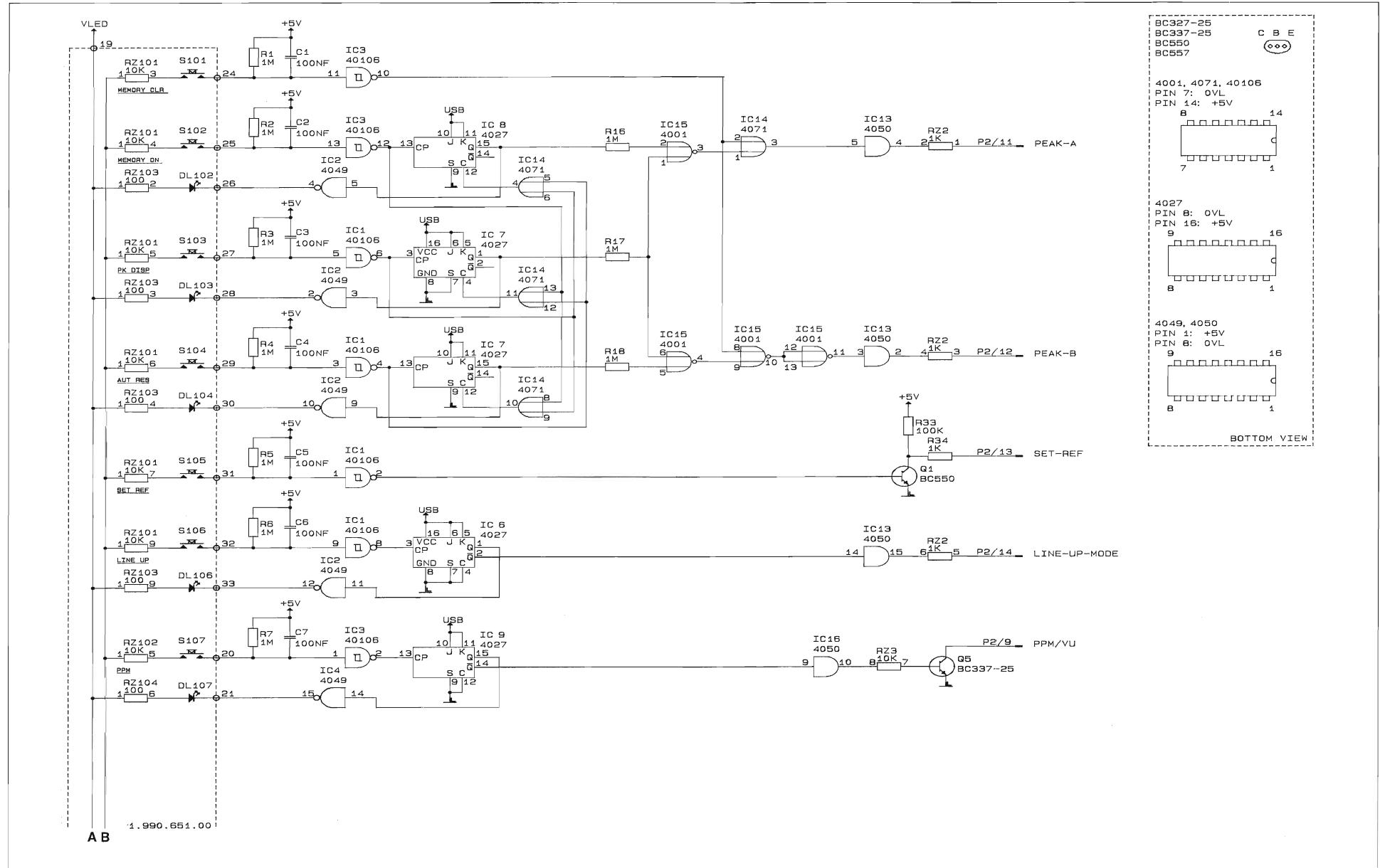


© 11.5.90	VOL			
STUDER			TB MIC/DISPLAY CONTROL BOARD	SC
				PAGE 1 OF 1
				1.990.650.00

TB MIC / DISPLAY CONTROL BOARD



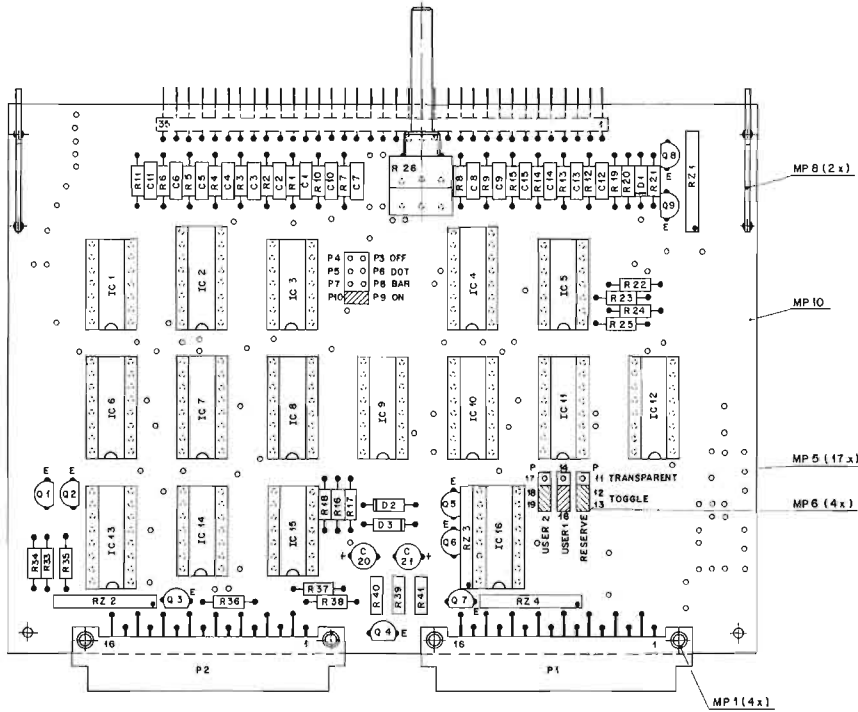
1.990.650.00



TB MIC/DISPLAY CONTROL BOARD



1.990.650.00

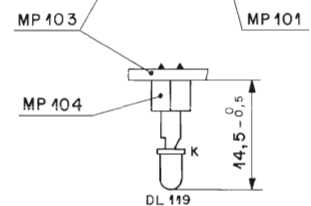
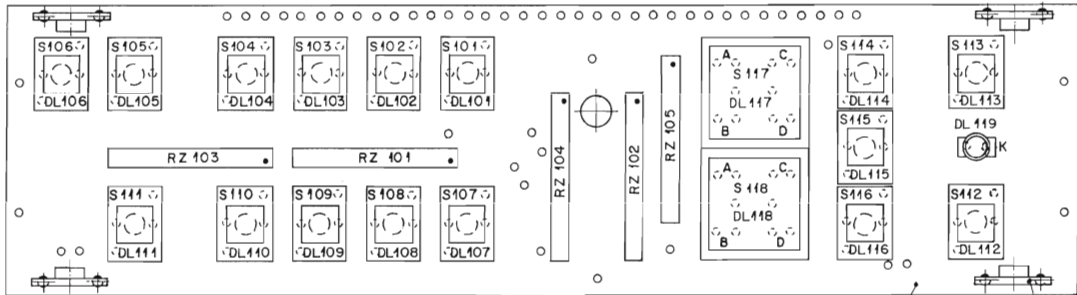


STUDER REGENDORF ZÜRICH	TB MIC / DISPLAY CONTROL BOARD ESE	1.990.650-00
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Ad	POS	REF. No.	DESCRIPTION	MANUFACTURER	Ad	POS	REF. No.	DESCRIPTION	MANUFACTURER
A	....1	1.990.651.00	TB MIC/DISPLAY SWITCH BOARD	St	RZ	....1	57.88.2682	6.8 10kΩ 2% 4"	
C	....1	59.06.0104	100 nF 10% PE		RZ	....2	57.88.2102	1 10kΩ 2% 4"	
C	....2	59.06.0104	100 nF 10% PE		RZ	....3	57.88.2103	10 10kΩ 2% 4"	
C	....3	59.06.0104	100 nF 10% PE		RZ	....4	57.88.2102	1 10kΩ 2% 4"	
C	....4	59.06.0104	100 nF 10% PE		MP	....1	28.99.0119	0004 pcs Rohmriete 2.5 * 9 * 0.15	
C	....5	59.06.0104	100 nF 10% PE		MP	....2	43.01.0108	0001 pcs ESE - Warnschild	
C	....6	59.06.0104	100 nF 10% PE		MP	....3	53.03.0187	0005 pcs IC-Socket, DIL 14	
C	....7	59.06.0104	100 nF 10% PE		MP	....4	53.03.0188	0011 pcs IC-Socket, DIL 16	
C	....8	59.06.0104	100 nF 10% PE		MP	....5	54.01.0020	0017 pcs Jumper Stift	
C	....9	59.06.0104	100 nF 10% PE		MP	....6	54.01.0021	0004 pcs Jumper Bruecke	
C	....10	59.06.0104	100 nF 10% PE		MP	....7	54.11.0125	0035 pcs Stiftleistenste, Winkel	
C	....11	59.06.0104	100 nF 10% PE		MP	....8	1.990.100.01	0002 pcs Quarprintstuetze	
C	....12	59.06.0104	100 nF 10% PE		MP	....9	1.990.650.04	0000 pcs Hr-Etikette 5 * 20	
C	....13	59.06.0104	100 nF 10% PE		MP	....10	1.990.650.11	0001 pcs TB Mic/Display Control PCB	St
C	....14	59.06.0104	100 nF 10% PE		* comment: only used, when 1.990.650.00 is part of 1.990.652.00 (EL MIC/DISPLAY CONTROL UNIT)				
C	....15	59.06.0104	100 nF 10% PE		CER = ceramic, EL = electrolytic, PE = polyester				
C	....16	.	0 not used	* see comment	MANUFACTURER ITT-Intermetall, Mot-Motorola, NS-National				
C	....17	.	0 not used	* see comment	Semiconductors, Phi-Philips, RCA-Radio Corporation of America, SGS-SGS/Thomson				
C	....18	.	0 not used	* see comment	SI-Siemens, St-Studer, To-Toshiba				
C	....19	.	0 not used		1.990.650.00 TB MIC/DISPLAY CONTROL BOARD VOL90/02/0600				
C	....20	59.22.3101	100 uF 10V EL		END				
C	....21	59.22.3101	100 uF 10V EL						
D	....1	50.04.1106	82K50C 2.7V	any					
D	....2	50.04.0122	1M4001	any					
D	....3	50.04.0122	1M4001	any					
IC	....1	50.07.0014	40106	Max Schmitt-Triggrer Inverter	Mot,NS,Phi				
IC	....2	50.07.0049	4049	Max Inverting Buffer	Phi,To				
IC	....3	50.07.0014	40106	Max Schmitt-Triggrer Inverter	Mot,NS,Phi				
IC	....4	50.07.0049	4049	Max Inverting Buffer	Phi,To				
IC	....5	50.07.0014	40106	Max Schmitt-Triggrer Inverter	Mot,NS,Phi				
IC	....6	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....7	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....8	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....9	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....10	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....11	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....12	50.07.0027	4027	Dual Flip-Flop	Mot,Phi,RCA				
IC	....13	50.07.0050	4050	Hex Buffer	Mot,Phi,RCA				
IC	....14	50.07.0022	4071	Quad OR Gate	Mot,RCA,SGS				
IC	....15	50.07.0050	4050	Quad NOR-Gate	Mot,NS,Phi				
IC	....16	50.07.0050	4050	Hex Buffer	Mot,Phi,RCA				
P	....1	54.11.2007		Eurocard connector, 16 pin					
P	....2	54.11.2007		Eurocard connector, 16 pin					
Q	....1	50.03.0497	BC 550		St				
Q	....2	50.03.0340	BC 337-25		ITT,Phi,St				
Q	....3	50.03.0340	BC 337-25		ITT,Phi,St				
Q	....4	50.03.0351	BC 337-26		ITT,Phi,St				
Q	....5	50.03.0340	BC 337-25		ITT,Phi,St				
Q	....6	50.03.0340	BC 337-25		ITT,Phi,St				
Q	....7	50.03.0340	BC 337-25		ITT,Phi,St				
Q	....8	50.03.0615	BC 557		ITT,Not,Phi				
Q	....9	50.03.0615	BC 557		ITT,Not,Phi				
R	....1	57.11.3105	1 10kΩ 1%						
R	....2	57.11.3105	1 10kΩ 1%						
R	....3	57.11.3105	1 10kΩ 1%						
R	....4	57.11.3105	1 10kΩ 1%						
R	....5	57.11.3105	1 10kΩ 1%						
R	....6	57.11.3105	1 10kΩ 1%						
R	....7	57.11.3105	1 10kΩ 1%						
R	....8	57.11.3105	1 10kΩ 1%						
R	....9	57.11.3105	1 10kΩ 1%						
R	....10	57.11.3105	1 10kΩ 1%						
R	....11	57.11.3105	1 10kΩ 1%						
R	....12	57.11.3105	1 10kΩ 1%						
R	....13	57.11.3105	1 10kΩ 1%						
R	....14	57.11.3105	1 10kΩ 1%						
R	....15	57.11.3105	1 10kΩ 1%						
R	....16	57.11.3105	1 10kΩ 1%						
R	....17	57.11.3105	1 10kΩ 1%						
R	....18	57.11.3105	1 10kΩ 1%						
R	....19	57.11.3331	330 Ohm 1%						
R	....20	57.11.3331	330 Ohm 1%						
R	....21	57.11.3101	100 Ohm 1%						
R	....22	57.11.3104	100 10kΩ 1%						
R	....23	57.11.3101	100 Ohm 1%						
R	....24	57.11.3104	100 10kΩ 1%						
R	....25	57.11.3101	100 Ohm 1%						
R	....26	1.010.101.58	10 10kΩ 1%	(Tandem-Pot, 100kΩ not used)					
R	....27	.	0 not used						
R	....28	.	0 not used						
R	....29	.	0 not used	* see comment					
R	....30	.	0 not used	* see comment					
R	....31	.	0 not used	* see comment					
R	....32	.	0 not used	* see comment					
R	....33	57.11.3104	100 10kΩ 1%						
R	....34	57.11.3102	1 10kΩ 1%						
R	....35	57.11.3103	10 10kΩ 1%						
R	....36	57.11.3103	10 10kΩ 1%						
R	....37	57.11.3272	2.7 10kΩ 1%						
R	....38	57.11.3103	10 10kΩ 1%						
R	....39	57.92.7013	.75 Ohm	O.5 A R-PTC					
R	....40	57.92.7013	.75 Ohm	O.5 A R-PTC					
R	....41	57.92.7013	.75 Ohm	O.5 A R-PTC					

DISPLAY SWITCH BOARD

1.990.651.00



Ausgabe		Änderung			
4.4.90		VOL			
Datum	Gez	Gepr	Ges	Index	
Ersatz für:		Ersetzt durch:		Kopie für:	
STUDER REGENSDORF ZÜRICH		DISPLAY SWITCH BOARD		Nummer: 1.990.651-00	

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

DL..101	. . 0	not used	see S101	
DL..102	. . 0	not used	see S102	
DL..103	. . 0	not used	see S103	
DL..104	. . 0	not used	see S104	
DL..105	. . 0	not used	see S105	
DL..106	. . 0	not used	see S106	
DL..107	. . 0	not used	see S107	
DL..108	. . 0	not used	see S108	
DL..109	. . 0	not used	see S109	
DL..110	. . 0	not used	see S110	
DL..111	. . 0	not used	see S111	
DL..112	. . 0	not used	see S112	
DL..113	. . 0	not used	see S113	
DL..114	. . 0	not used	see S114	
DL..115	. . 0	not used	see S115	
DL..116	. . 0	not used	see S116	
DL..117	. . 0	not used	see S117	
DL..118	. . 0	not used	see S118	
DL..119	50.04.2130	LY 3360	-GK yellow	Sie
RZ..101	57.88.4103	10 kOhm	2% ,8*	
RZ..102	57.88.4103	10 kOhm	2% ,8*	
RZ..103	57.88.4101	100 Ohm	2% ,8*	
RZ..104	57.88.4101	100 Ohm	2% ,8*	
RZ..105	57.88.4101	100 Ohm	2% ,8*	
S...101	55.15.0605	1*A	5mm, gn/tr (CLEAR MEM)	
S...102	55.15.0604	1*A	5mm, gb/tr (MEM ON)	
S...103	55.15.0604	1*A	5mm, gb/tr (PEAK DISP)	
S...104	55.15.0604	1*A	5mm, gb/tr (AUTO RESET)	
S...105	55.15.0605	1*A	5mm, gn/tr (SET REF)	
S...106	55.15.0604	1*A	5mm, gb/tr (LINE UP)	
S...107	55.15.0604	1*A	5mm, gb/tr (PPM)	
S...108	55.15.0605	1*A	5mm, gn/tr (FAST)	
S...109	55.15.0602	1*A	5mm, rt/tr (+20dB)	
S...110	55.15.0605	1*A	5mm, gn/tr (DOT)	
S...111	55.15.0604	1*A	5mm, gb/tr (EXT)	
S...112	55.15.0602	1*A	5mm, rt/tr (ON/ALARM)	
S...113	55.15.0602	1*A	5mm, rt/tr (PRESET)	
S...114	55.15.0604	1*A	5mm, gb/tr (OVERLOAD1)	
S...115	55.15.0602	1*A	5mm, rt/tr (OVERLOAD2)	
S...116	55.15.0604	1*A	5mm, gb/tr (RESERVE)	
S...117	55.15.0704	1*A	12mm, gb/tr (USER1)	
S...118	55.15.0702	1*A	12mm, rt/tr (USER2)	
MP..101	53.03.0230	0001 pcs	LED-Sockel Single Line, 2-pol.	
MP..102	1.990.100.05	0004 pcs	Querprinthalter	
MP..103	1.990.651.04	0000 pcs	Nr.-Etikette 5 * 20	
MP..104	1.990.651.11	0001 pcs	TB Mic/Display Switch PCB	St
MANUFACTURER	Sie=Siemens, St=Studer			

1.990.651.00 TB MIC/DISPLAY SWITCH BOARD VOL90/02/0600

Section 7 Units of the Euro Card Frame

Table of Contents

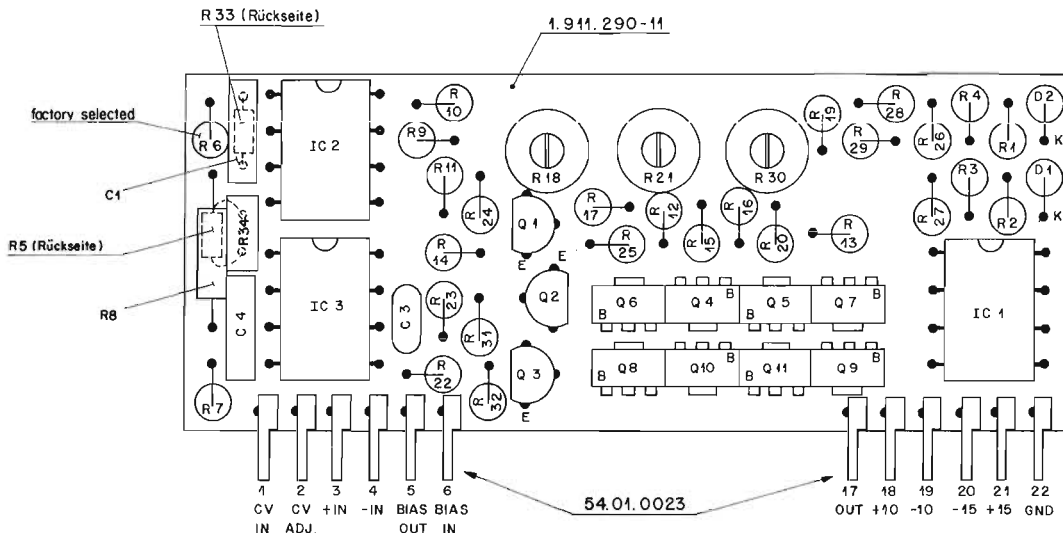
VCA Board Tape 2	1.911.291.00
Diodes/Power Alarm 2 Board	1.915.109.00
Power Supply 3V...6V.....	1.915.111.81
Power Supply LED 3V...6V	1.915.111.81
Pin location list.....	1.917.110
32CH Bus-Selector.....	1.917.110.00
Pin location list.....	1.917.110
Master Amplifier.....	1.917.140.81
Pin location list.....	1.917.140
Master Amplifier.....	1.917.140.81
Limiter Subcard for Master Amplifier	1.917.141.00
Master Amplifier with Limiter.....	1.917.142.81
Master Amplifier with Limiter.....	1.917.142.81
Pin location list.....	1.917.142
Master Amplifier with Limiter.....	1.917.142.81
CR + Studio Monitor Mix Amplifier	1.917.300.00
Pin location list.....	1.917.300
Monitor Mix Amplifier.....	1.917.300.00
CR/Studio Monitor Amplifier	1.917.310.00
Pin location list.....	1.917.310
CR/Studio Monitor Amplifier	1.917.310.00
Subcard for CR/Studio Monitor.....	1.917.311.00
CR/Studio Monitor Amplifier/Out.....	1.917.312.00
CR/Studio Monitor Amplifier/Out 2.....	1.917.312.00
Talk Back Amplifier.....	1.917.320.00
Pin location list.....	1.917.320
Talk Back Amplifier.....	1.917.320.00
PFL/Talk Back Headphones Amplifier	1.917.330.81
Pin location list.....	1.917.330

STUDER AUDIO CONSOLE 990

PFL/Talk Back Headphones Amplifier.....	1.917.330.81
Subcard for PFL/TB Headphone.....	1.917.331.00
Monitor Relays Unit 8x2/2.....	1.917.601.00
Pin location list.....	1.917.601
Monitor Relays Unit 8x2/2.....	1.917.601.00
Signal Input/Output Interface.....	1.917.611.00
Pin location list.....	1.917.611
Signal Input/Output Interface.....	1.917.611.00

VCA BOARD TAPE 2

1.911.291.00



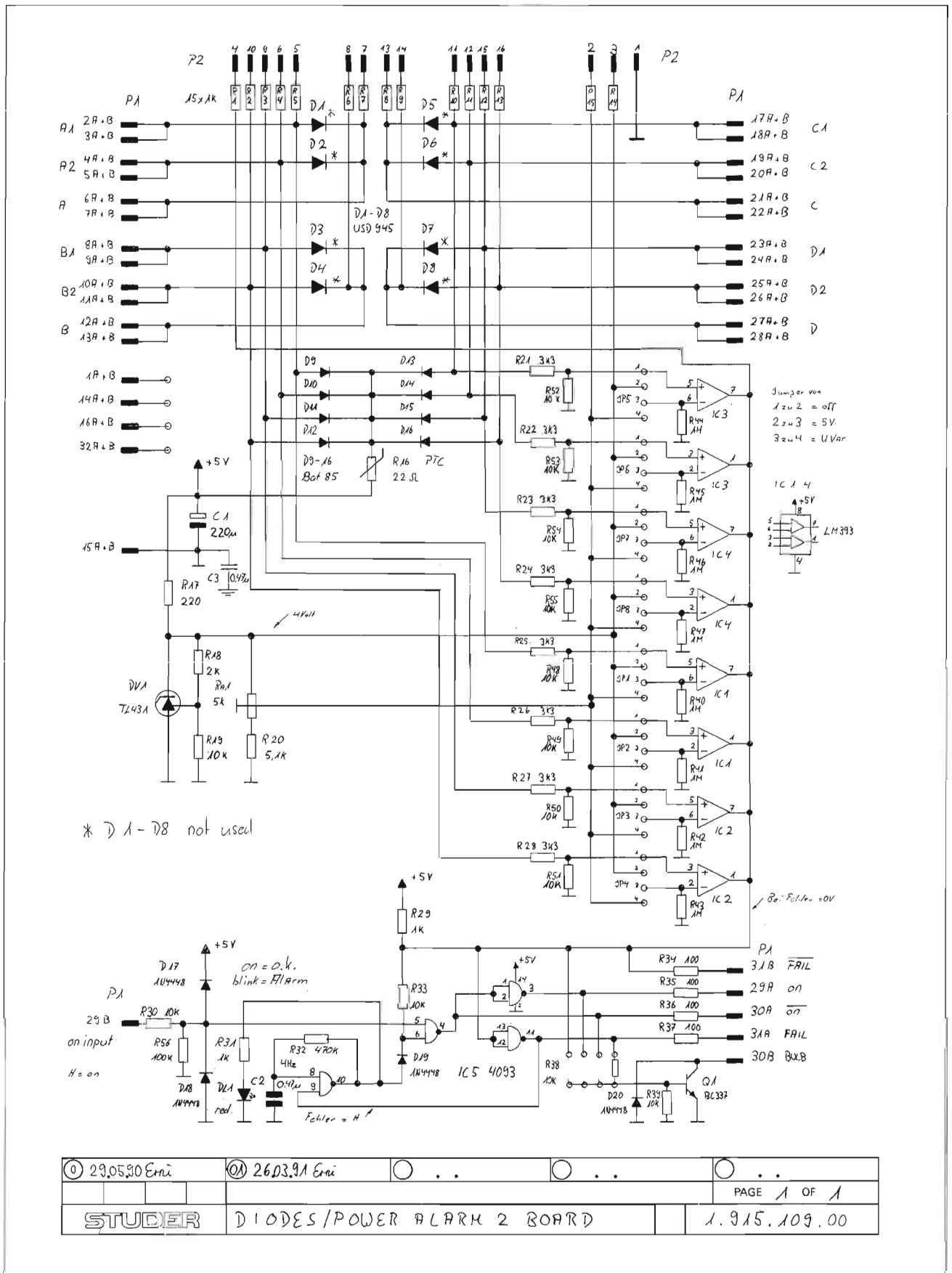
STUDER REGENSDORF ZÜRICH	Bemessung: VCA-Board Type 2 ESE	Anfertigung				①
		Ausführung				②
		Datum				③
		Kopie für:				④
		9.2.90	Gst.	Gedr.	Ges.	Index
		Nummer: 1.911.291-00				

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
C.....1		59.06.0332	3.3 nF 5%	PE
C.....3		59.99.0236	470 pF 20%	CER
C.....4		59.06.0103	10 nF 20%	PE
D.....1		50.04.1114	10 V zener diode 400mW	any
D.....2		50.04.1112	5.1 V zener diode 400mW	any
IC.....1		50.09.0107	RC4559 dual op. amp.	Ra, TI
IC.....2		50.09.0101	TLO72 dual op. amp. J-FET	Mot, TI
IC.....3		50.09.0101	TLO72 dual op. amp. J-FET	Mot, TI
Q.....1		1.010.037.50	BC 337 NPN selected	St
Q.....2		1.010.036.50	BC 327 NPN selected	St
Q.....3		1.010.037.50	BC 337 NPN selected	St
Q.....4		50.60.0100	BCX 68 NPN selected	St
Q.....5		50.60.0100	BCX 68 NPN selected	St
Q.....6		50.60.1100	BCX 69 PNP selected	St
Q.....7		50.60.1100	BCX 69 PNP selected	St
Q.....8		50.60.0100	BCX 68 NPN selected	St
Q.....9		50.60.0100	BCX 68 NPN selected	St
Q.....10		50.60.1100	BCX 69 PNP selected	St
Q.....11		50.60.1100	BCX 69 PNP selected	St
R.....1		57.11.3103	10 kOhm 1%	
R.....2		57.11.3103	10 kOhm 1%	
R.....3		57.11.3203	20 kOhm 1%	
R.....4		57.11.3103	10 kOhm 1%	
R.....5		57.11.3304	300 kOhm 1%	
R.....6		57.11.9999	10 kOhm factory selected	
R.....7		57.11.3103	10 kOhm 1%	
R.....8		57.11.3105	1 MOhm 1%	
R.....9		57.11.3203	20 kOhm 1%	
R.....10		57.11.3203	20 kOhm 1%	
R.....11		57.11.3222	2.2 kOhm 1%	
R.....12		57.11.3330	33 Ohm 1%	
R.....13		57.11.3100	10 Ohm 1%	
R.....14		57.11.3222	2.2 kOhm 1%	
R.....15		57.11.3330	33 Ohm 1%	
R.....16		57.11.3100	10 Ohm 1%	
R.....17		57.11.9999	105 Ohm 1%	
R.....18		58.11.6102	1 kOhm variable resistor	
R.....19		57.11.3203	20 kOhm 1%	
R.....20		57.11.3203	20 kOhm 1%	
R.....21		58.11.6503	50 kOhm variable resistor	
R.....22		57.11.3105	1 MOhm 1%	
R.....23		57.11.5106	10 MOhm 1%	
R.....24		57.11.3472	4.7 kOhm 1%	
R.....25		57.11.3622	6.2 kOhm 1%	
R.....26		57.11.3152	1.5 kOhm 1%	
R.....27		57.11.3152	1.5 kOhm 1%	
R.....28		57.11.3102	1 kOhm 1%	
R.....29		57.11.3102	1 kOhm 1%	
R.....30		58.11.6501	500 Ohm variable resistor	
R.....31		57.11.3332	3.3 kOhm 1%	
R.....32		57.11.3332	3.3 kOhm 1%	
R.....33		57.11.3824	820 kOhm 1%	
R.....34		57.99.0220	NTC	St
MP.....1		1.911.290.11	1 pcs PCB	St
MP.....2		54.01.0023	1 pcs STIFTENLEISTE	

CER=ceramic, PE=polyester, MANUFACTURER: Mot=Motorola, TI=Texas Instruments, St=Studer

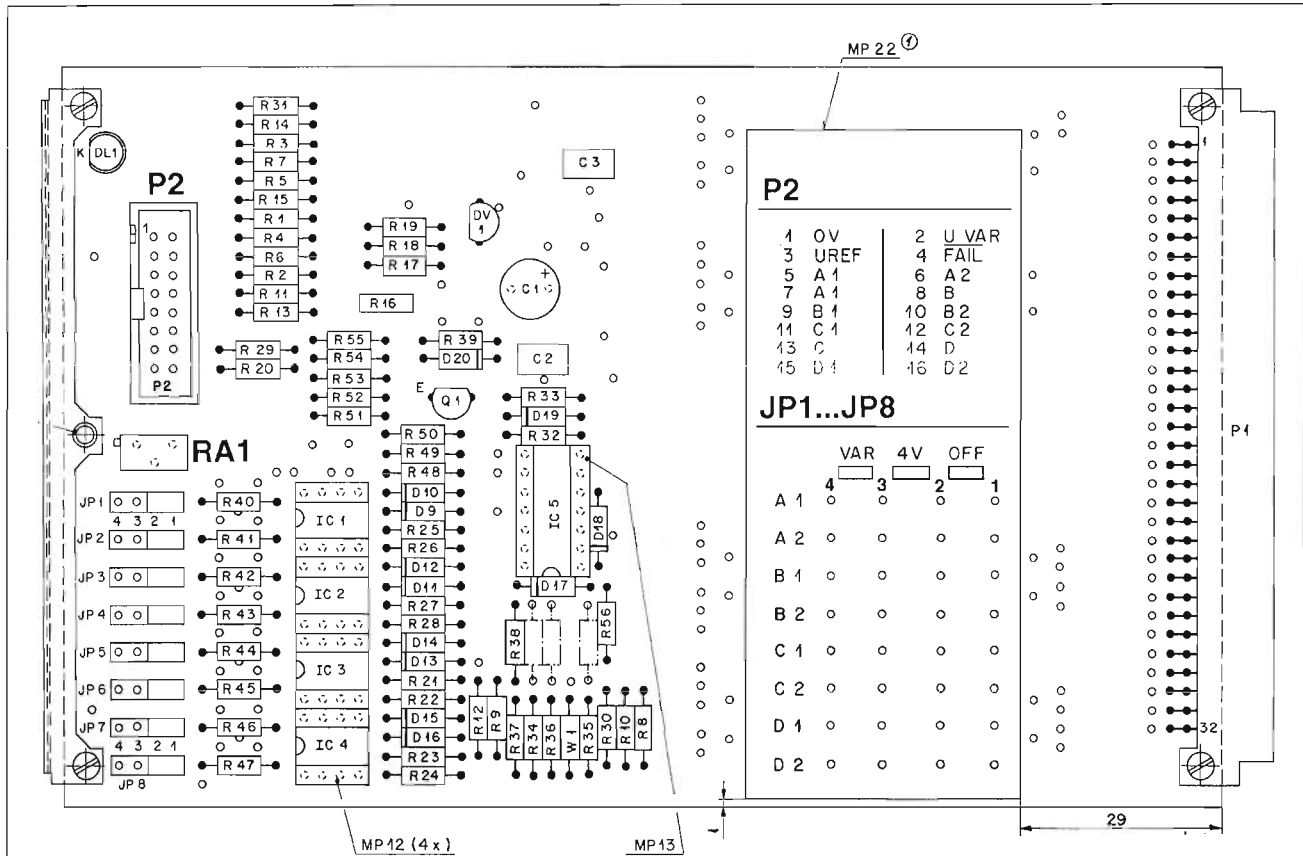
DIODES/POWER ALARM 2 BOARD

1.915.109.00



DIODES/POWER ALARM 2 BOARD

1.915.109.00



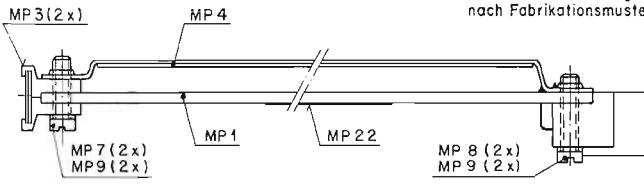
P2

1	0V	2	U VAR
3	UREF	4	FAIL
5	A 1	6	A 2
7	A 1	8	B
9	B 1	10	B 2
11	C 1	12	C 2
13	C	14	D
15	D 1	16	D 2

JP1...JP8

	VAR	4V	OFF	
A 1	4	3	2	1
A 2				
B 1				
B 2				
C 1				
C 2				
D 1				
D 2				

ESE-Warnschild aufgeklebt nach Fabrikationsmuster.



STUDER	Bezeichnung: DIODES / POWER ALARM 2 BOARD ESE	Nummer: 4.915.109-00
REGERSDORF ZÜRICH		
Ausgabe: 26.3.91		
Datum: 30.11.90		
Gez: [Signature]		
Gepr: [Signature]		
Ges: [Signature]		
Inch: [Signature]		

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
01	C.....1	59.22.4221	100 uF	EL 16V
	C.....1	59.22.4221	220 uF	EL 16V
	C.....2	59.06.5474	470 nF	PE
	C.....3	59.06.5474	470 nF	PE
	D.....9	50.04.0127	BAT 85	
	D.....10	50.04.0127	BAT 85	
	D.....11	50.04.0127	BAT 85	
	D.....12	50.04.0127	BAT 85	
	D.....13	50.04.0127	BAT 85	
	D.....14	50.04.0127	BAT 85	
	D.....15	50.04.0127	BAT 85	
	D.....16	50.04.0127	BAT 85	
	D.....17	50.04.0125	1N4448	75V 100mA
	D.....18	50.04.0125	1N4448	75V 100mA
	D.....19	50.04.0125	1N4448	75V 100mA
	D.....20	50.04.0125	1N4448	75V 100mA
	DL....1	50.04.2111	Led red	
	DV....1	50.10.0106	TL 431	ref
	IC....1	50.05.0283	LM 393	dual voltage comparator
	IC....2	50.05.0283	LM 393	dual voltage comparator
	IC....3	50.05.0283	LM 393	dual voltage comparator
	IC....4	50.05.0283	LM 393	dual voltage comparator
	IC....5	50.07.0008	4093	quad 2 input nand
	JJ....1	54.01.0021	8 pcs	jumper jack
	JP....1	54.01.0020	32 pcs	jumper pin
	P.....1	54.11.2004	2*32 pol	eurostecker
	P.....2	54.14.2002	16 pol	Stecker
	Q.....1	50.03.0340	BC 337	npn 800mA



DIODES/POWER ALARM 2 BOARD

1.915.109.00

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R.....1		57.11.3102	1 kOhm 1% 0.25W MF		R....52		57.11.3104	100 kOhm 1% 0.25W MF	
R.....2		57.11.3102	1 kOhm 1% 0.25W MF		01 R....52		57.11.3103	10 kOhm 1% 0.25W MF	
R.....3		57.11.3102	1 kOhm 1% 0.25W MF		R....53		57.11.3104	100 kOhm 1% 0.25W MF	
R.....4		57.11.3102	1 kOhm 1% 0.25W MF		01 R....53		57.11.3103	10 kOhm 1% 0.25W MF	
R.....5		57.11.3102	1 kOhm 1% 0.25W MF		R....54		57.11.3104	100 kOhm 1% 0.25W MF	
R.....6		57.11.3102	1 kOhm 1% 0.25W MF		01 R....54		57.11.3103	10 kOhm 1% 0.25W MF	
R.....7		57.11.3102	1 kOhm 1% 0.25W MF		R....55		57.11.3104	100 kOhm 1% 0.25W MF	
R.....8		57.11.3102	1 kOhm 1% 0.25W MF		01 R....55		57.11.3103	10 kOhm 1% 0.25W MF	
R.....9		57.11.3102	1 kOhm 1% 0.25W MF		R....56		57.11.3104	100 kOhm 1% 0.25W MF	
R.....10		57.11.3102	1 kOhm 1% 0.25W MF						
R....11		57.11.3102	1 kOhm 1% 0.25W MF		RA....1		58.05.0502	5 kOhm trimmpoti	
R....12		57.11.3102	1 kOhm 1% 0.25W MF		W....1		57.11.3000	0 Ohm	
R....13		57.11.3102	1 kOhm 1% 0.25W MF		MP....1		1.915.109.11	1 pcs Print	Studer
R....14		57.11.3102	1 kOhm 1% 0.25W MF		MP....2		1.915.109.01	1 pcs Bez. Streifen 6.3*91	Studer
R....15		57.11.3102	1 kOhm 1% 0.25W MF		MP....3		1.010.006.33	2 pcs Griffhaelften	Studer
R....16		57.92.1121	22 Ohm PTC		MP....4		1.010.090.49	1 pcs Abschirmblech	Studer
R....17		57.11.3221	220 Ohm 1% 0.25W MF		MP....5		1.010.096.49	1 pcs Kiarsicht Schild	
R....18		57.11.3202	2 kOhm 1% 0.25W MF		MP....6		28.21.1380	1 pcs Rohrniete D2.5/6	
R....19		57.11.3332	3.3 kOhm 1% 0.25W MF		MP....7		21.01.0280	2 pcs Z - Schraube M2.5*8	
01 R....19		57.11.3103	10 kOhm 1% 0.25W MF		MP....8		21.01.0281	2 pcs Z - Schraube M2.5*10	
R....20		57.11.3512	5.1 kOhm 1% 0.25W MF		MP....9		24.16.1025	4 pcs Rippenscheibe D2.7/5	
R....21		57.11.3102	1 kOhm 1% 0.25W MF		MP....10		43.01.0108	1 pcs ESE-Warnschild	
01 R....21		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....22		57.11.3102	1 kOhm 1% 0.25W MF		MP....11		0	1 pcs	
01 R....22		57.11.3332	3.3 kOhm 1% 0.25W MF		MP....12		53.03.0166	4 pcs IC-Sockel 8 Pin	
R....23		57.11.3102	1 kOhm 1% 0.25W MF		MP....13		53.03.0167	1 pcs IC-Sockel 16 Pin	
01 R....23		57.11.3332	3.3 kOhm 1% 0.25W MF		MP....22		1.915.109.02	1 pcs Klebschild fuer Jumper	
R....24		57.11.3102	1 kOhm 1% 0.25W MF						
01 R....24		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....25		57.11.3102	1 kOhm 1% 0.25W MF						
01 R....25		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....26		57.11.3102	1 kOhm 1% 0.25W MF						
01 R....26		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....27		57.11.3102	1 kOhm 1% 0.25W MF						
01 R....27		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....28		57.11.3102	1 kOhm 1% 0.25W MF						
01 R....28		57.11.3332	3.3 kOhm 1% 0.25W MF						
R....29		57.11.3102	1 kOhm 1% 0.25W MF						
R....30		57.11.3103	10 kOhm 1% 0.25W MF						
R....31		57.11.3102	1 kOhm 1% 0.25W MF						
R....32		57.11.3474	470 kOhm 1% 0.25W MF						
R....33		57.11.3103	10 kOhm 1% 0.25W MF						
R....34		57.11.3101	100 Ohm 1% 0.25W MF						
R....35		57.11.3101	100 Ohm 1% 0.25W MF						
R....36		57.11.3101	100 Ohm 1% 0.25W MF						
R....37		57.11.3101	100 Ohm 1% 0.25W MF						
R....38		57.11.3103	10 kOhm 1% 0.25W MF						
R....39		57.11.3103	10 kOhm 1% 0.25W MF						
R....40		57.11.3105	1 MOhm 1% 0.25W MF						
R....41		57.11.3105	1 MOhm 1% 0.25W MF						
R....42		57.11.3105	1 MOhm 1% 0.25W MF						
R....43		57.11.3105	1 MOhm 1% 0.25W MF						
R....44		57.11.3105	1 MOhm 1% 0.25W MF						
R....45		57.11.3105	1 MOhm 1% 0.25W MF						
R....46		57.11.3105	1 MOhm 1% 0.25W MF						
R....47		57.11.3105	1 MOhm 1% 0.25W MF						
R....48		57.11.3104	100 kOhm 1% 0.25W MF						
01 R....48		57.11.3103	10 kOhm 1% 0.25W MF						
R....49		57.11.3104	100 kOhm 1% 0.25W MF						
01 R....49		57.11.3103	10 kOhm 1% 0.25W MF						
R....50		57.11.3104	100 kOhm 1% 0.25W MF						
01 R....50		57.11.3103	10 kOhm 1% 0.25W MF						
R....51		57.11.3104	100 kOhm 1% 0.25W MF						
01 R....51		57.11.3103	10 kOhm 1% 0.25W MF						

MP....11	0	1 pcs	
MP....12	53.03.0166	4 pcs	IC-Sockel 8 Pin
MP....13	53.03.0167	1 pcs	IC-Sockel 16 Pin
MP....22	1.915.109.02	1 pcs	Klebschild fuer Jumper

01 Behebung folgender Fehler:
 Wenn die Karte kalt ist, wird ein Alarm ausgeloeset.
 Unterlagen anpassen.

CER=Ceramic,	EL =Elektrolyt
MF =Metal Film,	PE =Polyesterfolien

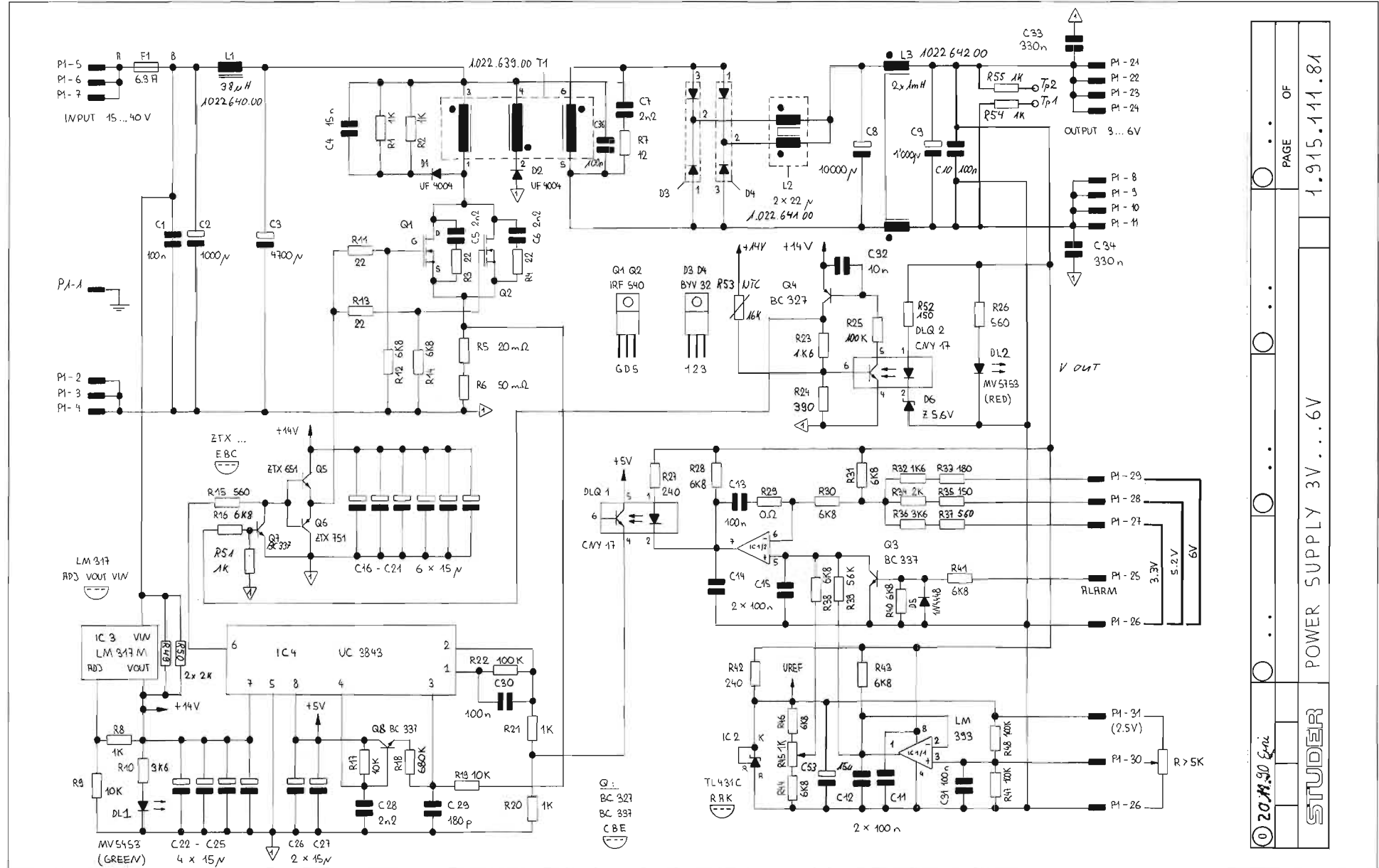
MANUFACTURER :

- Fe =ferranti
- NE =Nippon Electronic Corp.
- NS =National Semiconductors
- Ra =Raytheon
- Six=Siliconix
- Tho=Thomson
- Ti =Texas Instrument

1.915.109.00	DIODES/POWER ALARM 2 BOARD	SE 90/03/1000
1.915.109.00	DIODES/POWER ALARM 2 BOARD	SE 91/03/2601

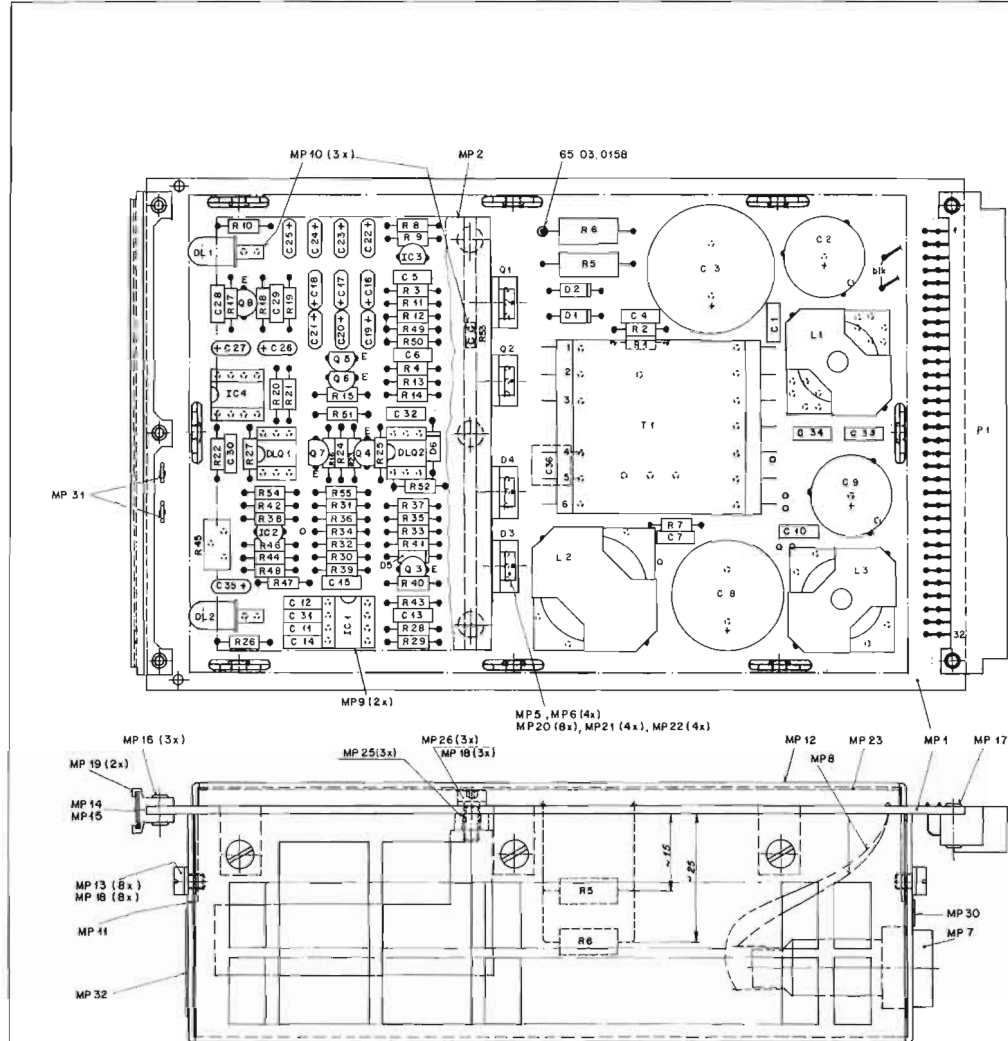
POWER SUPPLY 3V...6V

1.915.111.81



POWER SUPPLY LED 3-6V

1.915.111.81



Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C....1	59.06.0104	100 nF	PE	
C....2	59.22.6102	1000 uF	ALU 40V	
C....3	59.29.4472	4700 uF	EL 40V	
C....4	59.06.0153	15 nF	PE	
C....5	59.06.0222	2.2 nF	PE	
C....6	59.06.0222	2.2 nF	PE	
C....7	59.06.0222	2.2 nF	PE	
C....8	59.29.1103	10000 uF	EL 10V	
C....9	59.22.6102	1000 uF	ALU	
C....10	59.06.0104	100 nF	PE	
C....11	59.06.0104	100 nF	PE	
C....12	59.06.0104	100 nF	PE	
C....13	59.06.0104	100 nF	PE	
C....14	59.06.0104	100 nF	PE	
C....15	59.06.0104	100 nF	PE	
C....16	59.26.2150	15 uF	ALU 16V dry	
C....17	59.26.2150	15 uF	ALU 16V dry	
C....18	59.26.2150	15 uF	ALU 16V dry	
C....19	59.26.2150	15 uF	ALU 16V dry	
C....20	59.26.2150	15 uF	ALU 16V dry	
C....21	59.26.2150	15 uF	ALU 16V dry	
C....22	59.26.2150	15 uF	ALU 16V dry	
C....23	59.26.2150	15 uF	ALU 16V dry	
C....24	59.26.2150	15 uF	ALU 16V dry	
C....25	59.26.2150	15 uF	ALU 16V dry	
C....26	59.26.2150	15 uF	ALU 16V dry	
C....27	59.26.2150	15 uF	ALU 16V dry	
C....28	59.06.0222	2.2 nF	PE	
C....29	59.34.4181	180 pF	CER	
C....30	59.06.0104	100 nF	PE	
C....31	59.06.0104	100 nF	PE	
C....32	59.06.0103	10 nF	PE	
C....33	59.06.0334	330 nF	PE	
C....34	59.06.0334	330 nF	PE	
C....35	59.26.2150	15 uF	ALU 16V dry	
C....36	59.06.0104	100 nF	PE	
D....1	50.04.0138	UF4004		
D....2	50.04.0138	UF4004		
D....3	50.04.0517	BYV 32	dual diode 2*10A	
D....4	50.04.0517	BYV 32	dual diode 2*10A	
D....5	50.04.0125	1M6668		
D....6	50.04.1108			
DL....1	50.04.2113	MV5453	LED 5mm green	
DL....2	50.04.2111	MV5753	LED 5mm red	
DL0....1	50.04.3200	CW17	single optoisolator	GI
DL0....2	50.04.3200	CW17	single optoisolator	GI
F....1	51.01.0125	6.3A	fuse	
IC....1	50.05.0283	LM893	dual comparator	MS
IC....2	50.10.0106	TL431C	shunt voltage regulator	TI
IC....3	50.10.0108	LM317	series voltage regulator	MS
IC....4	50.10.0113	UC3843	current mode PWM controller	UN
L....1	1.022.640.00	38 uH	SA	STUDER
L....2	1.022.641.00	22 uH	dual coil 2*5A	STUDER
L....3	1.022.642.00	1.6 mH	dual coil 2*10A	STUDER
MP....1	1.915.111.12	1 pcs	Power Supply Led 3-6V PCB	STUDER
MP....2	50.20.3005	1 pcs	heat-sink black 1.8 X/M	
MP....3		0	not used	
MP....4		0	not used	
MP....5	50.20.0305	4 pcs	Glimmerscheibe	
MP....6	50.20.0404	4 pcs	Isolierdurchloerung	
MP....7	53.03.0106	1 pcs	fuse holder 10A	
MP....8	1.915.111.93	1 pcs	LL Power Supply Led 3-6V	
MP....9	53.03.0166	2 pcs	IC-societ 8 pins	
MP....10	1.010.012.50	3 pcs	LED-clip (2LED 1MTC)	
MP....11	1.915.111.01	1 pcs	Abdeckhaube Bestueckseite	STUDER
MP....12	1.915.111.02	1 pcs	Abdeckhaube Loetseite	STUDER
MP....13	21.53.0352	8 pcs	Z Schraube IS M3*4 (Abdeckhaube)	
MP....14	1.915.111.04	1 pcs	Bez-Streifen 6.3*91	
MP....15	1.010.096.49	1 pcs	Klarsichtschild	
MP....16	28.21.1380	3 pcs	Rohrnielate 02.25*6.5	
MP....17	28.99.0119	2 pcs	Rohrnielate D 2.5*9	
MP....18	24.16.1030	11 pcs	Rippscheibe M3	
MP....19	1.010.006.33	2 pcs	Griffhaelufe	
MP....20	37.01.0101	8 pcs	Tallerfeder	
MP....21	21.01.0356	4 pcs	Z Schraube M3*10 (Halbleiter-)	
MP....22	1.010.098.27	4 pcs	Distanzhuelse D 3.17*2.3	
MP....23	1.915.111.03	1 pcs	Isolation 138*89 selbstklebend	
MP....25	1.010.080.27	3 pcs	Distanzhuelse D 3.27* 35	
MP....26	21.53.0357	3 pcs	Z-Schraube M3*12	
MP....27		0	not used	
MP....28	65.03.0168	23 mm	Isolierschlauch (R6)	
MP....30	1.010.123.51	1 pcs	Text-Etikette 5*20 (T.6.3A)	
MP....31	54.02.0320	2 pcs	Flachstecker (Tp1 Tp2)	
MP....32	1.915.111.05	1 pcs	Klebschild (Poti Led Tp)	
P....1	54.11.2004	32 pins	Eurocard connector	
Q....1	50.03.1509	IRF 540	power MOS-FET	GE
Q....2	50.03.1509	IRF 540	power MOS-FET	GE
Q....3	50.03.0340	BC 337	NPN standard	
Q....4	50.03.0351	BC 327	PNP standard	
Q....5	50.03.0523	ZTX 651	NPN 2A	
Q....6	50.03.0352	ZTX 751	PNP 2A	
Q....7	50.03.0340	BC 337	NPN standard	



POWER SUPPLY LED 3-6V

1.915.111.81

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

T.....1 1.022.639.00 Schalttrafo Power Supply 3 - 6V STUDEF

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

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

1.915.111.81 POWER SUPPLY LED 3-6V SE 92/01/2400

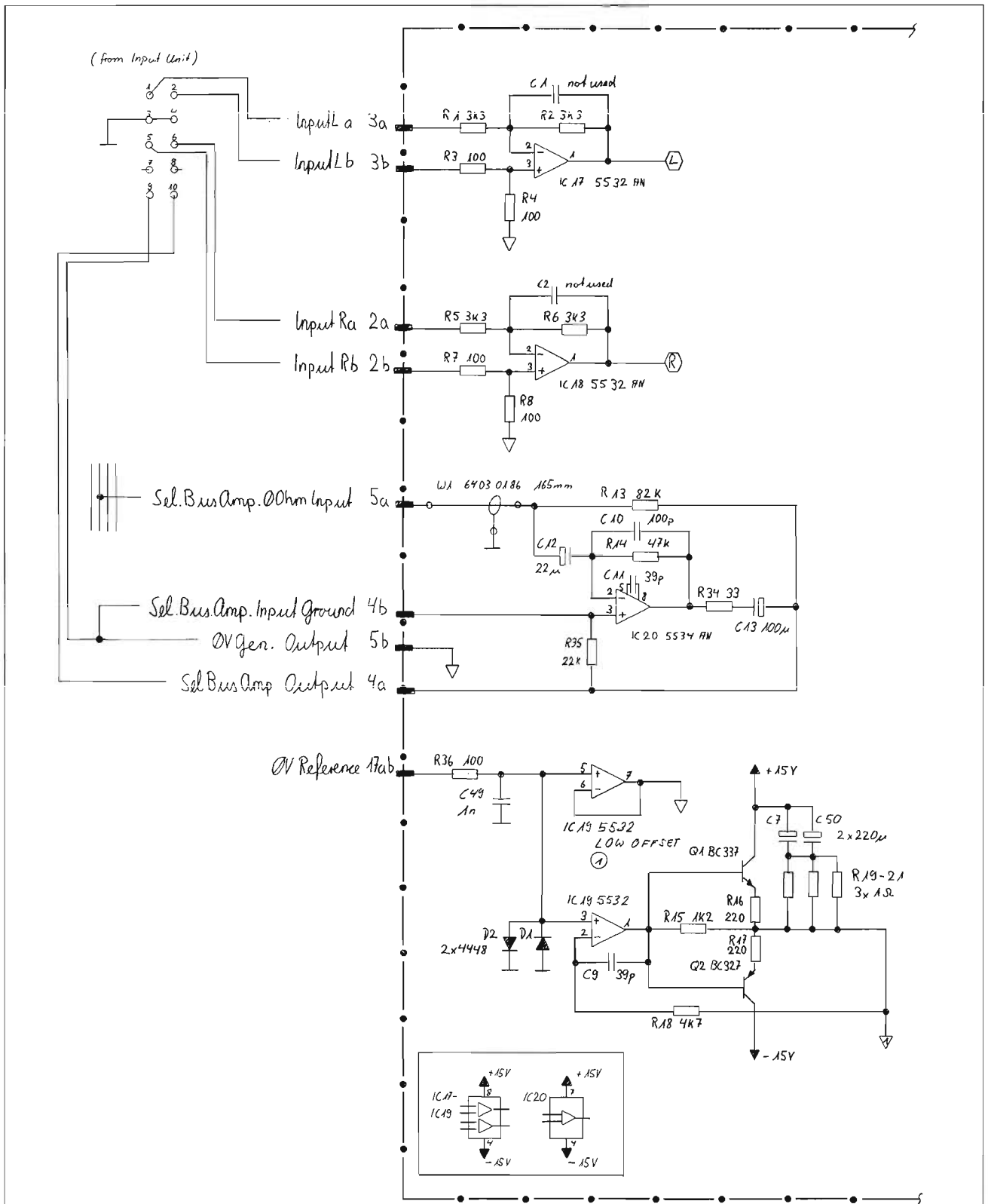
Pin location list

1.917.110

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

32CH BUS-SELECTOR

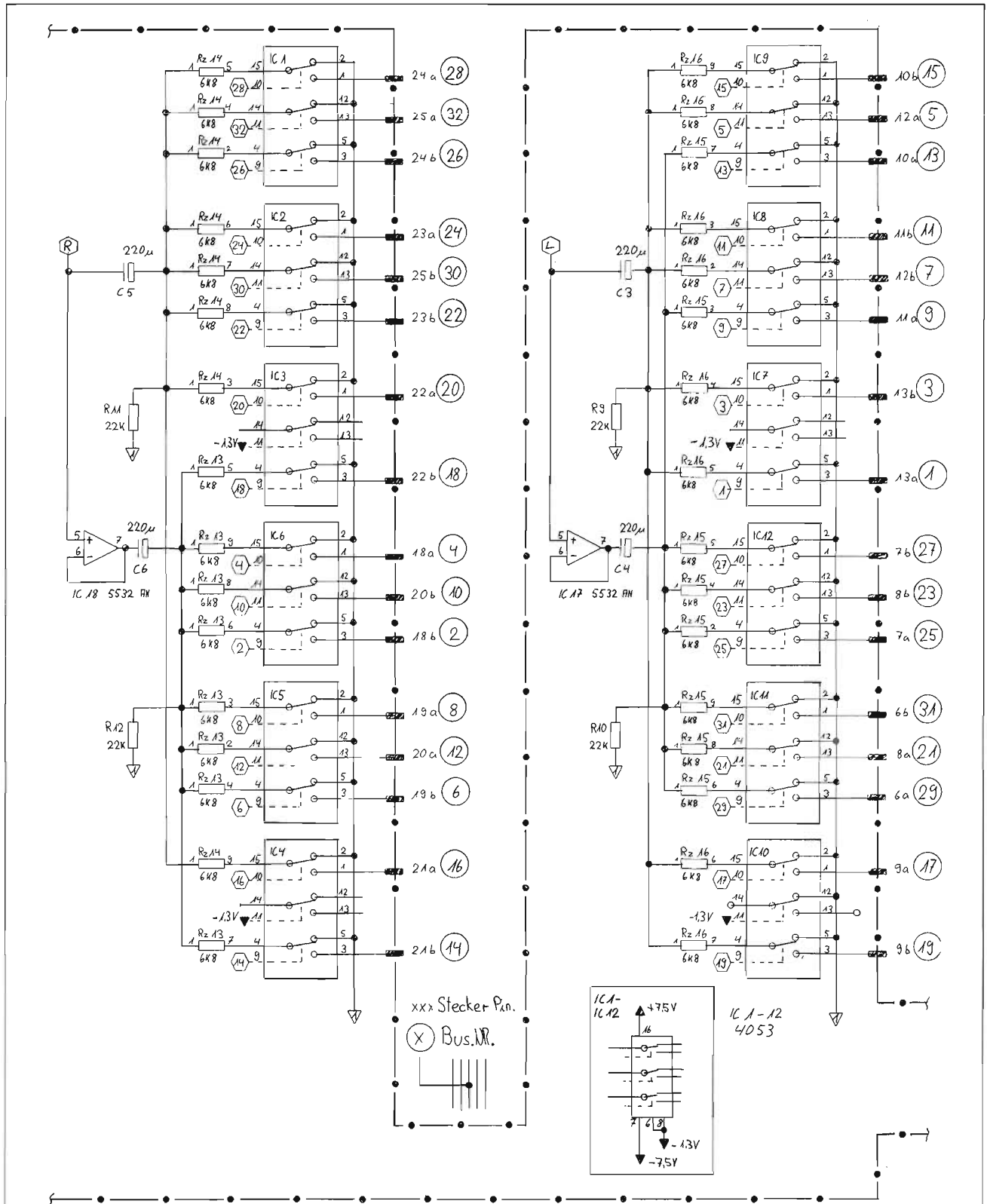
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① 13.12.89 Emi	① 30.08.93 trip	○ . .	○ . .	○ . .
STUDER			32CH - BUS. SELECTOR	
			PAGE 1 OF 3	
			1.917.110.00	

32CH BUS-SELECTOR

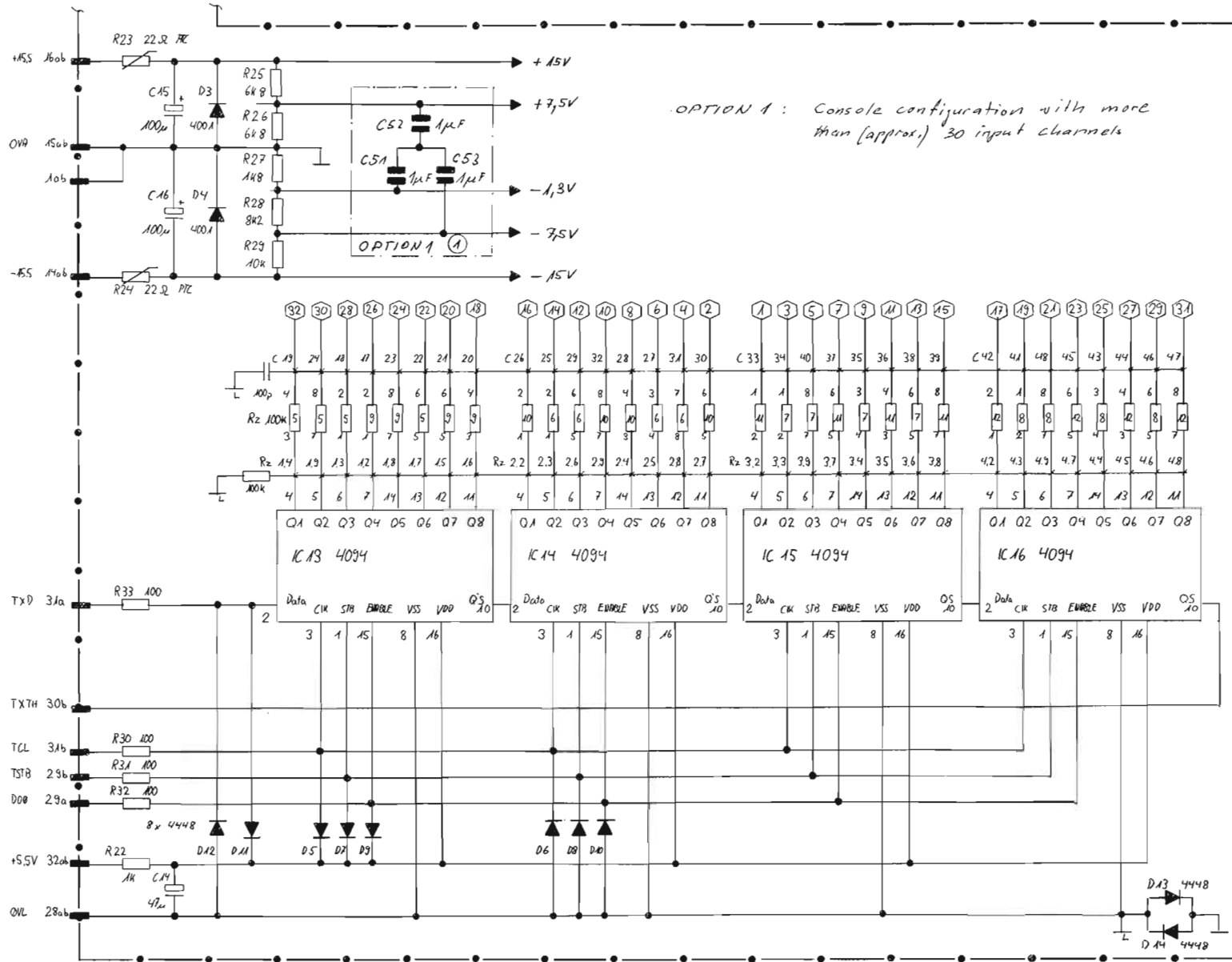
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① 13.12.89 Eni	③ 30.08.93 fr	○ . .	○ . .	○ . .
STUDER				32CH BUS-SELECTOR
			PAGE 2 OF 3	1.917.110.00

32CH BUS-SELECTOR

1.917.110.00



0 13.12.89 Emi

3 20.08.93 Fri

PAGE 3 OF 3

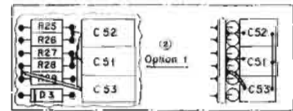
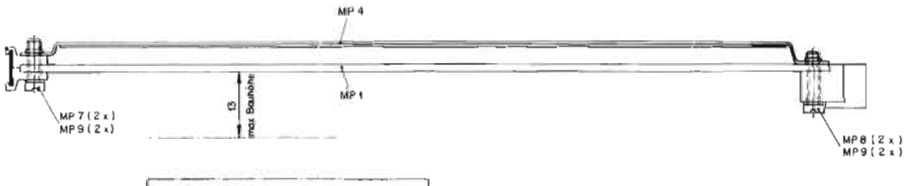
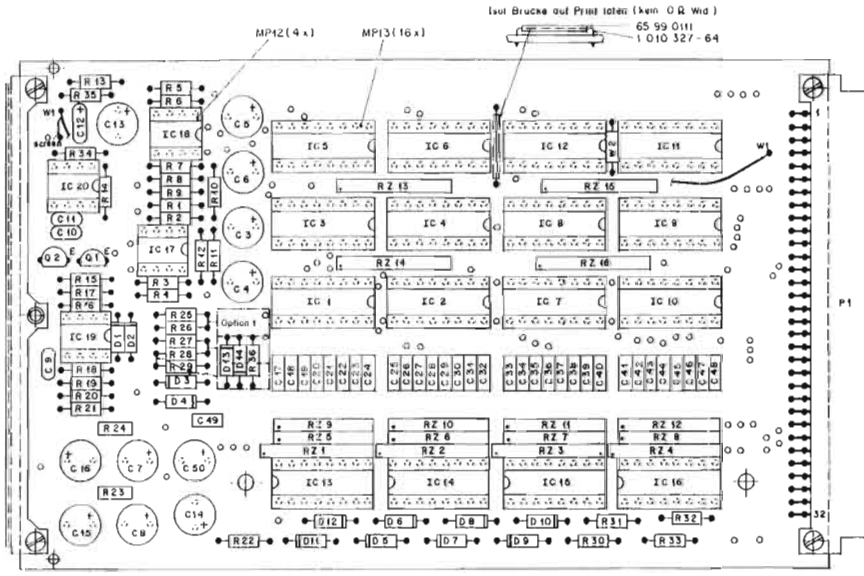
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STUDIER

32CH - BUS - SELECTOR

32CH BUS-SELECTOR

1.917.110.00



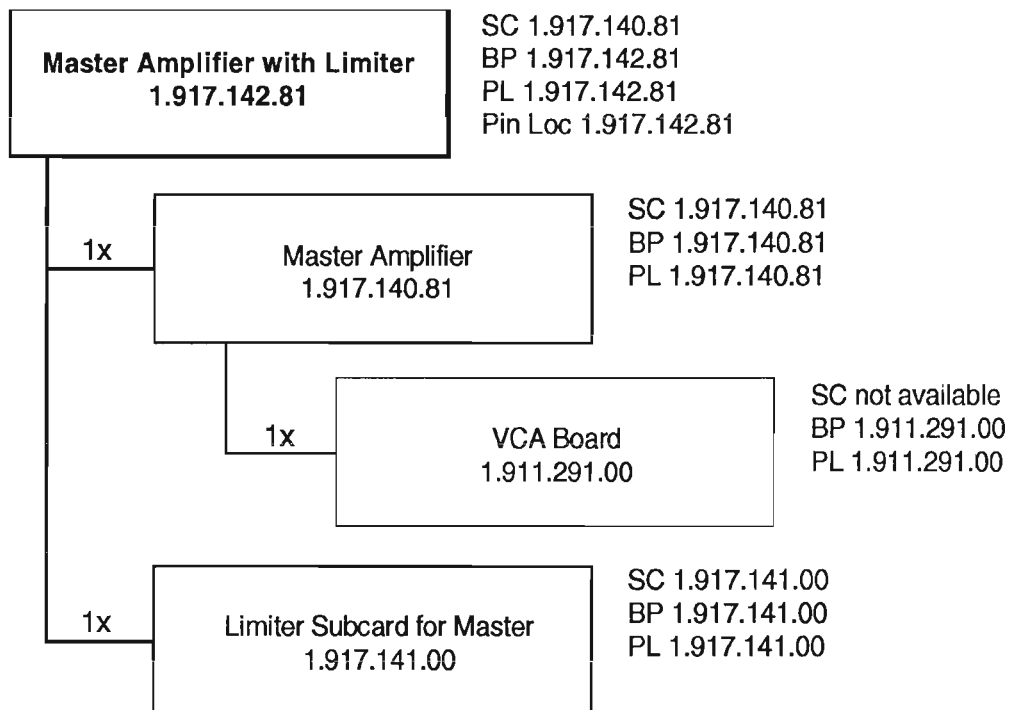
STUDER REGISDRONOP EINZIG	32 CH BUS SELECTOR	ESE	1.917.110-00
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Ad	POS	REF. No.	DESCRIPTION	MANUFACTURER
C....1			not used	
C....2			not used	
C....3		59.22.3221	220 uF	EL 10V
C....4		59.22.3221	220 uF	EL 10V
C....5		59.22.3221	220 uF	EL 10V
C....6		59.22.3221	220 uF	EL 10V
C....7		59.22.4221	220 uF	EL 16V
C....8		59.22.5101	100 uF	EL 25V
C....9		59.34.2390	39 uF	CER
C....10		59.34.4101	100 pF	CER
C....11		59.34.2390	39 uF	CER
C....12		59.24.1220	22 uF	SAL
C....13		59.22.5101	100 uF	EL 25V
C....14		59.22.3221	220 uF	EL 10V
C....15		59.22.5101	100 uF	EL 25V
C....16		59.22.5101	100 uF	EL 25V
C....17		59.34.4101	100 pF	CER
C....18		59.34.4101	100 pF	CER
C....19		59.34.4101	100 pF	CER
C....20		59.34.4101	100 pF	CER
C....21		59.34.4101	100 pF	CER
C....22		59.34.4101	100 pF	CER
C....23		59.34.4101	100 pF	CER
C....24		59.34.4101	100 pF	CER
C....25		59.34.4101	100 pF	CER
C....26		59.34.4101	100 pF	CER
C....27		59.34.4101	100 pF	CER
C....28		59.34.4101	100 pF	CER
C....29		59.34.4101	100 pF	CER
C....30		59.34.4101	100 pF	CER
C....31		59.34.4101	100 pF	CER
C....32		59.34.4101	100 pF	CER
C....33		59.34.4101	100 pF	CER
C....34		59.34.4101	100 pF	CER
C....35		59.34.4101	100 pF	CER
C....36		59.34.4101	100 pF	CER
C....37		59.34.4101	100 pF	CER
C....38		59.34.4101	100 pF	CER
C....39		59.34.4101	100 pF	CER
C....40		59.34.4101	100 pF	CER
C....41		59.34.4101	100 pF	CER
C....42		59.34.4101	100 pF	CER
C....43		59.34.4101	100 pF	CER
C....44		59.34.4101	100 pF	CER
C....45		59.34.4101	100 pF	CER
C....46		59.34.4101	100 pF	CER
C....47		59.34.4101	100 pF	CER
C....48		59.34.4101	100 pF	CER
C....49		59.06.0102	1 nF	PE
C....50		59.22.4221	220 uF	EL 16V
O3 C....51		OPTION 1	1 uF 63V 10V PE RN 5mm	59.06.0105
O3 C....52		OPTION 1	1 uF 63V 10V PE RN 5mm	59.06.0105
O3 C....53		OPTION 1	1 uF 63V 10V PE RN 5mm	59.06.0105
D....1		50.04.0125	IM4448	
D....2		50.04.0125	IM4448	
D....3		50.04.0122	IM4401	
D....4		50.04.0122	IM4401	
D....5		50.04.0125	IM4448	
D....6		50.04.0125	IM4448	
D....7		50.04.0125	IM4448	
D....8		50.04.0125	IM4448	
D....9		50.04.0125	IM4448	
D....10		50.04.0125	IM4448	
D....11		50.04.0125	IM4448	
D....12		50.04.0125	IM4448	
D....13		50.04.0125	IM4448	
D....14		50.04.0125	IM4448	
IC....1		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....2		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....3		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....4		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....5		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....6		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....7		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....8		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....9		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....10		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....11		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....12		50.07.0015	4053	triple 2 ch. analog mux/demux
IC....13		50.07.0018	4094	shift and store bus register
IC....14		50.07.0018	4094	shift and store bus register
IC....15		50.07.0018	4094	shift and store bus register
IC....16		50.07.0018	4094	shift and store bus register
IC....17		50.09.0106	NE5532AN	dual op. amp.
IC....18		50.09.0106	NE5532AN	dual op. amp.
IC....19		50.09.0117	MC 3307B	dual op. amp.
IC....19		1.010.051.50	NE5532AN	dual op. amp. low offset <1uV (STUDER)
IC....20		50.05.0244	NE5534AN	single op. amp.
P....1		54.11.2004		Euro. 2*32 contacts
Q....1		50.03.0340	BC 337	800mA
Q....2		50.03.0351	BC 327	800mA
R....1		57.11.3332	3.3 kOhm	1% 0.25W MF
R....2		57.11.3332	3.3 kOhm	1% 0.25W MF
R....3		57.11.3101	100 Ohm	1% 0.25W MF

Ad	POS	REF. No.	DESCRIPTION	MANUFACTURER
R....4		57.11.3101	100 Ohm	1% 0.25W MF
R....5		57.11.3332	3.3 kOhm	1% 0.25W MF
R....6		57.11.3332	3.3 kOhm	1% 0.25W MF
R....7		57.11.3101	100 Ohm	1% 0.25W MF
R....8		57.11.3101	100 Ohm	1% 0.25W MF
R....9		57.11.3223	22 kOhm	1% 0.25W MF
R....10		57.11.3223	22 kOhm	1% 0.25W MF
R....11		57.11.3223	22 kOhm	1% 0.25W MF
R....12		57.11.3223	22 kOhm	1% 0.25W MF
R....13		57.11.3622	8.2 kOhm	1% 0.25W MF
R....14		57.11.3473	47 kOhm	1% 0.25W MF
R....15		57.11.3122	1.2 kOhm	1% 0.25W MF
R....16		57.11.3221	220 Ohm	1% 0.25W MF
R....17		57.11.3221	220 Ohm	1% 0.25W MF
R....18		57.11.3472	4.7 kOhm	1% 0.25W MF
R....19		57.11.3109	1 Ohm	1% 0.25W MF
R....20		57.11.3109	1 Ohm	1% 0.25W MF
R....21		57.11.3109	1 Ohm	1% 0.25W MF
R....22		57.11.3102	1 kOhm	1% 0.25W MF
R....23		57.92.1121	22 Ohm	PTC
R....24		57.92.1121	22 Ohm	PTC
R....25		57.11.3682	6.8 kOhm	1% 0.25W MF
R....26		57.11.3682	6.8 kOhm	1% 0.25W MF
R....27		57.11.3182	1.8 kOhm	1% 0.25W MF
R....28		57.11.3622	8.2 kOhm	1% 0.25W MF
R....29		57.11.3303	10 kOhm	1% 0.25W MF
R....30		57.11.3101	100 Ohm	1% 0.25W MF
R....31		57.11.3101	100 Ohm	1% 0.25W MF
R....32		57.11.3101	100 Ohm	1% 0.25W MF
R....33		57.11.3101	100 Ohm	1% 0.25W MF
R....34		57.11.3101	100 Ohm	1% 0.25W MF
R....35		57.11.3223	22 kOhm	1% 0.25W MF
R....36		57.11.3101	100 Ohm	1% 0.25W MF
RZ....1		57.88.4104	100 kOhm	2% resistor-network
RZ....2		57.88.4104	100 kOhm	2% resistor-network
RZ....3		57.88.4104	100 kOhm	2% resistor-network
RZ....4		57.88.4104	100 kOhm	2% resistor-network
RZ....5		57.88.2104	100 kOhm	2% resistor-network
RZ....6		57.88.2104	100 kOhm	2% resistor-network
RZ....7		57.88.2104	100 kOhm	2% resistor-network
RZ....8		57.88.2104	100 kOhm	2% resistor-network
RZ....9		57.88.2104	100 kOhm	2% resistor-network
RZ....10		57.88.2104	100 kOhm	2% resistor-network
RZ....11		57.88.2104	100 kOhm	2% resistor-network
RZ....12		57.88.2104	100 kOhm	2% resistor-network
RZ....13		57.88.2682	6.8 kOhm	2% resistor-network
RZ....14		57.88.4682	6.8 kOhm	2% resistor-network
RZ....15		57.88.2682	6.8 kOhm	2% resistor-network
RZ....16		57.88.2682	6.8 kOhm	2% resistor-network
RZ....16		57.88.4682	6.8 kOhm	2% resistor-network
W....1		64.03.0186	165 mm	Kabel abgeschrägt
OZ W....1		1.917.110.94	1 pcs	K1 32 CH BUS SELECTOR
W....2		57.11.3100	0 Ohm	
MP....1		1.917.110.11	1 pcs	Print
MP....2		1.917.110.01	1 pcs	Bez. Streifen 6.3*9)
MP....3		1.010.006.33	2 pcs	Griffhaelfen
MP....4		1.010.090.49	1 pcs	Abschirmblech
MP....5		1.010.096.49	1 pcs	Klarsicht Schild
MP....6		28.21.1380	1 pcs	Rohrriete D2.5/6
MP....7		21.01.0280	2 pcs	Z - Schraube M2.5*6
MP....8		21.01.0281	2 pcs	Z - Schraube M2.5*10
MP....9		24.16.1025	4 pcs	Rippen Scheibe D2.7/5
MP....10		43.01.0108	1 pc	ESE-Marschild
MP....11				
MP....12		53.03.0166	4 pcs	IC-Sockel 8 Pin
MP....13		53.03.0168	16 pcs	IC-Sockel 16 Pin
OPTION 1:				Console configurations with more than (approx.) 30 input channels need additional DC supply filtering. (Index 1: C51, C52, C53)
Index 3:				0 Volt generator (IC19) with low offset <1uV
CER=ceramic,				EL=electrolytic, PE=polyester
MANUFACTURER:				BU=Burdyn, CX=C&K Components Inc, GI=General Instruments, Mo=Motorola, NS=National Semiconductors, Ra=Raytheon, Ses=Secosom, Si=Siemens, Sig=Signetics, Six=Siliconix, TI=Texas Instruments
1.917.110.00				32 CH BUS SELECTOR
SE87/09/0900				
1.917.110.00				32 CH BUS SELECTOR
SE90/02/0801				
1.917.110.00				32 CH BUS SELECTOR
SE91/10/2802				
1.917.110.00				32 CH BUS SELECTOR
FR193/08/3003				
END				

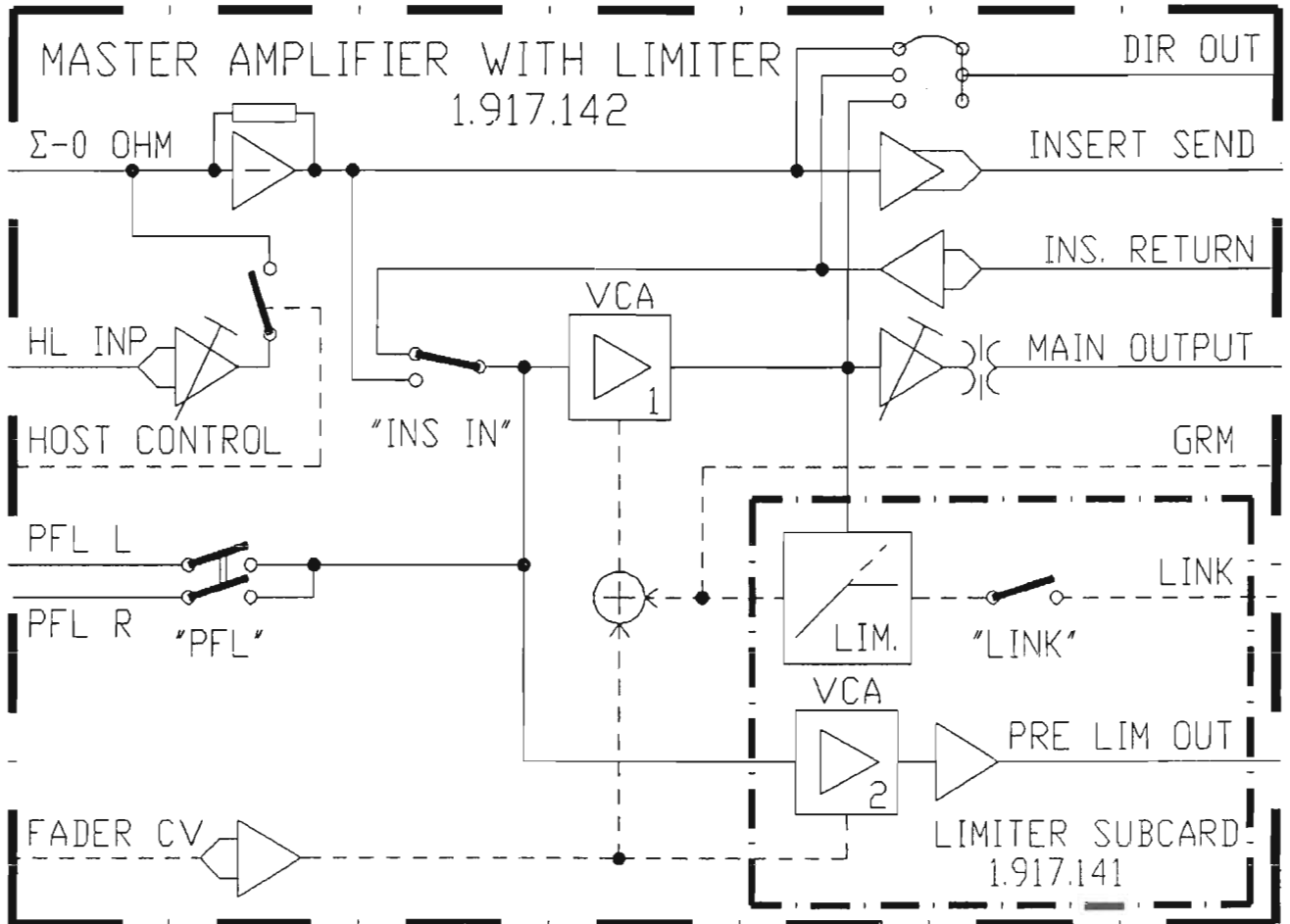
Master Amplifier with Limiter

1.917.142.81



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

MASTER AMPLIFIER WITH LIMITER 1.917.142.81



Pin location list

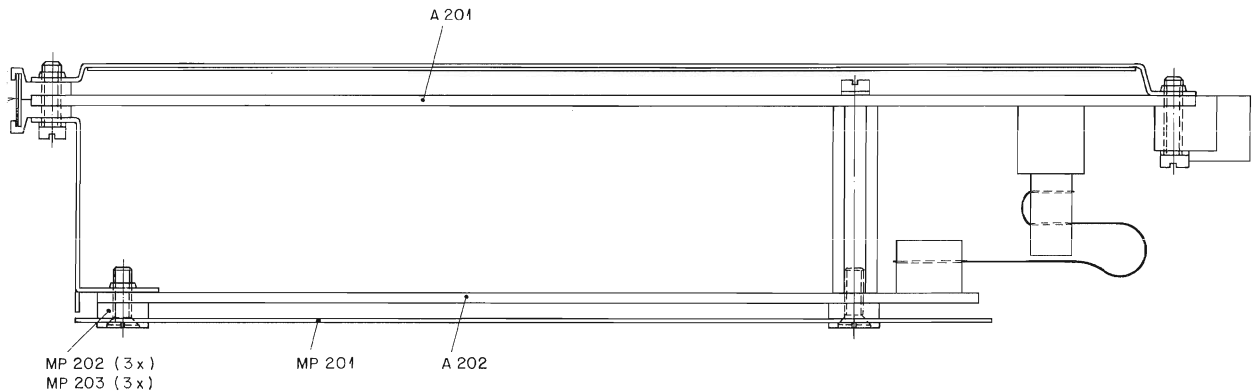
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P	NO	NAME	REMARK	

				B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC -----
P1	01	OVA	(RES)	
P1	02	B-PFL-L	PFL LEFT ; 0-OHM BUS	B,I
P1	03	B-PFL-R	PFL RIGHT ; 0-OHM BUS	B,I
P1	04	OVA-PFL-IN	INPUT GROUND PFL	B
P1	05	OOHM-IN-b	MASTER 0-OHM INPUT (b)	O,I
P1	06	OOHM-IN-OV	GROUND MASTER 0-OHM INPUT	O
P1	07	CV IN +	CONTROL VOLTAGE VCA (+)	O
P1	08	CV IN -	CONTROL VOLTAGE VCA (-)	O
P1	09	LINK/GRM	LINK/GAIN REDUKTION METER	O
P1	10	INS-SEND-a	SYM INSERT OUTPUT a	S
P1	11	INS-SEND-b	SYM INSERT OUTPUT b	S
P1	12	INS-RET -a	SYM INSERT INPUT a	S
P1	13	INS-RET -b	SYM INSERT INPUT b	S
P1	14	- 15.5V	- SUPPLY	B
P1	15	OV-A	GROUND AUDIO	B
P1	16	+ 15.5V	+ SUPPLY	B
P1	17	M-OUT-a	MASTER OUTPUT a	S
P1	18	M-OUT-b	MASTER OUTPUT b	S
P1	19	OVE	GROUND EXTERN	B
P1	20	HL-IN-a	HIGH LEVEL INPUT a	S
P1	21	HL-IN-b	HIGH LEVEL INPUT b	S
P1	22	VCA2-OUT-a	VCA2 OUTPUT a (AUDIO)	S
P1	23	VCA2-OUT-b	VCA2 OUTPUT b (AUDIO)	S
P1	24	DIR-OUT-a	DIRECT OUT (a)	AS
P1	25	AUX	AUXILIARY INPUT/OUTPUT	AS
P1	26	DO 0	DATA OUT 0 (ENABLE)	O
P1	27	TXTH	TRANSMIT DATA THROUGH	O
P1	28	OV-L	GROUND SIGN (LOGIC)	B
P1	29	TSTB 7	TRANSMIT STROBE 7	O
P1	30	TCL	TRANSMIT CLOCK	O
P1	31	TXD	TRANSMIT DATA	O
P1	32	+ 5.5V	+ SUPPLY	B

MASTER AMP. WITH LIMITER

1.917.142.81



Aenderung					③
					②
					①
Ausgabe	29.8.91	A. M.	W.	St.	①
Datum	Gez.	Gepr.	Gas.	Index	

STUDER REGENSDORF ZÜRICH	Benennung: MASTER AMP. WITH LIMITER	Kopie für:
		Nummer: 1.917.142 -81

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

A...201	1.917.140.81		Master Amplifier	St
A...202	1.917.141.00		Limiter Subcard f.Master Ampl.	St
MP..201	1.917.142.03	0001 pcs	Isolation	
MP..202	1.917.142.02	0003 pcs	Isolierhuelle	
MP..203	21.01.2280	0003 pcs	S-Schr.,ZN,M2.5*8	
MP..204	1.917.142.04	0000 pcs	Bezeichnungstreifen	

NOTE 1: Option: Double VCA for better noise performance
 IC108 50110140 DBX 2150 A
 R 132 57113243 24 kOhm 1%
 R 133 57113243 24 kOhm 1%

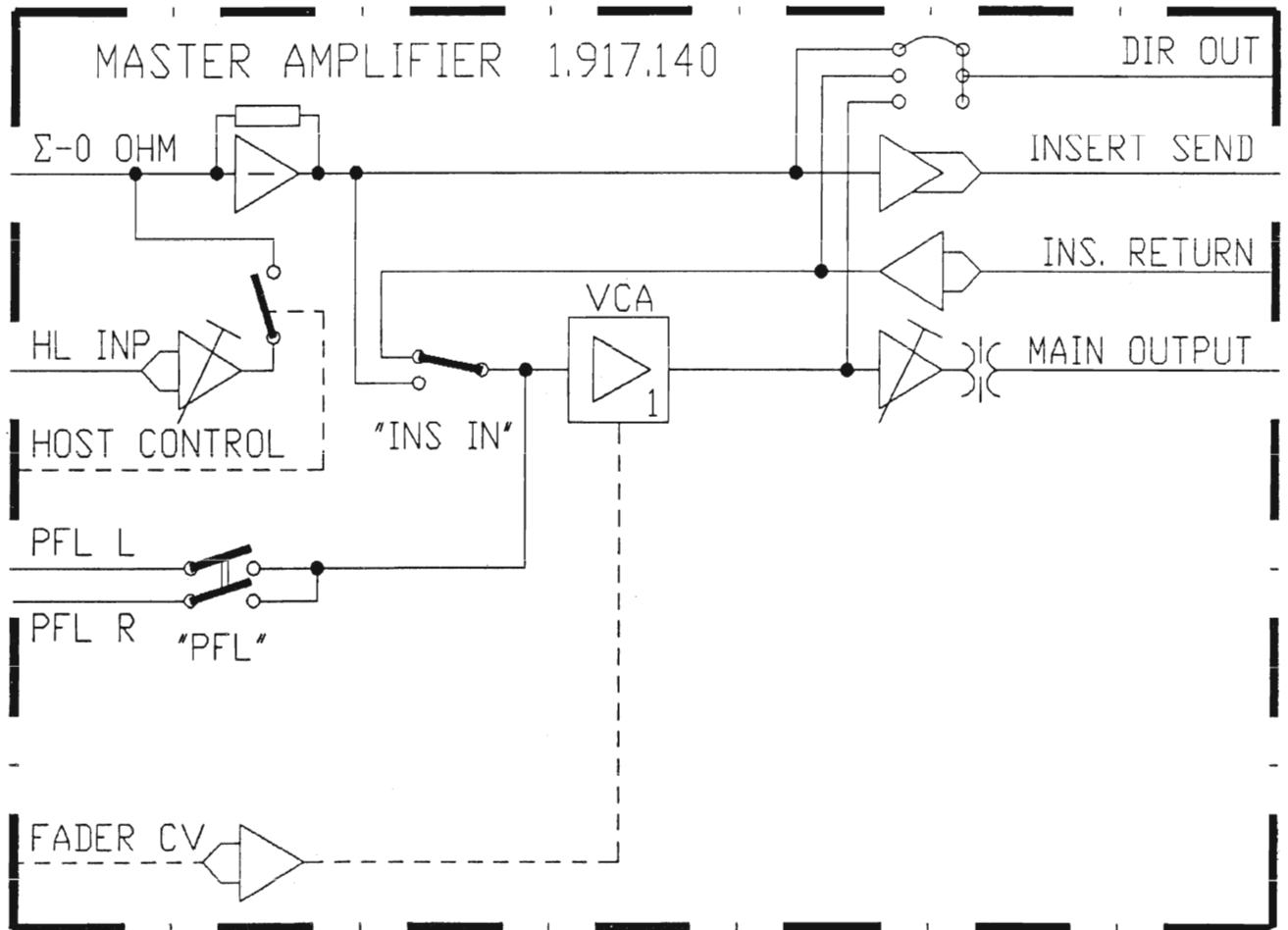
(-81) 91/10/21 A 201 has changed to -81

CER = ceramic, EL = electrolytic, PE = polyester, SAL = Solid Aluminium

MANUFACTURER dBx=dBx-Incorporation, Ex=Exar, ITT=Intermetall,
 JRC=Japan Radio Corporation, Mot=Motorola,
 NS=National Semiconductors, Ph=Philips, Ra=Raytheon,
 RCA=Radio Corporation of America, Sie=Siemens,
 Sig=Signetics, Six=Siliconix, St=Studer, Tf=Telefunken,
 Tho=Thomson, TI=Texas Instruments

1.917.142.81 MASTER AMP.WITH LIMITER HOR91/10/2100

MASTER AMPLIFIER 1.917.140.81



Pin location list

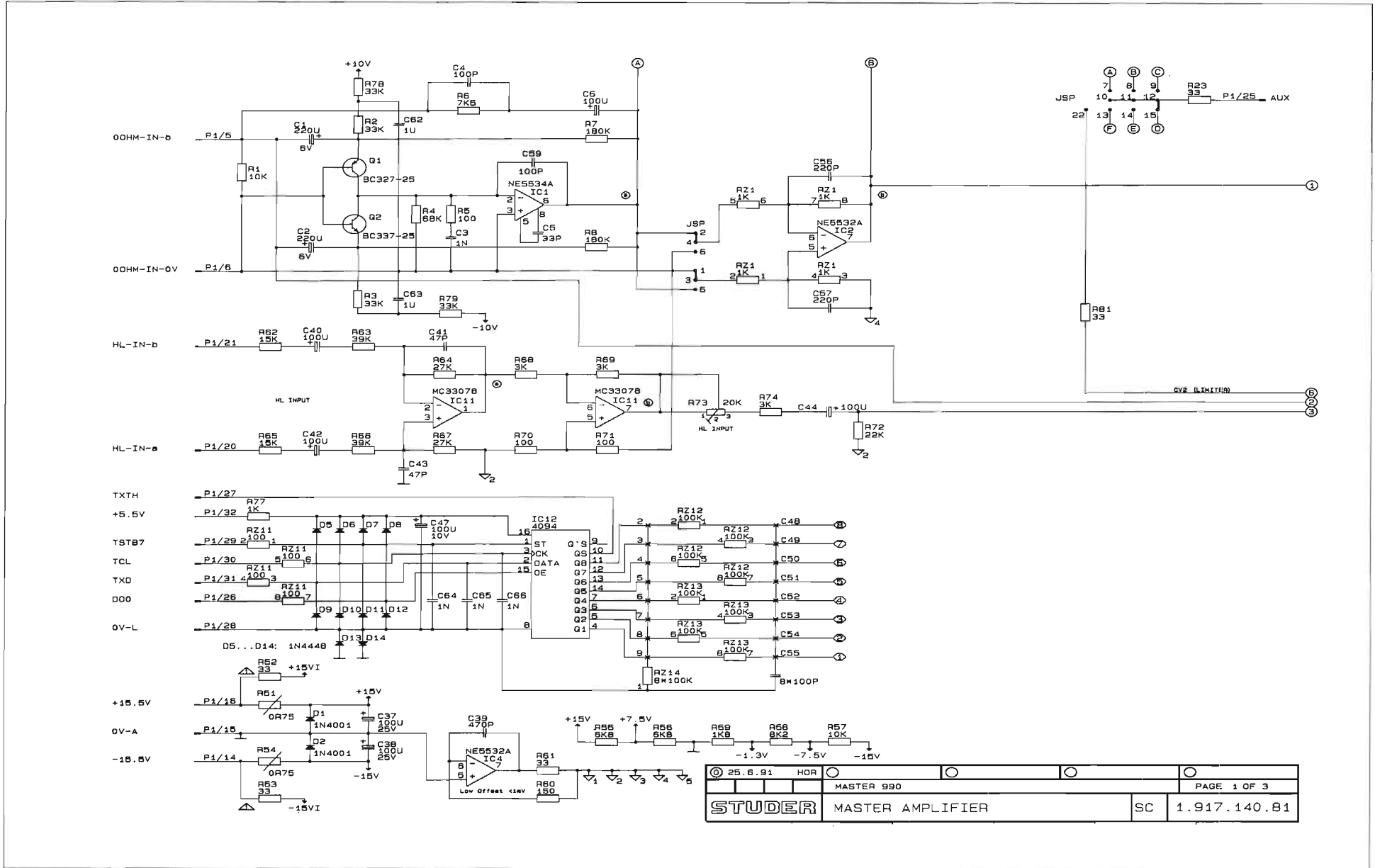
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P	NO	NAME	REMARK	

				B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC -----
P1	01	OVA	(RES)	
P1	02	B-PFL-L	PFL LEFT ; 0-OHM BUS	B,I
P1	03	B-PFL-R	PFL RIGHT ; 0-OHM BUS	B,I
P1	04	OVA-PFL-IN	INPUT GROUND PFL	B
P1	05	OOHM-IN-b	MASTER 0-OHM INPUT (b)	O,I
P1	06	OOHM-IN-0V	GROUND MASTER 0-OHM INPUT	O
P1	07	CV IN +	CONTROL VOLTAGE VCA (+)	O
P1	08	CV IN -	CONTROL VOLTAGE VCA (-)	O
P1	09	-	RESERVED	
P1	10	INS-SEND-a	SYM INSERT OUTPUT a	S
P1	11	INS-SEND-b	SYM INSERT OUTPUT b	S
P1	12	INS-RET -a	SYM INSERT INPUT a	S
P1	13	INS-RET -b	SYM INSERT INPUT b	S
P1	14	- 15.5V	- SUPPLY	B
P1	15	0V-A	GROUND AUDIO	B
P1	16	+ 15.5V	+ SUPPLY	B
P1	17	M-OUT-a	MASTER OUTPUT a	S
P1	18	M-OUT-b	MASTER OUTPUT b	S
P1	19	OVE	GROUND EXTERN	B
P1	20	HL-IN-a	HIGH LEVEL INPUT a	S
P1	21	HL-IN-b	HIGH LEVEL INPUT b	S
P1	22	-	RESERVED	
P1	23	-	RESERVED	
P1	24	DIR-OUT-a	DIRECT OUT (a)	AS
P1	25	AUX	AUXILIARY INPUT/OUTPUT	AS
P1	26	DO 0	DATA OUT 0 (ENABLE)	O
P1	27	TXTH	TRANSMIT DATA THROUGH	O
P1	28	0V-L	GROUND SIGN (LOGIC)	B
P1	29	TSTB 7	TRANSMIT STROBE 7	O
P1	30	TCL	TRANSMIT CLOCK	O
P1	31	TXD	TRANSMIT DATA	O
P1	32	+ 5.5V	+ SUPPLY	B

MASTER AMPLIFIER

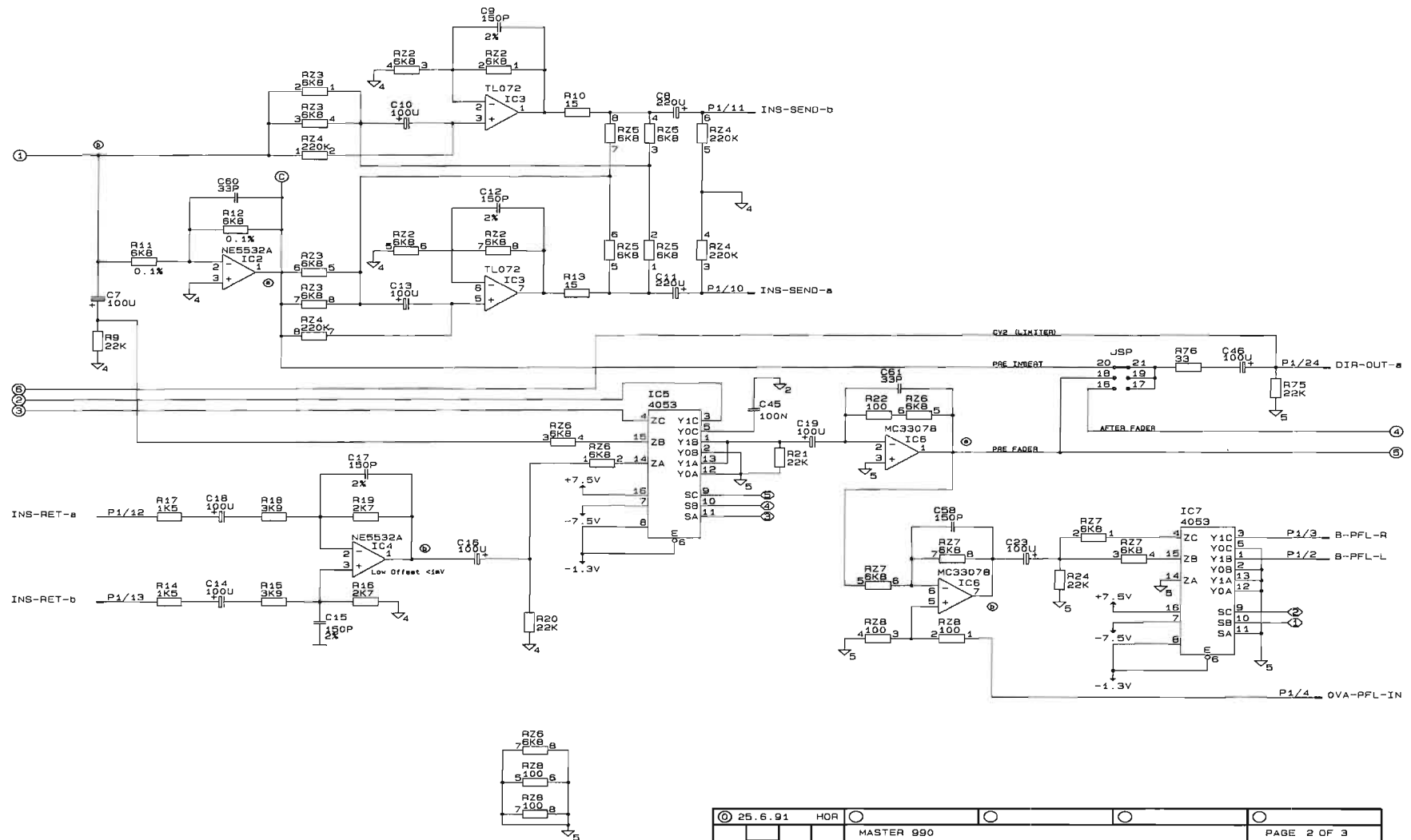
1.917.140.81



25.6.91	HDR	MASTER 990	PAGE 1 OF 3
STUDER		MASTER AMPLIFIER	SC 1.917.140.81

MASTER AMPLIFIER

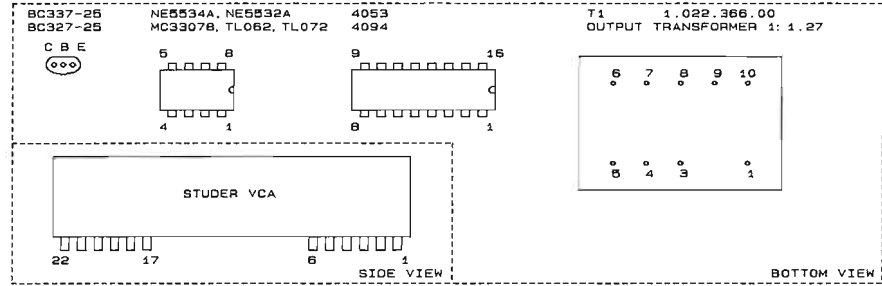
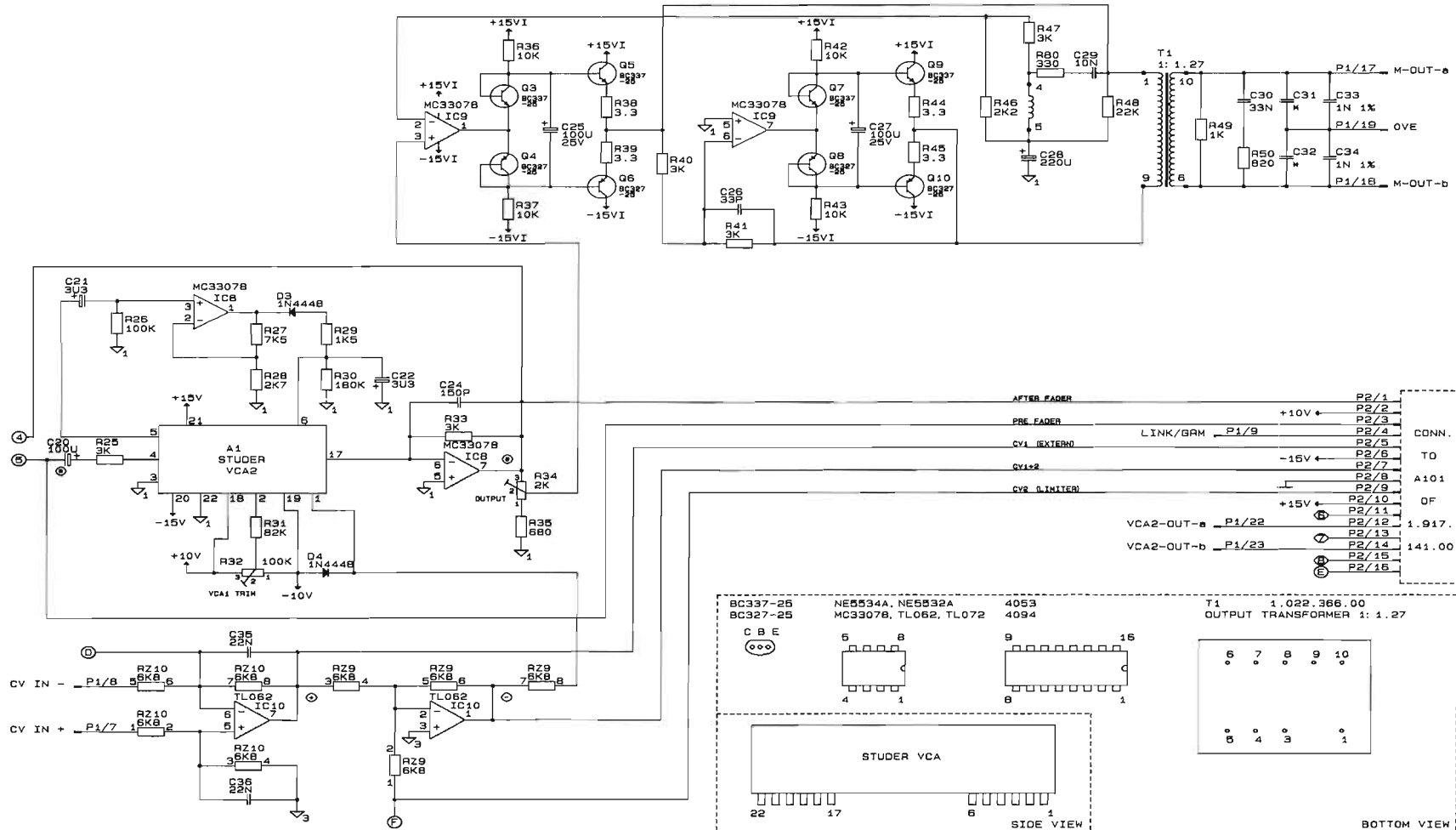
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© 25.6.91	HDR		
MASTER 990		PAGE 2 OF 3	
STUDER	MASTER AMPLIFIER	SC	1.917.140.81

MASTER AMPLIFIER

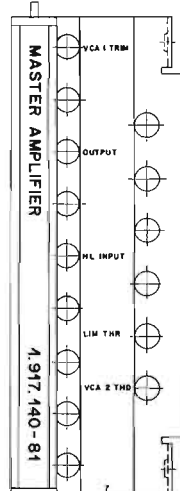
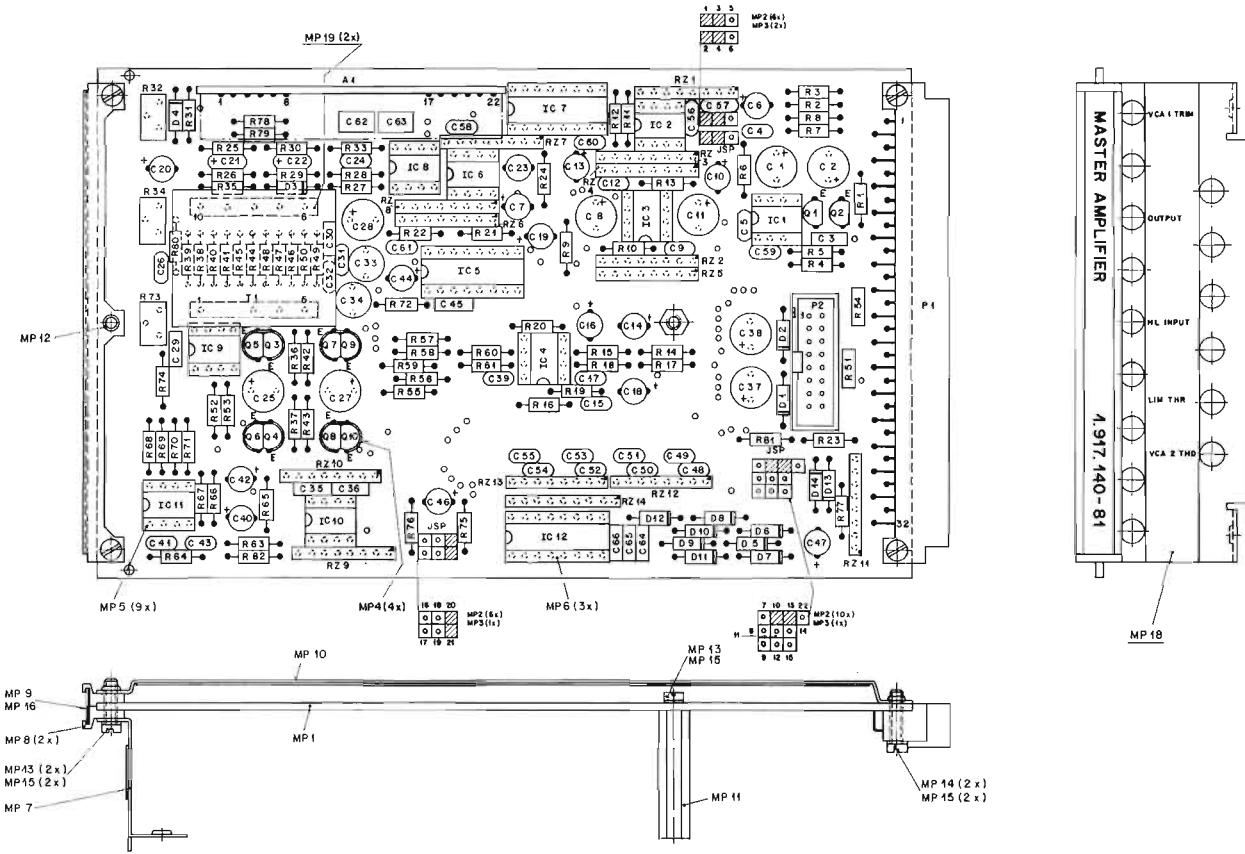
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MASTER 990				PAGE 3 OF 3			
STUDER		MASTER AMPLIFIER		SC	1.917.140.81		

MASTER AMPLIFIER

1.917.140.81



Ad	POS	REF. No.	DESCRIPTION	MANUFACTURER
A	1	1.911.291.00	VCA Board Type 2	St
C	1	59.22.2221	220 uF 6V EL	
C	2	59.22.2221	220 uF 6V EL	
C	3	59.06.0102	1 nF 10V PE	
C	4	59.34.2101	100 pF 5V CER	
C	5	59.34.2330	33 pF 5V CER	
C	6	59.22.3101	100 uF 10V EL	
C	7	59.22.3101	100 uF 10V EL	
C	8	59.22.2221	220 uF 6V EL	
C	9	59.34.7151	150 pF 2V CER	
C	10	59.22.3101	100 uF 10V EL	
C	11	59.22.2221	220 uF 6V EL	
C	12	59.34.7151	150 pF 2V CER	
C	13	59.22.3101	100 uF 10V EL	
C	14	59.22.3101	100 uF 10V EL	
C	15	59.34.7151	150 pF 2V CER	
C	16	59.22.3101	100 uF 10V EL	
C	17	59.34.7151	150 pF 2V CER	
C	18	59.22.3101	100 uF 10V EL	
C	19	59.22.3101	100 uF 10V EL	
C	20	59.22.3101	100 uF 10V EL	
C	21	59.26.2339	3.3 uF 16V SAL	
C	22	59.26.2339	3.3 uF 16V SAL	
C	23	59.22.3101	100 uF 10V EL	
C	24	59.34.2151	150 pF 5V CER	
C	25	59.22.5101	100 uF 25V EL	
C	26	59.34.2330	33 pF 5V CER	
C	27	59.22.5101	100 uF 25V EL	
C	28	59.22.2221	220 uF 6V EL	
C	29	59.06.0103	10 nF 10V PE	
C	30	59.06.0333	33 nF 10V PE	
C	31	0	not used	
C	32	59.34.4560	56 pF 5V CER	
C	33	59.05.1102	1 nF 1V PP	
C	34	59.05.1102	1 nF 1V PP	
C	35	59.06.0223	22 nF 10V PE	
C	36	59.06.0223	22 nF 10V PE	
C	37	59.22.5101	100 uF 25V EL	
C	38	59.22.5101	100 uF 25V EL	
C	39	59.34.5471	470 pF 5V CER	
C	40	59.22.3101	100 uF 10V EL	
C	41	59.34.2470	47 pF 5V CER	
C	42	59.22.3101	100 uF 10V EL	
C	43	59.34.2470	47 pF 5V CER	
C	44	59.22.3101	100 uF 10V EL	
C	45	59.06.0104	100 nF 10V PE	
C	46	59.22.3101	100 uF 10V EL	
C	47	59.22.3101	100 uF 10V EL	
C	48	59.34.2101	100 pF 5V CER	
C	49	59.34.2101	100 pF 5V CER	
C	50	59.34.2101	100 pF 5V CER	
C	51	59.34.2101	100 pF 5V CER	
C	52	59.34.2101	100 pF 5V CER	
C	53	59.34.2101	100 pF 5V CER	
C	54	59.34.2101	100 pF 5V CER	
C	55	59.34.2101	100 pF 5V CER	
C	56	59.34.4221	220 nF 5V CER	
C	57	59.34.4221	220 nF 5V CER	
C	58	59.34.7151	150 pF 2V CER	
C	59	59.34.2101	100 pF 5V CER	
C	60	59.34.2330	33 pF 5V CER	
C	61	59.34.2330	33 pF 5V CER	
C	62	59.06.0105	1 uF 10V PE	
C	63	59.06.0105	1 uF 10V PE	
C	64	59.32.4102	1 nF 20V CER	
C	65	59.32.4102	1 nF 20V CER	
C	66	59.32.4102	1 nF 20V CER	
D	1	50.04.0122	1M4001	any
D	2	50.04.0122	1M4001	any
D	3	50.04.0125	1M4448	any
D	4	50.04.0125	1M4448	any
D	5	50.04.0125	1M4448	any
D	6	50.04.0125	1M4448	any
D	7	50.04.0125	1M4448	any
D	8	50.04.0125	1M4448	any
D	9	50.04.0125	1M4448	any
D	10	50.04.0125	1M4448	any
D	11	50.04.0125	1M4448	any
D	12	50.04.0125	1M4448	any
D	13	50.04.0125	1M4448	any
D	14	50.04.0125	1M4448	any
IC	1	50.05.0244	ME 553A AM	Sig
IC	2	50.09.0106	ME 5532 AM	Sig, Ex, Pa
IC	3	50.09.0101	TL 072 CP	TL
IC	4	1.010.051.50	ME 5532 AM	St
IC	5	50.07.0015	CD 4053 BE	Low Offset +/- 1uV
IC	6	50.09.0117	MC 33078 P	RCA, NS
IC	7	50.07.0015	CD 4053 BE	Not
IC	8	50.09.0117	MC 33078 P	RCA, NS
IC	9	50.09.0117	MC 33078 P	Not
IC	10	50.09.0119	TL 062 CP	TL, Tho
IC	11	50.09.0117	MC 33078 P	Not
IC	12	50.07.0018	CD 4094 BE	RCA
MP	1	1.917.140.12	0001 pcs Master PCB	St
MP	2	54.01.0020	0022 pcs Jumper plug	

STUDER	REGENSDORF	ZÜRICH
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MASTER AMPLIFIER

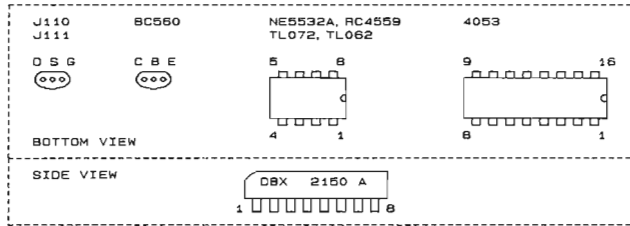
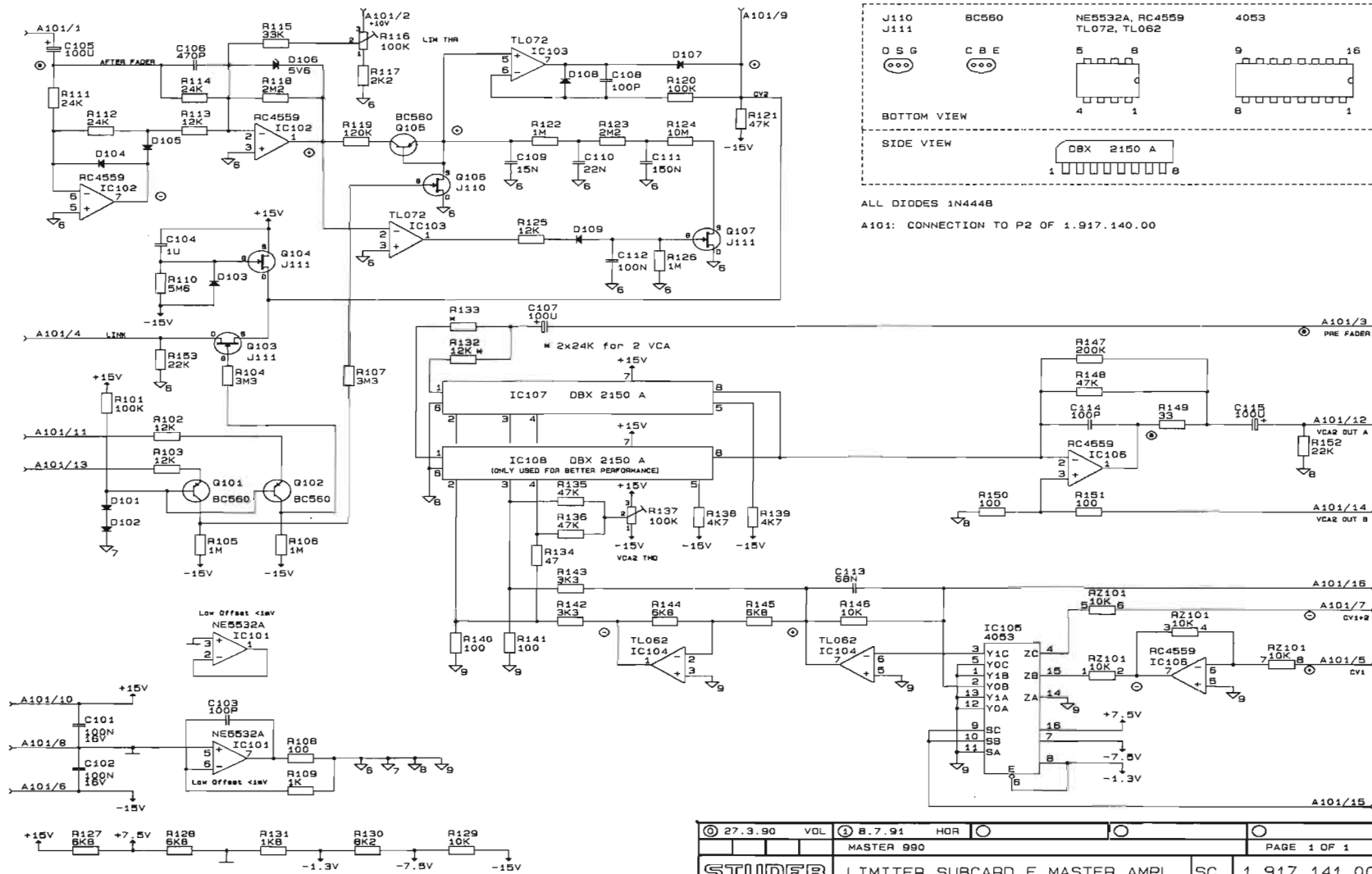
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Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
MP...	3	54.01.0021	0004 pcs	Jumper bridge	R....	68	57.11.3302	3 kOhm	1%
MP...	4	50.20.2001	0004 pcs	Clip for 2*TO 92	R....	69	57.11.3302	3 kOhm	1%
MP...	5	53.03.0166	0009 pcs	IC-Socket, 8 pin	R....	70	57.11.3101	100 Ohm	1%
MP...	6	53.03.0168	0003 pcs	IC-Socket, 16 pin	R....	71	57.11.3101	100 Ohm	1%
MP...	7	1.917.142.01	0001 pcs	Walter	R....	72	57.11.3223	22 kOhm	1%
MP...	8	1.010.006.33	0002 pcs	Griffhaelfte	R....	73	58.01.9203	20 kOhm	10% variable resistor
MP...	9	1.010.096.49	0001 pcs	Klarsichtschild	R....	74	57.11.3302	3 kOhm	1%
MP...	10	1.010.090.49	0001 pcs	Abschirmung komplett	R....	75	57.11.3223	22 kOhm	1%
MP...	11	1.010.204.27	0001 pcs	Mutterbolzen,M2.5*25	R....	76	57.11.3330	33 Ohm	1%
MP...	12	28.21.1380	0001 pcs	Rohrniete,D2.25*6.5	R....	77	57.11.3102	1 kOhm	1%
O1 MP...	12	28.21.1390	1 pcs	Rohrniete,D2.25*7.0	R....	78	57.11.3333	33 kOhm	1%
MP...	13	21.01.0280	0003 pcs	Z-Schr.,ZN,M2.5*8	R....	79	57.11.3333	33 kOhm	1%
MP...	14	21.01.0281	0002 pcs	Z-Schr.,ZN,M2.5*10	R....	80	57.11.3331	330 Ohm	1%
MP...	15	24.16.1025	0005 pcs	Rippenscheibe,D2.7/5	R....	81	57.11.3330	33 Ohm	1%
MP...	16	1.917.140.01	0000 pcs	Bezeichnungsstreifen	RZ....	1	57.88.2102	1 kOhm	2% ,4*
MP...	17	43.01.0108	0001 pcs	ESE-Warnschild	RZ....	2	57.88.2682	6.8 kOhm	2% ,4*
MP...	18	1.917.140.02	0001 pcs	Schild Potmeterbeschriftung	RZ....	3	57.88.2682	6.8 kOhm	2% ,4*
MP...	19	1.911.323.01	0002 pcs	Trafo-Unterlage	RZ....	4	57.88.2224	220 kOhm	2% ,4*
P....	1	54.01.0359		Eurocard connector, 32 pin	RZ....	5	57.88.2682	6.8 kOhm	2% ,4*
P....	2	54.14.2002		PCB connector for ribbon cable, 16 pin	RZ....	6	57.88.2682	6.8 kOhm	2% ,4*
Q....	1	50.03.0351	BC 327-25	ITT,Ph,Sie	RZ....	7	57.88.2682	6.8 kOhm	2% ,4*
Q....	2	50.03.0340	BC 337-25	ITT,Ph,Sie	RZ....	8	57.88.2101	100 Ohm	2% ,4*
Q....	3	50.03.0340	BC 337-25	ITT,Ph,Sie	RZ....	9	57.88.2682	6.8 kOhm	2% ,4*
Q....	4	50.03.0351	BC 327-25	ITT,Ph,Sie	RZ....	10	57.88.2682	6.8 kOhm	2% ,4*
Q....	5	50.03.0340	BC 337-25	ITT,Ph,Sie	RZ....	11	57.88.2101	100 Ohm	2% ,4*
Q....	6	50.03.0351	BC 327-25	ITT,Ph,Sie	RZ....	12	57.88.2104	100 kOhm	2% ,4*
Q....	7	50.03.0340	BC 337-25	ITT,Ph,Sie	RZ....	13	57.88.2104	100 kOhm	2% ,4*
Q....	8	50.03.0351	BC 327-25	ITT,Ph,Sie	RZ....	14	57.88.4104	100 kOhm	2% ,8*
Q....	9	50.03.0340	BC 337-25	ITT,Ph,Sie	T.....	1	1.022.366.00	Output Transformer 1:1.27	St
Q....	10	50.03.0351	BC 327-25	ITT,Ph,Sie					
R....	1	57.11.3103	10 kOhm	1%					
R....	2	57.11.3333	33 kOhm	1%					
R....	3	57.11.3333	33 kOhm	1%					
R....	4	57.11.3683	68 kOhm	1%					
R....	5	57.11.3101	100 Ohm	1%					
R....	6	57.11.3752	7.5 kOhm	1%					
R....	7	57.11.3184	180 kOhm	1%					
R....	8	57.11.3184	180 kOhm	1%					
R....	9	57.11.3223	22 kOhm	1%					
R....	10	57.11.3150	15 Ohm	1%					
R....	11	57.99.0250	6.8 kOhm	0.1%					
R....	12	57.99.0250	6.8 kOhm	0.1%					
R....	13	57.11.3150	15 Ohm	1%					
R....	14	57.11.3152	1.5 kOhm	1%					
R....	15	57.11.3392	3.9 kOhm	1%					
R....	16	57.11.3272	2.7 kOhm	1%					
R....	17	57.11.3152	1.5 kOhm	1%					
R....	18	57.11.3392	3.9 kOhm	1%					
R....	19	57.11.3272	2.7 kOhm	1%					
R....	20	57.11.3223	22 kOhm	1%					
R....	21	57.11.3223	22 kOhm	1%					
R....	22	57.11.3101	100 Ohm	1%					
R....	23	57.11.3330	33 Ohm	1%					
R....	24	57.11.3223	22 kOhm	1%					
R....	25	57.11.3302	3 kOhm	1%					
R....	26	57.11.3104	100 kOhm	1%					
R....	27	57.11.3752	7.5 kOhm	1%					
R....	28	57.11.3272	2.7 kOhm	1%					
R....	29	57.11.3152	1.5 kOhm	1%					
R....	30	57.11.3184	180 kOhm	1%					
R....	31	57.11.3823	82 kOhm	1%					
R....	32	58.01.9104	100 kOhm	10% variable resistor					
R....	33	57.11.3302	3 kOhm	1%					
R....	34	58.01.9202	2 kOhm	10% variable resistor					
R....	35	57.11.3681	680 Ohm	1%					
R....	36	57.11.3103	10 kOhm	1%					
R....	37	57.11.3103	10 kOhm	1%					
R....	38	57.11.3339	3.3 Ohm	1%					
R....	39	57.11.3339	3.3 Ohm	1%					
R....	40	57.11.3302	3 kOhm	1%					
R....	41	57.11.3302	3 kOhm	1%					
R....	42	57.11.3103	10 kOhm	1%					
R....	43	57.11.3103	10 kOhm	1%					
R....	44	57.11.3339	3.3 Ohm	1%					
R....	45	57.11.3339	3.3 Ohm	1%					
R....	46	57.11.3222	2.2 kOhm	1%					
R....	47	57.11.3302	3 kOhm	1%					
R....	48	57.11.3223	22 kOhm	1%					
R....	49	57.11.3102	1 kOhm	1%					
R....	50	57.11.3821	820 Ohm	1%					
R....	51	57.92.7013	0.75 Ohm	R-PTC, I-hold = 500 mA					
R....	52	57.19.0330	33 Ohm	5% fusible resistor					
R....	53	57.19.0330	33 Ohm	5% fusible resistor					
R....	54	57.92.7013	0.75 Ohm	R-PTC, I-hold = 500 mA					
R....	55	57.11.3682	6.8 kOhm	1%					
R....	56	57.11.3682	6.8 kOhm	1%					
R....	57	57.11.3103	10 kOhm	1%					
R....	58	57.11.3822	8.2 kOhm	1%					
R....	59	57.11.3182	1.8 kOhm	1%					
R....	60	57.11.3151	150 Ohm	1%					
R....	61	57.11.3330	33 Ohm	1%					
R....	62	57.11.3153	15 kOhm	1%					
R....	63	57.11.3393	39 kOhm	1%					
R....	64	57.11.3273	27 kOhm	1%					
R....	65	57.11.3153	15 kOhm	1%					
R....	66	57.11.3393	39 kOhm	1%					
R....	67	57.11.3273	27 kOhm	1%					

LIMITER SUBCARD F. MASTER AMPL.



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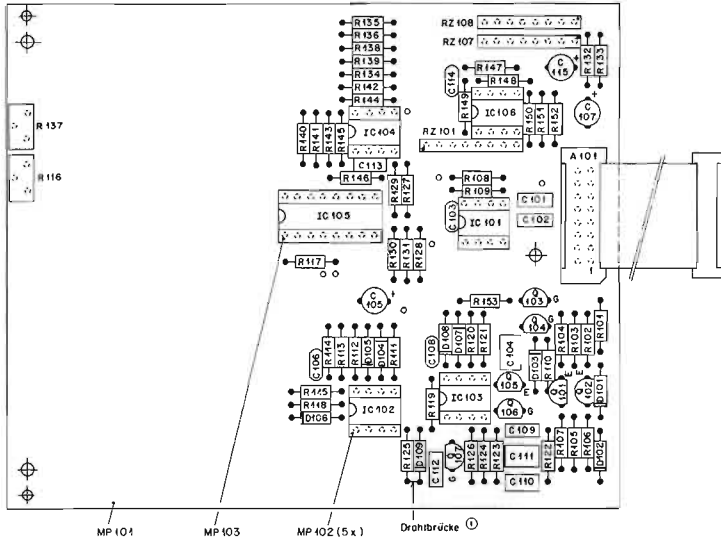


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A101: CONNECTION TO P2 OF 1.917.140.00

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STUDER		LIMITER SUBCARD F. MASTER AMPL.		SC	1.917.141.00	

LIMITER SUBCARD F. MASTER AMPL.

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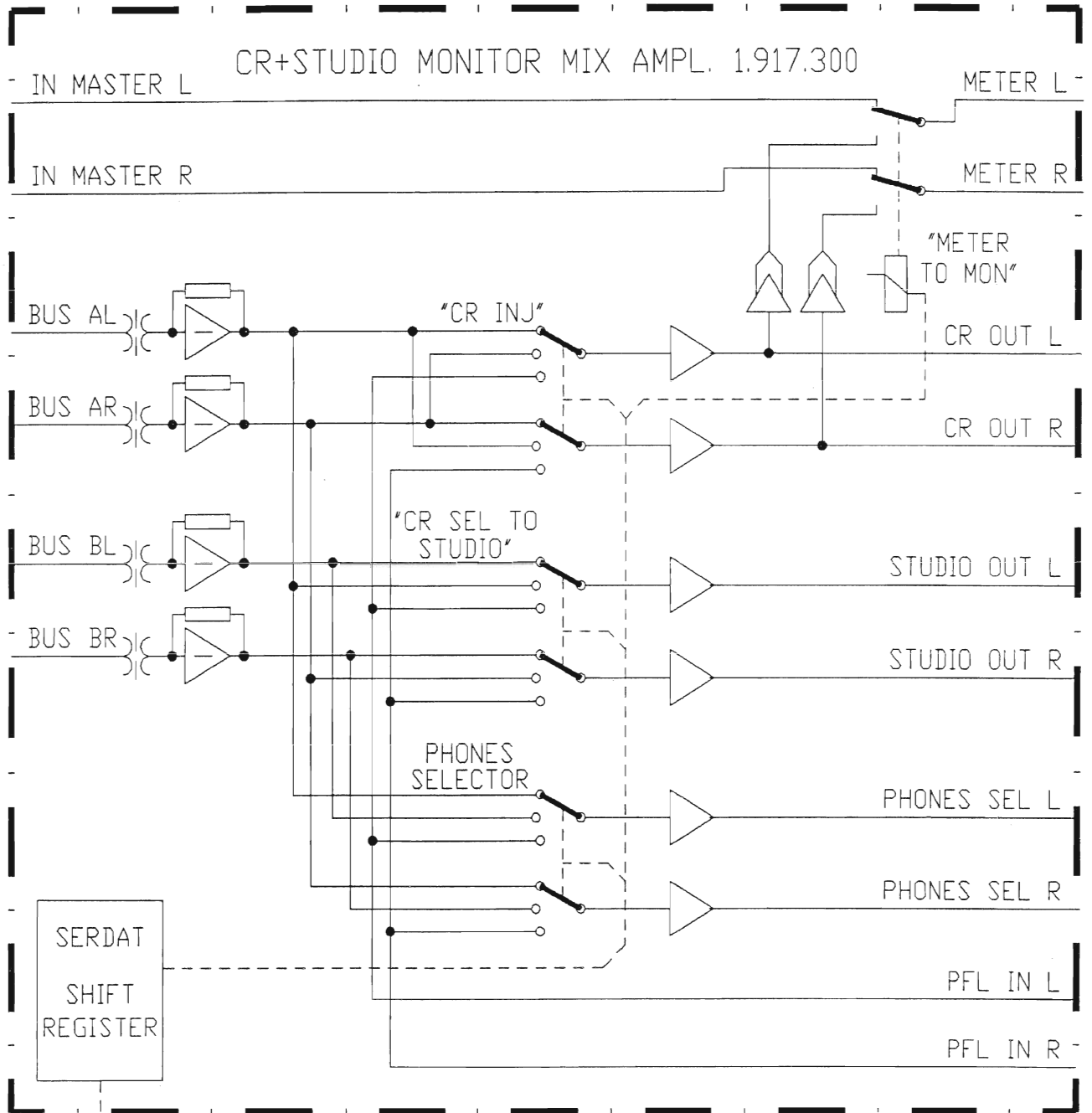
STUDER
REGENSDORF
ZÜRICH

LIMITER SUBCARD
F. MASTER AMPL. ESE

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1.917.141-00

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER	Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
A...	101	1.023.111.02	Flat cable, 16 pin, 0.085m	St	R...	146	57.11.3103	10 kOhm 1%	
C...	101	59.06.0104	100 nF 10% PE		R...	147	57.11.3204	200 kOhm 1%	
C...	102	59.06.0104	100 nF 10% PE		R...	148	57.11.3473	47 kOhm 1%	
C...	103	59.34.2101	100 pF 5% CER		R...	149	57.11.3350	33 Ohm 1%	
C...	104	59.06.0105	1 uF 10% PE		R...	150	57.11.3101	100 Ohm 1%	
C...	105	59.22.3101	100 uF 10V EL		R...	151	57.11.3101	100 Ohm 1%	
C...	106	59.34.5471	470 pF 5% CER		R...	152	57.11.3223	22 kOhm 1%	
C...	107	59.22.3101	100 uF 10V EL		R...	153	57.11.3223	22 kOhm 1%	
C...	108	59.34.2101	100 pF 5% CER		RZ...	101	57.88.2103	10 kOhm 2% ,4"	
C...	109	59.06.0683	68 nF 10% PE		NOTE 1: Option: Double VCA for better performance				
C...	109	59.06.0153	15 nF 10% PE		IC108	5010140	DBX 2150 A		
C...	110	59.06.0104	100 nF 10% PE		R 132	57113243	24 kOhm 1%		
C...	110	59.06.0223	22 nF 10% PE		R 133	57113243	24 kOhm 1%		
C...	111	59.06.0474	470 nF 10% PE		CER = ceramic, EL = electrolytic, PE = polyester				
C...	111	59.06.5154	150 nF 5% PE		MANUFACTURER dbx=dbx-Incorporation, ITT=Intermetall, JRC=Japan Radio Corporation, Mot=Moticon, MS=National Semiconductors, Ph=Philips, Ra=Raytheon, RCA=Radio Corporation of America, Si=Siemens, Si=Siliconix, St=Studer, Tf=Telefunken, Tho=Thomson, Ti=Texas Instruments				
C...	112	59.06.0104	100 nF 10% PE		1.917.141.00	LIMITER SUBCARD F.MASTER AMPL.	.VOL90/04/1700		
C...	113	59.06.0683	68 nF 10% PE		1.917.141.00	LIMITER SUBCARD F.MASTER AMPL.	.VOL90/11/0801		
C...	114	59.34.2101	100 pF 5% CER		END				
C...	115	59.22.3101	100 uF 10V EL		*				
D...	101	50.04.0125	1M4448	any					
D...	102	50.04.0125	1M4448	any					
D...	103	50.04.0125	1M4448	any					
D...	104	50.04.0125	1M4448	any					
D...	105	50.04.0125	1M4448	any					
D...	106	50.04.1108	82X55C 5.6V	ITT,Mot,Ph,Ti,Tho					
D...	107	50.04.0125	1M4448	any					
D...	108	50.04.0125	1M4448	any					
D...	109	50.04.0125	1M4448	any					
IC...	101	50.09.0105	ME 5532 N	Sig,Ex,Ra					
IC...	102	50.09.0118	RC 4562 MB	Ra,JRC					
IC...	103	50.09.0101	TL 072 CP	Ti					
IC...	104	50.09.0119	TL 062 CP	Ti,Tho					
IC...	105	50.07.0015	CD 4053 BE	RCA,MS					
IC...	106	50.09.0118	RC 4562 MB	Ra,JRC					
IC...	107	50.11.0140	DBX 2150 A	dbx					
IC...	108	0	not used	see note 1					
MP...	101	1.917.141.11	0001 pcs Limiter Sub PCB	St					
MP...	102	53.03.0166	0005 pcs IC-Socket, 8 pin						
MP...	103	53.03.0168	0001 pcs IC-Socket, 16 pin						
MP...	104	1.917.141.04	0000 pcs Wc-Steckette						
MP...	105	43.01.0108	0001 pcs ESE-Warnschild						
Q...	101	50.03.0496	8C 560	Si					
Q...	102	50.03.0496	8C 560	Si					
Q...	103	50.03.0216	J 111	Mot,MS,Six					
Q...	104	50.03.0216	J 111	Mot,MS,Six					
Q...	105	50.03.0496	8C 560	Si					
Q...	106	50.03.1130	J 110	Mot,MS,Six					
Q...	107	50.03.0216	J 111	Mot,MS,Six					
R...	101	57.11.3104	100 kOhm 1%						
R...	102	57.11.3123	12 kOhm 1%						
R...	103	57.11.3123	12 kOhm 1%						
R...	104	57.11.5335	3.3 MOhm 5%						
R...	105	57.11.3105	1 MOhm 1%						
R...	106	57.11.3105	1 MOhm 1%						
R...	107	57.11.5335	3.3 MOhm 5%						
R...	108	57.11.3101	100 Ohm 1%						
R...	109	57.11.3102	1 kOhm 1%						
R...	110	57.11.5665	5.6 MOhm 5%						
R...	111	57.11.3243	24 kOhm 1%						
R...	112	57.11.3243	24 kOhm 1%						
R...	113	57.11.3123	12 kOhm 1%						
R...	114	57.11.3243	24 kOhm 1%						
R...	115	57.11.3353	33 kOhm 1%						
R...	116	58.01.9104	100 kOhm 10% variable resistor						
R...	117	57.11.3222	2.2 kOhm 1%						
R...	118	57.11.5225	2.2 MOhm 5%						
R...	119	57.11.3243	24 kOhm 1%						
R...	119	57.11.3124	120 kOhm 1%						
R...	120	57.11.3104	100 kOhm 1%						
R...	121	57.11.3473	47 kOhm 1%						
R...	122	57.11.3274	270 kOhm 1%						
R...	122	57.11.3105	1 MOhm 1%						
R...	123	57.11.3684	680 kOhm 1%						
R...	123	57.11.5225	2.2 MOhm 5%						
R...	124	57.11.5335	3.3 MOhm 5%						
R...	124	57.11.5106	10 MOhm 10%						
R...	126	57.11.3123	12 kOhm 1%						
R...	126	57.11.3105	1 MOhm 1%						
R...	127	57.11.3682	6.8 kOhm 1%						
R...	128	57.11.3682	6.8 kOhm 1%						
R...	129	57.11.3103	10 kOhm 1%						
R...	130	57.11.3222	8.2 kOhm 1%						
R...	131	57.11.3182	1.8 kOhm 1%						
R...	132	57.11.3123	12 kOhm 1%						
R...	133	0	not used	see note 1					
R...	134	57.11.3470	47 Ohm 1%	see note 1					
R...	135	57.11.3473	47 kOhm 1%						
R...	136	57.11.3473	47 kOhm 1%						
R...	137	58.01.9104	100 kOhm 10% variable resistor						
R...	138	57.11.3472	4.7 kOhm 1%						
R...	139	57.11.3472	4.7 kOhm 1%						
R...	140	57.11.3101	100 Ohm 1%						
R...	141	57.11.3101	100 Ohm 1%						
R...	142	57.11.3352	3.3 kOhm 1%						
R...	143	57.11.3352	3.3 kOhm 1%						
R...	144	57.11.3682	6.8 kOhm 1%						
R...	145	57.11.3682	6.8 kOhm 1%						

CR+STUDIO MONITOR MIX AMPLIFIER 1.917.300.00



Pin location list

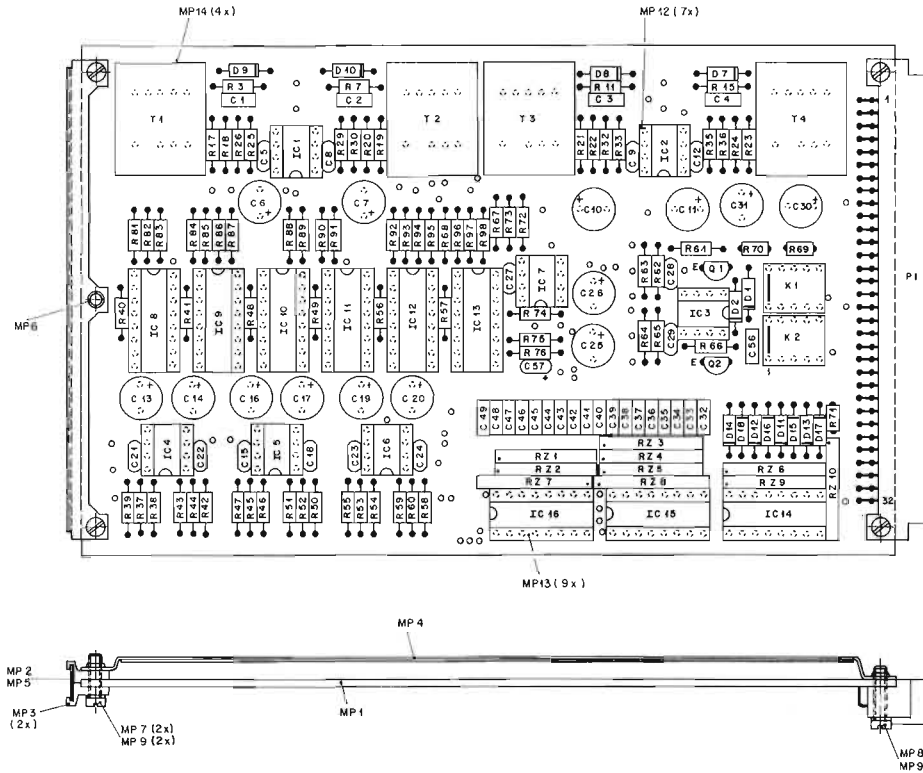
1.917.300

P	NO	NAME	REMARK	B=BUS	O=CONNECTION	S=SYMMETRIC	I=INVERS	AS=ASYMMETRIC

P1	01	0V-A	GROUND AUDIO	B				X X
P1	02A	IN A-L-a	0-OHM INPUT A LEFT a	S				
P1	02B	IN A-L-b	0-OHM INPUT A LEFT b	S				
P1	03A	IN A-R-a	0-OHM INPUT A RIGHT a	S				
P1	03B	IN A-R-b	0-OHM INPUT A RIGHT b	S				
P1	04A	IN B-L-a	0-OHM INPUT B LEFT a	S				
P1	04B	IN B-L-b	0-OHM INPUT B LEFT b	S				
P1	05A	IN B-R-a	0-OHM INPUT B RIGHT a	S				
P1	05B	IN B-R-b	0-OHM INPUT B RIGHT b	S				
P1	06	0V-A	GROUND AUDIO	B				X X
P1	07A	-	RES					
P1	07B	-	RES					
P1	8	0V-A	GROUND AUDIO	B				X X
P1	09A	M-HL-L-a	INPUT MASTER HL LEFT a	S				
P1	09B	M-HL-L-b	INPUT MASTER HL LEFT b	S				
P1	10A	M-HL-R-a	INPUT MASTER HL RIGHT a	S				
P1	10B	M-HL-R-b	INPUT MASTER HL RIGHT b	S				
P1	11A	-	N.C.					
P1	11B	-	N.C.					
P1	12A	-	N.C.					
P1	12B	-	N.C.					
P1	13A	METER-L-a	OUTPUT METER LEFT a	S				
P1	13B	METER-L-b	OUTPUT METER LEFT b	S				
P1	14	- 15.5V	- SUPPLY	B				X X
P1	15	0V-A	GROUND AUDIO	B				X X
P1	16	+ 15.5V	+ SUPPLY	B				X X
P1	17A	METER-R-a	OUTPUT METER RIGHT a	S				
P1	17B	METER-R-b	OUTPUT METER RIGHT b	S				
P1	18	0V-A	GROUND AUDIO	B				X X
P1	19A	0V-A	GROUND AUDIO					
P1	19B	PFL-IN-L-b	PFL INPUT LEFT (b)	AS,I				
P1	20A	0V-A	GROUND AUDIO	B				
P1	20B	-	N.C.					
P1	21A	0V-A	GROUND AUDIO					
P1	21B	PFL-IN-R-b	PFL INPUT RIGHT (b)	AS,I				
P1	22A	0V-A	GROUND AUDIO					
P1	22B	CR-OUT-L-a	CR OUTPUT LEFT (a)	AS				
P1	23A	0V-A	GROUND AUDIO					
P1	23B	CR-OUT-R-a	CR OUTPUT RIGHT (a)	AS				
P1	24A	0V-A	GROUND AUDIO					
P1	24B	S-OUT-L-a	STUDIO OUTPUT LEFT (a)	AS				
P1	25A	0V-A	GROUND AUDIO					
P1	25B	S-OUT-R-a	STUDIO OUTPUT RIGHT (a)	AS				
P1	26A	0V-A	GROUND AUDIO					
P1	26B	PHO-OUT-L-a	PHONE OUTPUT LEFT (a)	AS				
P1	27A	0V-A	GROUND AUDIO					
P1	27B	PHO-OUT-R-a	PHONE OUTPUT RIGHT (a)	AS				
P1	28	0V-L	GROUND SIGN (LOGIC)	B				X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)					
P1	29B	TSTB 5	TRANSMIT STROBE 5					
P1	30A	-	RES					
P1	30B	TXTH	TRANSMIT DATA THROUGH					
P1	31A	TXD	TRANSMIT DATA					
P1	31B	TCL	TRANSMIT CLOCK					
P1	32	+ 5.5V	+ SUPPLY	B				X X

MONITOR MIX AMPLIFIER

1.917.300.00



MONITOR MIX AMPLIFIER
1.917.300-00

STUDER REGENDORF ZÜRICH	System	MONITOR MIX. AMPLIFIER	ESE	Name	1.917.300-00																		
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19.3.90	JA	JK	JK	JK	JK																		
27.10.89	JK	JK	JK	JK	JK																		
Druck	Doc.	Disp.	Gen.	Index																			

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURE
C.....1	59.06.0682	6,8 nF	10%, 63V, PE	
C.....2	59.06.0682	6,8 nF	10%, 63V, PE	
C.....3	59.06.0682	6,8 nF	10%, 63V, PE	
C.....4	59.06.0682	6,8 nF	10%, 63V, PE	
C.....5	59.34.4331	330 pF	5%, 63V, CER	
C.....6	59.22.4101	100 uF	-20%, 10V, EL	
C.....7	59.22.4101	100 uF	-20%, 10V, EL	
C.....8	59.34.4331	330 pF	5%, 63V, CER	
C.....9	59.34.4331	330 pF	5%, 63V, CER	
C.....10	59.22.4101	100 uF	-20%, 10V, EL	
C.....11	59.22.4101	100 uF	-20%, 10V, EL	
C.....12	59.34.4331	330 pF	5%, 63V, CER	
C.....13	59.22.4101	100 uF	-20%, 10V, EL	
C.....14	59.22.4101	100 uF	-20%, 10V, EL	
C.....15	59.34.4101	100 pF	5%, 63V, CER	
C.....16	59.22.4101	100 uF	-20%, 10V, EL	
C.....17	59.22.4101	100 uF	-20%, 10V, EL	
C.....18	59.34.4101	100 pF	5%, 63V, CER	
C.....19	59.22.4101	100 uF	-20%, 10V, EL	
C.....20	59.22.4101	100 uF	-20%, 10V, EL	
C.....21	59.34.4101	100 pF	5%, 63V, CER	
C.....22	59.34.4101	100 pF	5%, 63V, CER	
C.....23	59.34.4101	100 pF	5%, 63V, CER	
C.....24	59.34.4101	100 pF	5%, 63V, CER	
C.....25	59.22.4101	100 uF	-20%, 10V, EL	
C.....26	59.22.4101	100 uF	-20%, 10V, EL	
C.....27	59.34.4101	100 pF	5%, 63V, CER	
C.....28	59.34.4101	100 pF	5%, 63V, CER	
C.....29	59.34.4101	100 pF	5%, 63V, CER	
C.....30	59.22.4101	100 uF	-20%, 10V, EL	
C.....31	59.22.5101	100 uF	-20%, 25V, EL	
C.....32	59.34.4101	100 pF	5%, 63V, CER	
C.....33	59.34.4101	100 pF	5%, 63V, CER	
C.....34	59.34.4101	100 pF	5%, 63V, CER	
C.....35	59.34.4101	100 pF	5%, 63V, CER	
C.....36	59.34.4101	100 pF	5%, 63V, CER	
C.....37	59.34.4101	100 pF	5%, 63V, CER	
C.....38	59.34.4101	100 pF	5%, 63V, CER	
C.....39	59.34.4101	100 pF	5%, 63V, CER	
C.....40	59.34.4101	100 pF	5%, 63V, CER	
C.....41	59.34.4101	100 pF	5%, 63V, CER	
C.....42	59.34.4101	100 pF	5%, 63V, CER	
C.....43	59.34.4101	100 pF	5%, 63V, CER	
C.....44	59.34.4101	100 pF	5%, 63V, CER	
C.....45	59.34.4101	100 pF	5%, 63V, CER	
C.....46	59.34.4101	100 pF	5%, 63V, CER	
C.....47	59.34.4101	100 pF	5%, 63V, CER	
C.....48	59.34.4101	100 pF	5%, 63V, CER	
C.....49	59.34.4101	100 pF	5%, 63V, CER	
C.....56	59.06.0682	6,8 nF	10%, 63V, PE	
C.....57	59.26.0680	68 uF	-20%, 6.3V, SAL	
D.....1	50.04.0125	1M 4448		any
D.....2	50.04.0125	1M 4448		any
D.....7	50.04.0125	1M 4448		any
D.....8	50.04.0125	1M 4448		any
D.....9	50.04.0105	1M 4004		any
D.....10	50.04.0105	1M 4004		any
D.....11	50.04.0125	1M 4448		any
D.....12	50.04.0125	1M 4448		any
D.....13	50.04.0125	1M 4448		any
D.....14	50.04.0125	1M 4448		any
D.....15	50.04.0125	1M 4448		any
D.....16	50.04.0125	1M 4448		any
D.....17	50.04.0125	1M 4448		any
D.....18	50.04.0125	1M 4448		any
C.....1	50.09.0117	MC33078	Dual Op Amp	
C.....2	50.09.0117	MC33078	Dual Op Amp	
C.....3	50.09.0117	MC33078	Dual Op Amp	
C.....4	50.09.0117	MC33078	Dual Op Amp	
C.....5	50.09.0117	MC33078	Dual Op Amp	
C.....6	50.09.0117	MC33078	Dual Op Amp	
C.....7	50.05.0243	6534	single op. amp.	
IC.....8	50.07.0015	4053	Triple Analog-Switch	
IC.....9	50.07.0015	4053	Triple Analog-Switch	
IC.....10	50.07.0015	4053	Triple Analog-Switch	
IC.....11	50.07.0015	4053	Triple Analog-Switch	
IC.....12	50.07.0015	4053	Triple Analog-Switch	
IC.....13	50.07.0015	4053	Triple Analog-Switch	
IC.....14	50.07.0018	4094	Shift & store bus register	
IC.....15	50.07.0018	4094	Shift & store bus register	
IC.....16	50.07.0018	4094	Shift & store bus register	
K.....1	56.04.0195		SDS Relais, Type T02- 6V	
K.....2	56.04.0195		SDS Relais, Type T02- 6V	
K.....3				
K.....4				
K.....5				
K.....6				
P.....1	54.11.2004	1 pcs	Euro, 2 * 32 contacts	
Q.....1	50.03.0496	BC 237	NPN	any
Q.....2	50.03.0496	BC 237	NPN	any
Q.....3				
Q.....4				



MONITOR MIX AMPLIFIER

1.917.300.00

Ad	..POS..	..REF.No...	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No...	DESCRIPTION.....	MANUFACTURER
Q....5	.	.			RZ....5	57.88.2104	100 kOhm	2%, 4 * 100k	
Q....6	.	.			RZ....6	57.88.2682	6.8 kOhm	2%, 4 * 6.8k	
R....1	.	.			RZ....7	57.88.4104	100 kOhm	2%, 8 * 100k	
R....2	.	.			RZ....8	57.88.4104	100 kOhm	2%, 8 * 100k	
R....3	57.11.3392	3.9 kOhm	1%		RZ....9	57.89.4104	100 kOhm	2%, 9 * 100k	
R....4	.	.			RZ...10	57.88.2104	100 Ohm	2%, 4 * 100	
R....5	.	.			T....1	1.022.451.00		INPUT TRAF0	STUDER
R....6	.	.			T....2	1.022.451.00		INPUT TRAF0	STUDER
R....7	57.11.3392	3.9 kOhm	1%		T....3	1.022.451.00		INPUT TRAF0	STUDER
R....8	.	.			T....4	1.022.451.00		INPUT TRAF0	STUDER
R....9	.	.			MP....1	1.917.300.11	1 pcs	Print	Studer
R....10	.	.			MP....2	1.917.300.01	1 pcs	Bez. Streifen 6.3*91	Studer
R....11	57.11.3392	3.9 kOhm	1%		MP....3	1.010.006.33	2 pcs	Griffhaelften	Studer
R....12	.	.			MP....4	1.010.090.49	1 pcs	Abschirmblech	Studer
R....13	.	.			MP....5	1.010.096.49	1 pcs	Klarsicht Schild	
R....14	.	.			MP....6	28.21.1380	1 pcs	Rohrniete D2.5/6	
R....15	57.11.3392	3.9 kOhm	1%		MP....7	21.01.0280	2 pcs	Z - Schraube M2.5*8	
R....16	.	.			MP....8	21.01.0281	2 pcs	Z - Schraube M2.5*10	
R....17	57.11.3391	390 Ohm	1%		MP....9	24.16.1025	4 pcs	Rippenscheibe D2.7/5	
R....18	57.11.3123	12 kOhm	1%		MP...10	43.01.0108	1 pcs	ESE-Warnschild	
R....19	57.11.3391	390 Ohm	1%		MP...11	.			
R....20	57.11.3123	12 kOhm	1%		MP...12	53.03.0166	7 pcs	IC-Sockel 8 Pin	
R....21	57.11.3391	390 Ohm	1%		MP...13	53.03.0168	9 pcs	IC-Sockel 16 Pin	
R....22	57.11.3123	12 kOhm	1%		MP...14	1.022.400.03	4 pcs	Isolation zu Trafo	
R....23	57.11.3391	390 Ohm	1%						
R....24	57.11.3123	12 kOhm	1%						
R....25	57.11.3473	47 kOhm	1%						
R....26	57.11.3332	3.3 kOhm	1%						
R....29	57.11.3473	47 kOhm	5%						
R....30	57.11.3332	3.3 kOhm	1%						
R....32	57.11.3473	47 kOhm	1%						
R....33	57.11.3332	3.3 kOhm	1%						
R....35	57.11.3473	47 kOhm	1%						
R....36	57.11.3332	3.3 kOhm	1%						
R....37	57.11.3473	47 kOhm	1%						
R....38	57.11.3822	8.2 kOhm	1%						
R....39	57.11.3330	33 Ohm	1%						
R....40	57.11.3223	22 kOhm	1%						
R....41	57.11.3223	22 kOhm	1%						
R....42	57.11.3330	33 Ohm	1%						
R....43	57.11.3473	47 kOhm	1%						
R....44	57.11.3822	8.2 kOhm	1%						
R....45	57.11.3473	47 kOhm	1%						
R....46	57.11.3822	8.2 kOhm	1%						
R....47	57.11.3330	33 Ohm	1%						
R....48	57.11.3223	22 kOhm	1%						
R....49	57.11.3223	22 kOhm	1%						
R....50	57.11.3330	33 Ohm	1%						
R....51	57.11.3473	47 kOhm	1%						
R....52	57.11.3822	8.2 kOhm	1%						
R....53	57.11.3473	47 kOhm	1%						
R....54	57.11.3822	8.2 kOhm	1%						
R....55	57.11.3330	33 Ohm	1%						
R....56	57.11.3223	22 kOhm	1%						
R....57	57.11.3223	22 kOhm	1%						
R....58	57.11.3330	33 Ohm	1%						
R....59	57.11.3473	47 kOhm	1%						
R....60	57.11.3822	8.2 kOhm	1%						
R....61	57.11.3330	33 Ohm	1%						
R....62	57.11.3682	6.8 kOhm	1%						
R....63	57.11.3682	6.8 kOhm	1%						
R....64	57.11.3682	6.8 kOhm	1%						
R....65	57.11.3682	6.8 kOhm	1%						
R....66	57.11.3330	33 Ohm	1%						
R....67	57.11.3103	10 kOhm	1%						
R....68	57.11.3103	10 kOhm	1%						
R....69	57.92.7014	PTC	650mA						
R....70	57.92.7014	PTC	650mA						
R....71	57.92.7014	PTC	650mA						
R....72	57.11.3682	6.8 kOhm	1%						
R....73	57.11.3682	6.8 kOhm	1%						
R....74	57.11.3103	10 kOhm	1%						
R....75	57.11.3182	1.8 kOhm	1%						
R....76	57.11.3822	8.2 kOhm	1%						
R....81	57.11.3682	6.8 kOhm	1%						
R....82	57.11.3682	6.8 kOhm	1%						
R....83	57.11.3682	6.8 kOhm	1%						
R....84	57.11.3682	6.8 kOhm	1%						
R....85	57.11.3682	6.8 kOhm	1%						
R....86	57.11.3682	6.8 kOhm	1%						
R....87	57.11.3682	6.8 kOhm	1%						
R....88	57.11.3682	6.8 kOhm	1%						
R....89	57.11.3682	6.8 kOhm	1%						
R....90	57.11.3682	6.8 kOhm	1%						
R....91	57.11.3682	6.8 kOhm	1%						
R....92	57.11.3682	6.8 kOhm	1%						
R....93	57.11.3682	6.8 kOhm	1%						
R....94	57.11.3682	6.8 kOhm	1%						
R....95	57.11.3682	6.8 kOhm	1%						
R....96	57.11.3682	6.8 kOhm	1%						
R....97	57.11.3682	6.8 kOhm	1%						
R....98	57.11.3682	6.8 kOhm	1%						
RZ....1	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....2	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....3	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....4	57.88.2104	100 kOhm	2%, 4 * 100k						

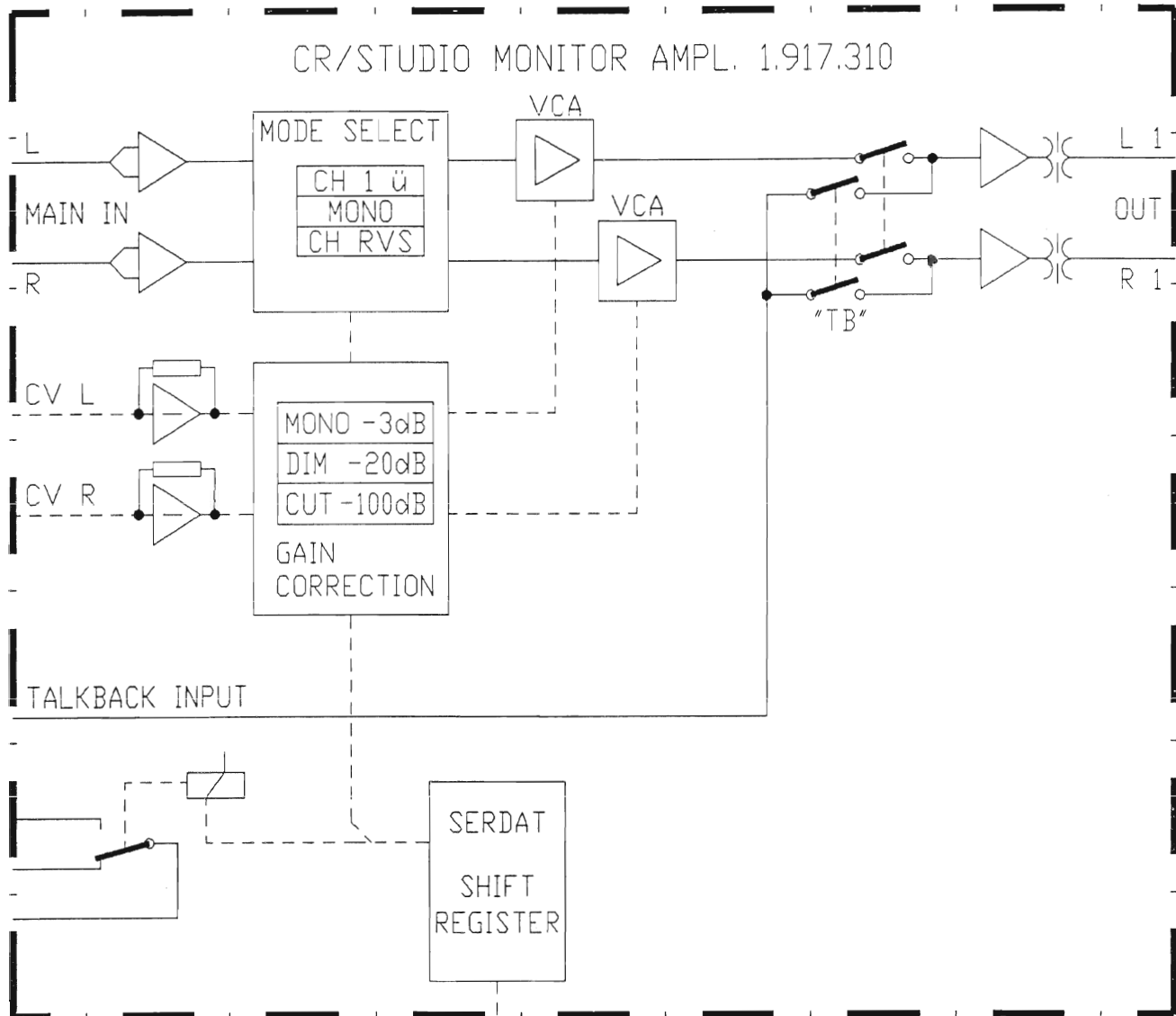
EL=Electrolytic, ElBip=Electrolytic Bipolar, PE=Polyester

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Ph=Philips, Ses=Sescosew, Sie=Siemens, Tf=Telefunken.

1.917.300 00 MONITOR MIX AMPLIFIER SE 89/02/2000

1.917.300 00 MONITOR MIX AMPLIFIER SE 90/03/1901

CR / STUDIO MONITOR AMPLIFIER 1.917.310.00



Pin location list

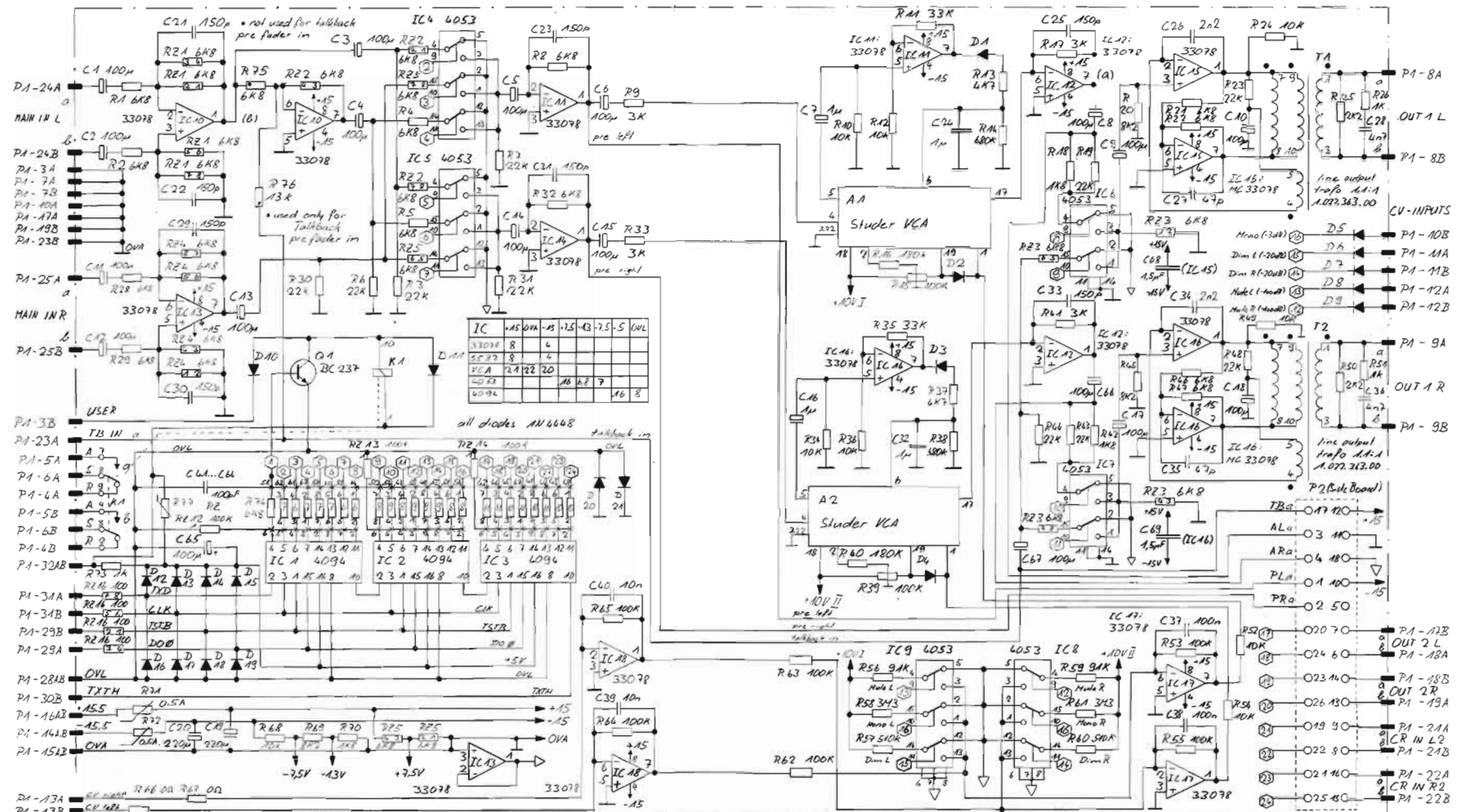
1.917.310

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

CR/STUDIO MONITOR AMPLIFIER



1.917.310.00

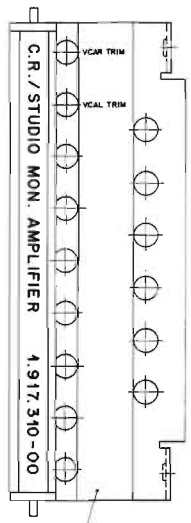
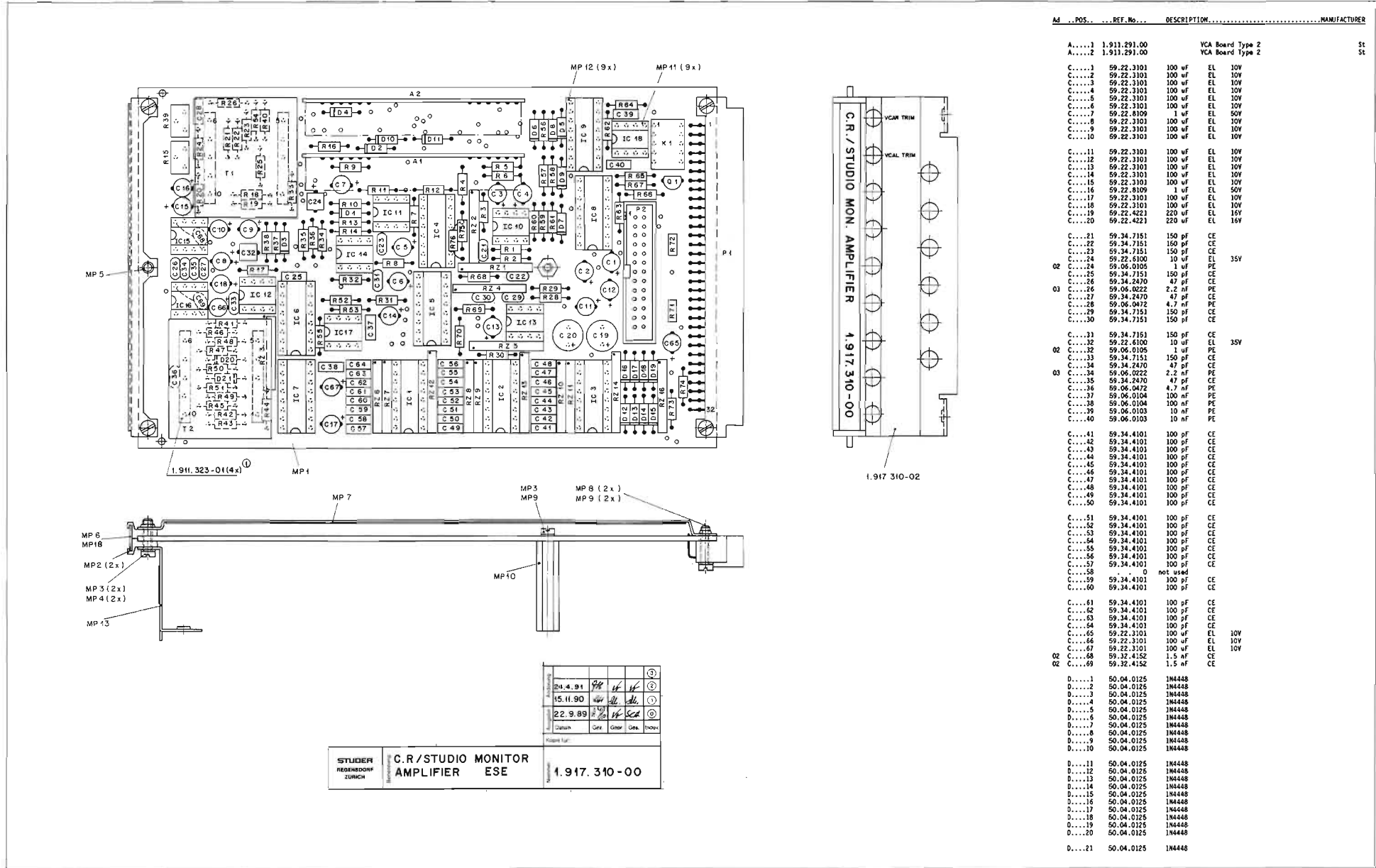


① 10.4.90 A Schmid	① 24.04.91 A Schmid	② 07.02.92 Enzi		
PAGE 1 OF 2				
STUDER	CR/STUDIO-MONITOR AMPLIFIER	SC	1 917 310 00	

① 10.4.90 A Schmid	① 24.04.91 A Schmid	② 07.02.92 Enzi		
PAGE 2 OF 2				
STUDER	CR/STUDIO-MONITOR AMPLIFIER	SC	1 917 310 00	

CR/STUDIO MONITOR AMPLIFIER

1.917.310.00



Alt.	POS.	REF. No.	DESCRIPTION	MANUFACTURER
A....1		1.911.291.00	VCA Board Type 2	St
A....2		1.911.291.00	VCA Board Type 2	St
C....3		59.22.3101	100 uF EL 10V	
C....4		59.22.3101	100 uF EL 10V	
C....5		59.22.3101	100 uF EL 10V	
C....6		59.22.3101	100 uF EL 10V	
C....7		59.22.8109	1 uF EL 50V	
C....8		59.22.3101	100 uF EL 10V	
C....9		59.22.3101	100 uF EL 10V	
C....10		59.22.3101	100 uF EL 10V	
C....11		59.22.3101	100 uF EL 10V	
C....12		59.22.3101	100 uF EL 10V	
C....13		59.22.3101	100 uF EL 10V	
C....14		59.22.3101	100 uF EL 10V	
C....15		59.22.3101	100 uF EL 10V	
C....16		59.22.8109	1 uF EL 50V	
C....17		59.22.3101	100 uF EL 10V	
C....18		59.22.3101	100 uF EL 10V	
C....19		59.22.4221	220 uF EL 15V	
C....20		59.22.4221	220 uF EL 15V	
C....21		59.34.7151	150 pF CE	
C....22		59.34.7151	150 pF CE	
C....23		59.34.7151	150 pF CE	
C....24		59.22.6100	10 uF EL 35V	
C....25		59.06.0105	1 uF PE	
C....26		59.34.7151	150 pF CE	
C....27		59.34.2470	47 pF CE	
C....28		59.06.0222	2.2 nF PE	
C....29		59.34.2470	47 pF CE	
C....30		59.06.0472	4.7 nF PE	
C....31		59.34.7151	150 pF CE	
C....32		59.22.6100	10 uF EL 35V	
C....33		59.06.0105	1 uF PE	
C....34		59.34.7151	150 pF CE	
C....35		59.34.2470	47 pF CE	
C....36		59.06.0222	2.2 nF PE	
C....37		59.34.2470	47 pF CE	
C....38		59.06.0472	4.7 nF PE	
C....39		59.06.0104	100 nF PE	
C....40		59.06.0103	10 nF PE	
C....41		59.34.4101	100 pF CE	
C....42		59.34.4101	100 pF CE	
C....43		59.34.4101	100 pF CE	
C....44		59.34.4101	100 pF CE	
C....45		59.34.4101	100 pF CE	
C....46		59.34.4101	100 pF CE	
C....47		59.34.4101	100 pF CE	
C....48		59.34.4101	100 pF CE	
C....49		59.34.4101	100 pF CE	
C....50		59.34.4101	100 pF CE	
C....51		59.34.4101	100 pF CE	
C....52		59.34.4101	100 pF CE	
C....53		59.34.4101	100 pF CE	
C....54		59.34.4101	100 pF CE	
C....55		59.34.4101	100 pF CE	
C....56		59.34.4101	100 pF CE	
C....57		59.34.4101	100 pF CE	
C....58		0	not used	
C....59		59.34.4101	100 pF CE	
C....60		59.34.4101	100 pF CE	
C....61		59.34.4101	100 pF CE	
C....62		59.34.4101	100 pF CE	
C....63		59.34.4101	100 pF CE	
C....64		59.34.4101	100 pF CE	
C....65		59.22.3101	100 uF EL 10V	
C....66		59.22.3101	100 uF EL 10V	
C....67		59.22.3101	100 uF EL 10V	
C....68		59.32.4152	1.5 nF CE	
C....69		59.32.4152	1.5 nF CE	
D....1		50.04.0125	1M4448	
D....2		50.04.0125	1M4448	
D....3		50.04.0125	1M4448	
D....4		50.04.0125	1M4448	
D....5		50.04.0125	1M4448	
D....6		50.04.0125	1M4448	
D....7		50.04.0125	1M4448	
D....8		50.04.0125	1M4448	
D....9		50.04.0125	1M4448	
D....10		50.04.0125	1M4448	
D....11		50.04.0125	1M4448	
D....12		50.04.0125	1M4448	
D....13		50.04.0125	1M4448	
D....14		50.04.0125	1M4448	
D....15		50.04.0125	1M4448	
D....16		50.04.0125	1M4448	
D....17		50.04.0125	1M4448	
D....18		50.04.0125	1M4448	
D....19		50.04.0125	1M4448	
D....20		50.04.0125	1M4448	
D....21		50.04.0125	1M4448	

STUDER REGENSBACH ZÜRICH	C.R./STUDIO MONITOR AMPLIFIER ESE	1.917.310-00
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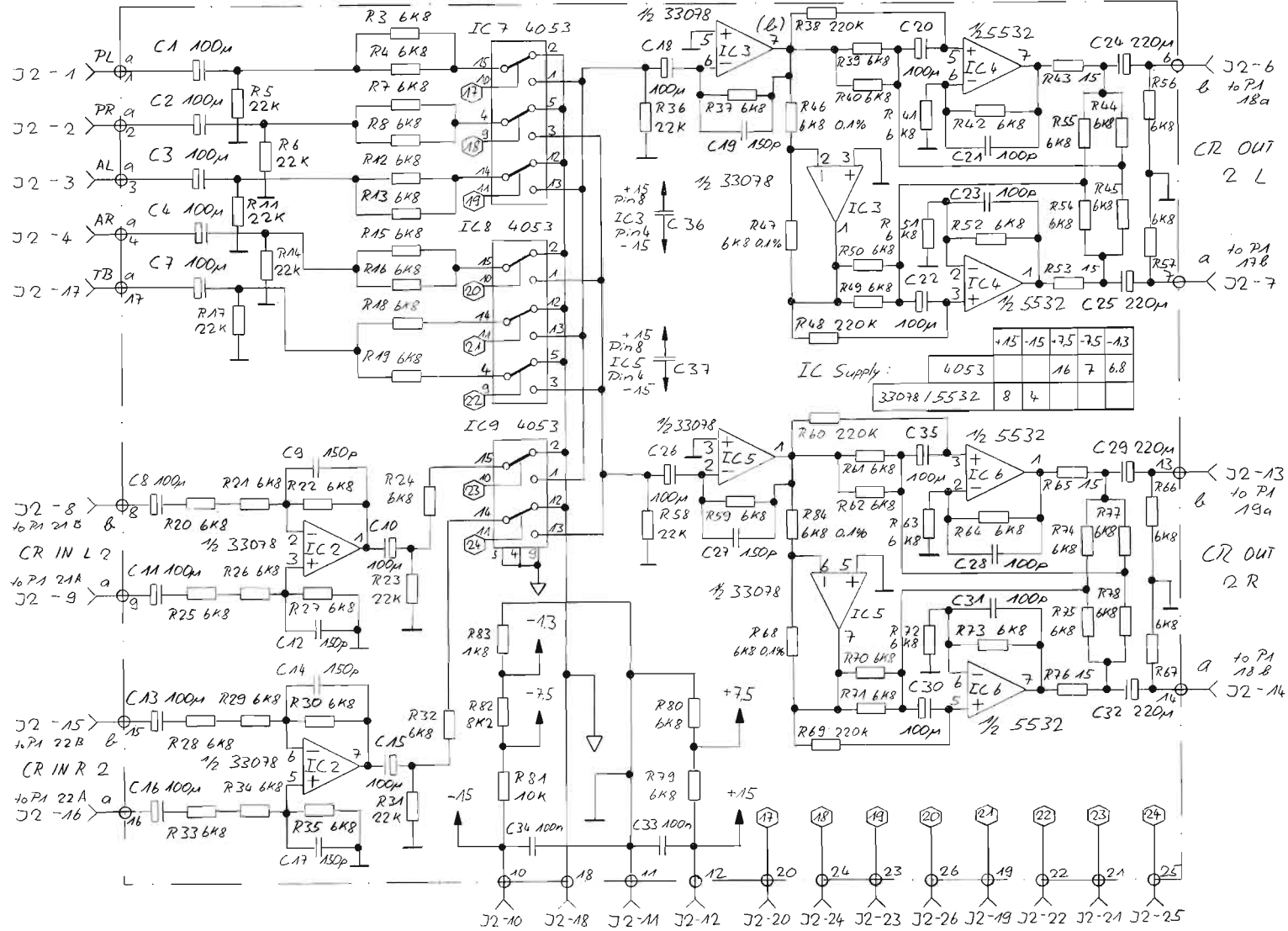
CR/STUDIO MONITOR AMPLIFIER ESE

1.917.310.00

Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
IC....1	50.07.0018	CD4094	shift and store busregister		R....55	57.11.3104	100 kOhm	1% MF	
IC....2	50.07.0018	CD4094	shift and store busregister		R....56	57.11.3913	91 kOhm	1% MF	
IC....3	50.07.0018	CD4094	shift and store busregister		R....57	57.11.3514	510 kOhm	1% MF	
IC....4	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....58	57.11.5335	3.3 MOhm	1% MF	
IC....5	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....59	57.11.2913	91 kOhm	1% MF	
IC....6	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....60	57.11.3514	510 kOhm	1% MF	
IC....7	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....61	57.11.5335	3.3 MOhm	1% MF	
IC....8	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....62	57.11.3104	100 kOhm	1% MF	
IC....9	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....63	57.11.3104	100 kOhm	1% MF	
IC....10	50.09.0117	MC33078	dual op. amp.		R....64	57.11.3104	100 kOhm	1% MF	
IC....11	50.09.0117	MC33078	dual op. amp.		R....65	57.11.3104	100 kOhm	1% MF	
IC....12	50.09.0117	MC33078	dual op. amp.		R....66	57.11.3000	0 Ohm	Bridge	
IC....13	50.09.0117	MC33078	dual op. amp.		R....67	57.11.3000	0 Ohm	Bridge	
IC....14	50.09.0117	MC33078	dual op. amp.		R....68	57.11.3103	10 kOhm	1% MF	
IC....15	50.09.0106	NE5532AN	dual op. amp.		R....69	57.11.3822	8.2 kOhm	1% MF	
IC....16	50.09.0117	MC33078	dual op. amp.		R....70	57.11.3182	1.8 kOhm	1% MF	
IC....17	50.09.0117	MC33078	dual op. amp.		R....71	57.92.7013	500 mA	R - PTC 0.5 Ohm	
IC....18	50.09.0117	MC33078	dual op. amp.		R....72	57.92.7013	500 mA	R - PTC 0.5 Ohm	
K....1	56.04.0195	2*U	RELAIS 6V 2*U		R....73	57.11.3102	1.0 kOhm	1% MF 5V-R Version used only (see R77)	
MP....1	1.917.310.11	1 pcs	PCB		R....74	57.11.3682	6.8 kOhm	1% MF	
MP....2	1.010.006.33	2 pcs	Griffhaelfte		R....75	57.11.3682	6.8 kOhm	1% MF TB AF used only (see R76)	
MP....3	21.01.0280	3 pcs	Z-Schr.,ZN,M2.5*8		R....76	. . . 0	not used	TB PF Version used only 57.11.3133(see R75)	
MP....4	24.16.1025	2 pcs	Rippenscheibe D2.7/5		R....77	. . . 0	not used	5V-PTC Version used only 57.92.1121(see R73)	
MP....5	28.21.1380	1 pcs	Rohrniete,D2.25*6.5		RZ....1	57.88.2682	6.8 kOhm	2% 4*1 network	
MP....6	28.21.1390	1 pcs	Rohrniete,D2.25*7.0		RZ....2	57.88.2682	6.8 kOhm	2% 4*1 network	
MP....7	1.010.096.49	1 pcs	Klarsichtschild		RZ....3	57.88.2682	6.8 kOhm	2% 4*1 network	
MP....8	1.010.090.49	1 pcs	Abschirmung komplett		RZ....4	57.88.2682	6.8 kOhm	2% 4*1 network	
MP....9	21.01.0281	2 pcs	Z-Schr.,ZN,M2.5*10		RZ....5	57.88.2682	6.8 kOhm	2% 4*1 network	
MP....10	24.16.1025	3 pcs	Rippenscheibe D2.7/5		RZ....6	57.88.2104	100 kOhm	2% 4*1 network	
MP....11	1.010.204.27	1 pcs	Mutterbolzen M2.5*25		RZ....7	57.88.2104	100 kOhm	2% 4*1 network	
MP....12	53.03.0166	9 pcs	IC-Socket, 8-pin		RZ....8	57.88.2104	100 kOhm	2% 4*1 network	
MP....13	53.03.0168	9 pcs	IC-Socket,16-pin		RZ....9	57.88.2104	100 kOhm	2% 4*1 network	
MP....14	1.917.142.01	1 pcs	Halter		RZ....10	57.88.2104	100 kOhm	2% 4*1 network	
MP....15	43.01.0108	1 pcs	ESE-Schild		RZ....11	57.88.2104	100 kOhm	2% 4*1 network	
MP....16	1.917.310.01	1 pcs	Bezeichnungsstreifen 6.3*91		RZ....12	57.88.4104	100 kOhm	2% 8*1 network	
MP....17					RZ....13	57.88.4104	100 kOhm	2% 8*1 network	
MP....18					RZ....14	57.88.4104	100 kOhm	2% 8*1 network	
MP....19					RZ....15	57.88.2101	100 Ohm	2% 4*1 network	
MP....20									
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MP....49									
MP....50									
MP....51									
MP....52									
MP....53									
MP....54									
Q....1	50.03.0436	BC 237	UNI NPN 100 mA		05 T....1	1.022.363.81		Line Output-Trafo	
P....1	54.11.2004	2*32 pin	eurocard-connector		05 T....2	1.022.363.81		Line Output-Trafo	
P....2	54.14.2003	26 pin	PCB ribbon connector						
R....1	57.11.3682	6.8 kOhm	1% MF						
R....2	57.11.3682	6.8 kOhm	1% MF						
R....3	57.11.3223	22 kOhm	1% MF						
R....4	57.11.3682	6.8 kOhm	1% MF						
R....5	57.11.3682	6.8 kOhm	1% MF						
R....6	57.11.3223	22 kOhm	1% MF						
R....7	57.11.3223	22 kOhm	1% MF						
R....8	57.11.3682	6.8 kOhm	1% MF						
R....9	57.11.3302	3.0 kOhm	1% MF						
R....10	57.11.3103	10 kOhm	1% MF						
R....11	57.11.3333	33 kOhm	1% MF						
R....12	57.11.3103	10 kOhm	1% MF						
R....13	57.11.3472	4.7 kOhm	1% MF						
R....14	57.11.3684	680 kOhm	1% MF						
R....15	58.01.9104	100 kOhm	trimpot						
R....16	57.11.3184	180 kOhm	1% MF						
R....17	57.11.3302	3.0 kOhm	1% MF						
R....18	57.11.3182	1.8 kOhm	1% MF						
R....19	57.11.3223	22 kOhm	1% MF						
R....20	57.11.3822	8.2 kOhm	1% MF						
R....21	57.11.3682	6.8 kOhm	1% MF						
R....22	57.11.3682	6.8 kOhm	1% MF						
R....23	57.11.3223	22 kOhm	1% MF						
R....24	57.11.3103	10 kOhm	1% MF						
R....25	57.11.3222	2.2 kOhm	1% MF						
R....26	57.11.3102	1.0 kOhm	1% MF						
R....27	57.11.3682	6.8 kOhm	1% MF						
R....28	57.11.3682	6.8 kOhm	1% MF						
R....29	57.11.3682	6.8 kOhm	1% MF						
R....30	57.11.3223	22 kOhm	1% MF						
R....31	57.11.3223	22 kOhm	1% MF						
R....32	57.11.3682	6.8 kOhm	1% MF						
R....33	57.11.3302	3.0 kOhm	1% MF						
R....34	57.11.3103	10 kOhm	1% MF						
R....35	57.11.3333	33 kOhm	1% MF						
R....36	57.11.3103	10 kOhm	1% MF						
R....37	57.11.3472	4.7 kOhm	1% MF						
R....38	57.11.3684	680 kOhm	1% MF						
R....39	58.01.9104	100 kOhm	trimpot						
R....40	57.11.3184	180 kOhm	1% MF						
R....41	57.11.3302	3.0 kOhm	1% MF						
R....42	57.11.3182	1.8 kOhm	1% MF						
R....43	57.11.3223	22 kOhm	1% MF						
R....44	57.11.3223	22 kOhm	1% MF						
R....45	57.11.3822	8.2 kOhm	1% MF						
R....46	57.11.3682	6.8 kOhm	1% MF						
R....47	57.11.3682	6.8 kOhm	1% MF						
R....48	57.11.3223	22 kOhm	1% MF						
R....49	57.11.3103	10 kOhm	1% MF						
R....50	57.11.3222	2.2 kOhm	1% MF						
R....51	57.11.3102	1 kOhm	1% MF						
R....52	57.11.3103	10 kOhm	1% MF						
R....53	57.11.3104	100 kOhm	1% MF						
R....54	57.11.3103	10 kOhm	1% MF						

SUBCARD FOR CR/STUDIO MON

1.917.311.00



PAGE 1 OF 1

1 917 311 00

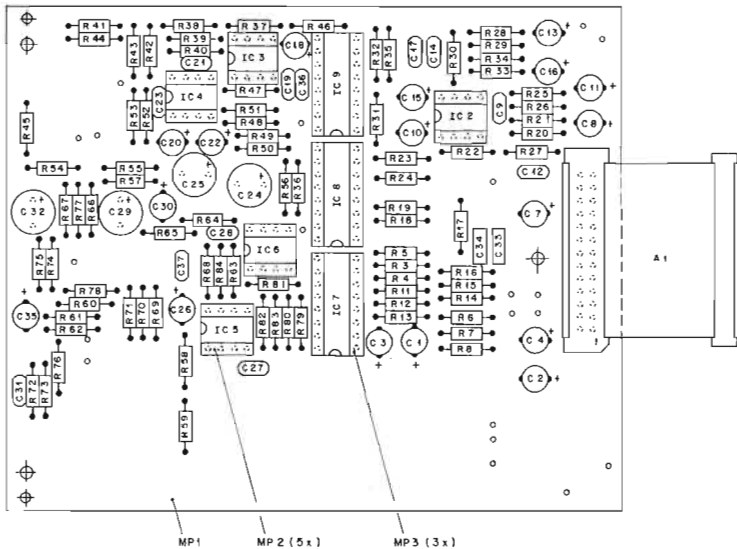
SUBCARD FOR CR/STUDIO MON

STUDER

10.490 d. Schmid

SUBCARD FOR CR/STUDIO MON

1.917.311.00



①	②	③	④	⑤
⑥	⑦	⑧	⑨	⑩
⑪	⑫	⑬	⑭	⑮
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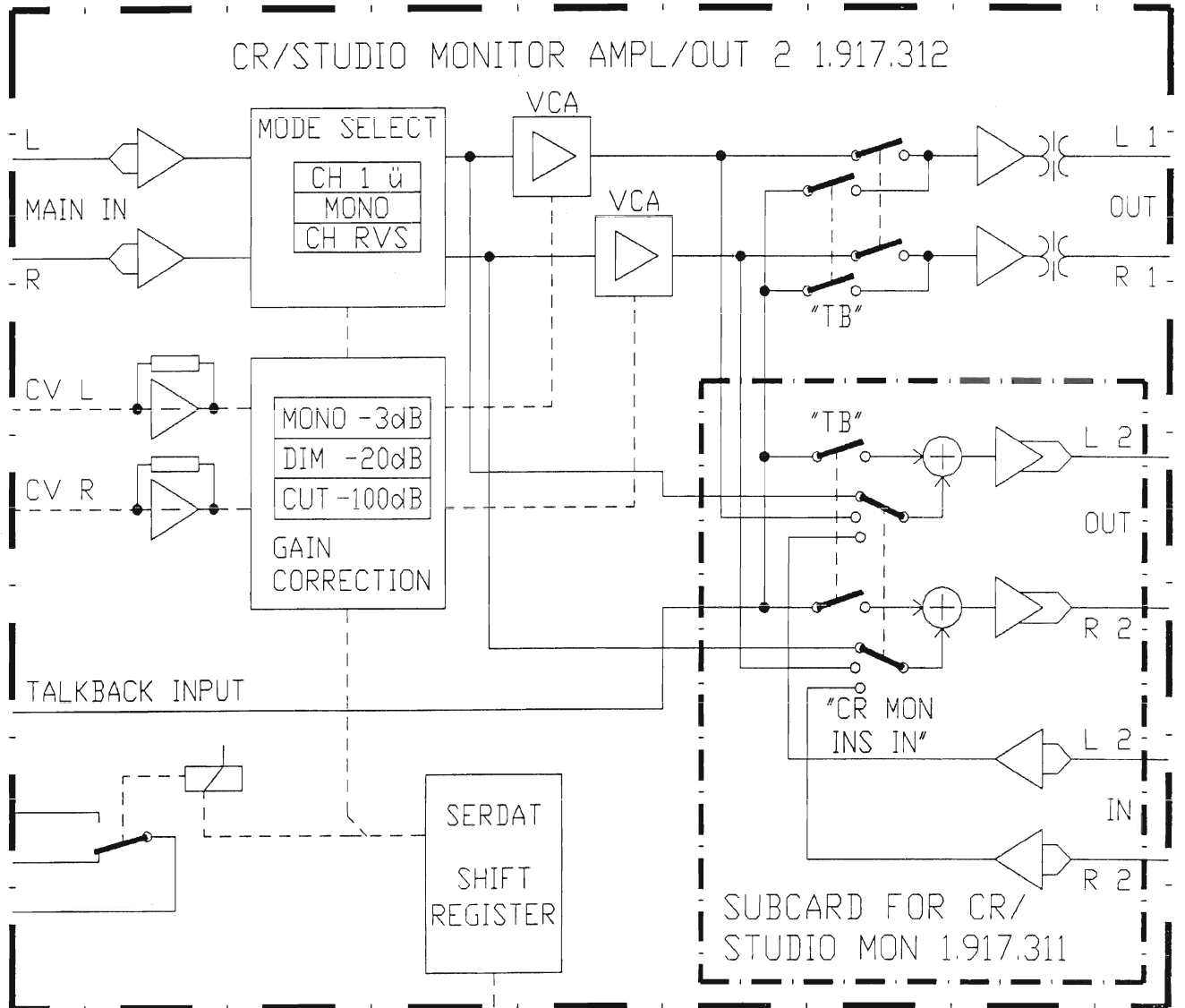
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Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
A	....1	1.023.312.01	Flachtafel 26 Pol	ST	R	...51	57.11.3682	6.8 kOhm	1% MF
C	....1	59.22.3101	100 uF EL 10V		R	...52	57.11.3682	6.8 kOhm	1% MF
C	....2	59.22.3101	100 uF EL 10V		R	...53	57.11.3150	15 Ohm	1% MF
C	....3	59.22.3101	100 uF EL 10V		R	...54	57.11.3682	6.8 kOhm	1% MF
C	....4	59.22.3101	100 uF EL 10V		R	...55	57.11.3682	6.8 kOhm	1% MF
C	....5	59.22.3101	100 uF EL 10V		R	...56	57.11.3682	6.8 kOhm	1% MF
C	....6	59.22.3101	100 uF EL 10V		R	...57	57.11.3682	6.8 kOhm	1% MF
C	....7	59.22.3101	100 uF EL 10V		R	...58	57.11.3223	22 kOhm	1% MF
C	....8	59.22.3101	100 uF EL 10V		R	...59	57.11.3682	6.8 kOhm	1% MF
C	....9	59.34.7151	150 pF CE 63V 2V		R	...60	57.11.3224	220 kOhm	1% MF
C	....10	59.22.3101	100 uF EL 10V		R	...61	57.11.3682	6.8 kOhm	1% MF
C	....11	59.22.3101	100 uF EL 10V		R	...62	57.11.3682	6.8 kOhm	1% MF
C	....12	59.34.7151	150 pF CE 63V 2V		R	...63	57.11.3682	6.8 kOhm	1% MF
C	....13	59.22.3101	100 uF EL 10V		R	...64	57.11.3682	6.8 kOhm	1% MF
C	....14	59.34.7151	150 pF CE 63V 2V		R	...65	57.11.3150	15 Ohm	1% MF
C	....15	59.22.3101	100 uF EL 10V		R	...66	57.11.3682	6.8 kOhm	1% MF
C	....16	59.22.3101	100 uF EL 10V		R	...67	57.11.3682	6.8 kOhm	1% MF
C	....17	59.34.7151	150 pF CE 63V 2V		R	...68	57.99.0250	6.8 kOhm	0.1% MF
C	....18	59.22.3101	100 uF EL 10V		R	...69	57.11.3224	220 kOhm	1% MF
C	....19	59.34.7151	150 pF CE 63V 2V		R	...70	57.11.3682	6.8 kOhm	1% MF
C	....20	59.22.3101	100 uF EL 10V		R	...71	57.11.3682	6.8 kOhm	1% MF
C	....21	59.34.4101	100 pF CE 63V 2V		R	...72	57.11.3682	6.8 kOhm	1% MF
C	....22	59.22.3101	100 uF EL 10V		R	...73	57.11.3682	6.8 kOhm	1% MF
C	....23	59.34.4101	100 pF CE 63V 2V		R	...74	57.11.3682	6.8 kOhm	1% MF
C	....24	59.22.4221	220 uF EL 16V		R	...75	57.11.3682	6.8 kOhm	1% MF
C	....25	59.22.4221	220 uF EL 16V		R	...76	57.11.3150	15 Ohm	1% MF
C	....26	59.22.3101	100 uF EL 10V		R	...77	57.11.3682	6.8 kOhm	1% MF
C	....27	59.34.7151	150 pF CE 63V 2V		R	...78	57.11.3682	6.8 kOhm	1% MF
C	....28	59.34.4101	100 pF CE 63V 2V		R	...79	57.11.3682	6.8 kOhm	1% MF
C	....29	59.22.4221	220 uF EL 16V		R	...80	57.11.3682	6.8 kOhm	1% MF
C	....30	59.22.3101	100 uF EL 10V		R	...81	57.11.3103	10 kOhm	1% MF
C	....31	59.34.4101	100 pF CE 63V 2V		R	...82	57.11.3822	8.2 kOhm	1% MF
C	....32	59.22.4221	220 uF EL 16V		R	...83	57.11.3182	1.8 kOhm	1% MF
C	....33	59.06.0104	100 nF PE 63V		R	...84	57.99.0250	6.8 kOhm	0.1% MF
C	....34	59.06.0104	100 nF PE 63V		R	...85	0	not used	
C	....35	59.22.3101	100 uF EL 10V		R	...86	0	not used	
C	....36	59.06.0103	10 nF PE 63V						
C	....37	59.06.0103	10 nF PE 63V						
IC	...2	50.09.0117	MC33078 dual op. amp.						
IC	...3	50.09.0117	MC33078 dual op. amp.						
IC	...4	50.09.0105	NE55328 dual op. amp.						
IC	...5	50.09.0117	MC33078 dual op. amp.						
IC	...6	50.09.0105	NE55328 dual op. amp.						
IC	...7	50.07.0015	CD4053 triple 2 ch. analog mux/demux						
IC	...8	50.07.0015	CD4053 triple 2 ch. analog mux/demux						
IC	...9	50.07.0015	CD4053 triple 2 ch. analog mux/demux						
MP	...1	1.917.311.11	1 pcs SUB-PCB for CR/Studio Monitor						
MP	...2	53.03.0166	5 pcs IC-Socket 8-pin						
MP	...3	53.03.0168	3 pcs IC-Socket 16-pin						
MP	...4	43.01.0108	1 pcs ESE-Schild						
MP	...5	1.917.311.04	1 pcs Mr-Etikette 5*20						
R	...3	57.11.3682	6.8 kOhm	1% MF					
R	...4	57.11.3682	6.8 kOhm	1% MF					
R	...5	57.11.3223	22 kOhm	1% MF					
R	...6	57.11.3223	22 kOhm	1% MF					
R	...7	57.11.3682	6.8 kOhm	1% MF					
R	...8	57.11.3682	6.8 kOhm	1% MF					
R	...11	57.11.3223	22 kOhm	1% MF					
R	...12	57.11.3682	6.8 kOhm	1% MF					
R	...13	57.11.3682	6.8 kOhm	1% MF					
R	...14	57.11.3223	22 kOhm	1% MF					
R	...15	57.11.3682	6.8 kOhm	1% MF					
R	...16	57.11.3682	6.8 kOhm	1% MF					
R	...17	57.11.3223	22 kOhm	1% MF					
R	...18	57.11.3682	6.8 kOhm	1% MF					
R	...19	57.11.3682	6.8 kOhm	1% MF					
R	...20	57.11.3682	6.8 kOhm	1% MF					
R	...21	57.11.3682	6.8 kOhm	1% MF					
R	...22	57.11.3682	6.8 kOhm	1% MF					
R	...23	57.11.3223	22 kOhm	1% MF					
R	...24	57.11.3682	6.8 kOhm	1% MF					
R	...25	57.11.3682	6.8 kOhm	1% MF					
R	...26	57.11.3682	6.8 kOhm	1% MF					
R	...27	57.11.3682	6.8 kOhm	1% MF					
R	...28	57.11.3682	6.8 kOhm	1% MF					
R	...29	57.11.3682	6.8 kOhm	1% MF					
R	...30	57.11.3682	6.8 kOhm	1% MF					
R	...31	57.11.3223	22 kOhm	1% MF					
R	...32	57.11.3682	6.8 kOhm	1% MF					
R	...33	57.11.3682	6.8 kOhm	1% MF					
R	...34	57.11.3682	6.8 kOhm	1% MF					
R	...35	57.11.3682	6.8 kOhm	1% MF					
R	...36	57.11.3223	22 kOhm	1% MF					
R	...37	57.11.3682	6.8 kOhm	1% MF					
R	...38	57.11.3224	220 kOhm	1% MF					
R	...39	57.11.3682	6.8 kOhm	1% MF					
R	...40	57.11.3682	6.8 kOhm	1% MF					
R	...41	57.11.3682	6.8 kOhm	1% MF					
R	...42	57.11.3682	6.8 kOhm	1% MF					
R	...43	57.11.3150	15 Ohm	1% MF					
R	...44	57.11.3682	6.8 kOhm	1% MF					
R	...45	57.11.3682	6.8 kOhm	1% MF					
R	...46	57.99.0250	6.8 kOhm	0.1% MF					
R	...47	57.99.0250	6.8 kOhm	0.1% MF					
R	...48	57.11.3224	220 kOhm	1% MF					
R	...49	57.11.3682	6.8 kOhm	1% MF					
R	...50	57.11.3682	6.8 kOhm	1% MF					

CER-Ceramic, PE-Polyester
MF-Metal Film, PMG-Cermet
MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon, Sig=Signetics, St=Studer.
1.917.311.00 SUBCARD FOR C.R./STUDIO MON. SCAB8/10/1000

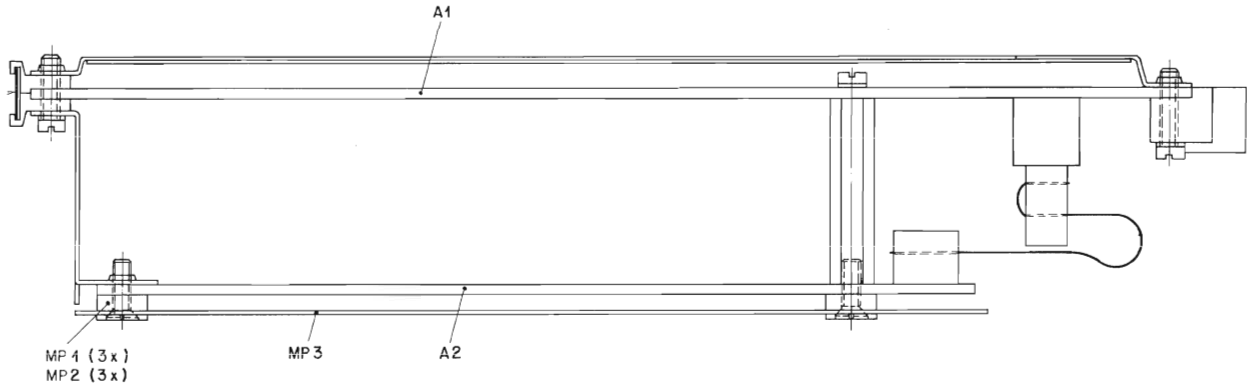
END

CR / STUDIO MONITOR AMPLIFIER / OUT 1.917.312.00



CR / STUDIO MONITOR AMPLIFIER / OUT 2

1.917.312.00



Ausgabe	30.1.90	A/S	Vf	SCA	①
	Datum	Gez	Gepr	Ges	Index
	Kopie für:				
	Nummer: 1.917.312 - 00				

STUDER REGENSDORF ZÜRICH	Benennung: C.R./STUDIO MONITOR AMPL./ OUT 2	Nummer: 1.917.312 - 00
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Ad ..POS.. ..REF.No... DESCRIPTION.....MANUFACTURER

A....1	1.917.310.00			CR/STUDIO MONITOR AMP. ,A
A....2	1.917.311.00			SUBCARD FOR CR/STUDIO MON. ,A
01 MP....1	21.01.2279	3 pcs		S-SCHR. ,ZN,M2.5*6
MP....1	21.01.2280	3 pcs		S-SCHR. ,ZN,M2.5*8
MP....2	1.917.142.02	3 pcs		Isolierhülse
MP....3	1.917.142.03	1 pcs		Isolation
MP....4	1.917.312.01	1 pcs		Bezeichnungstreifen 6,3 * 91

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

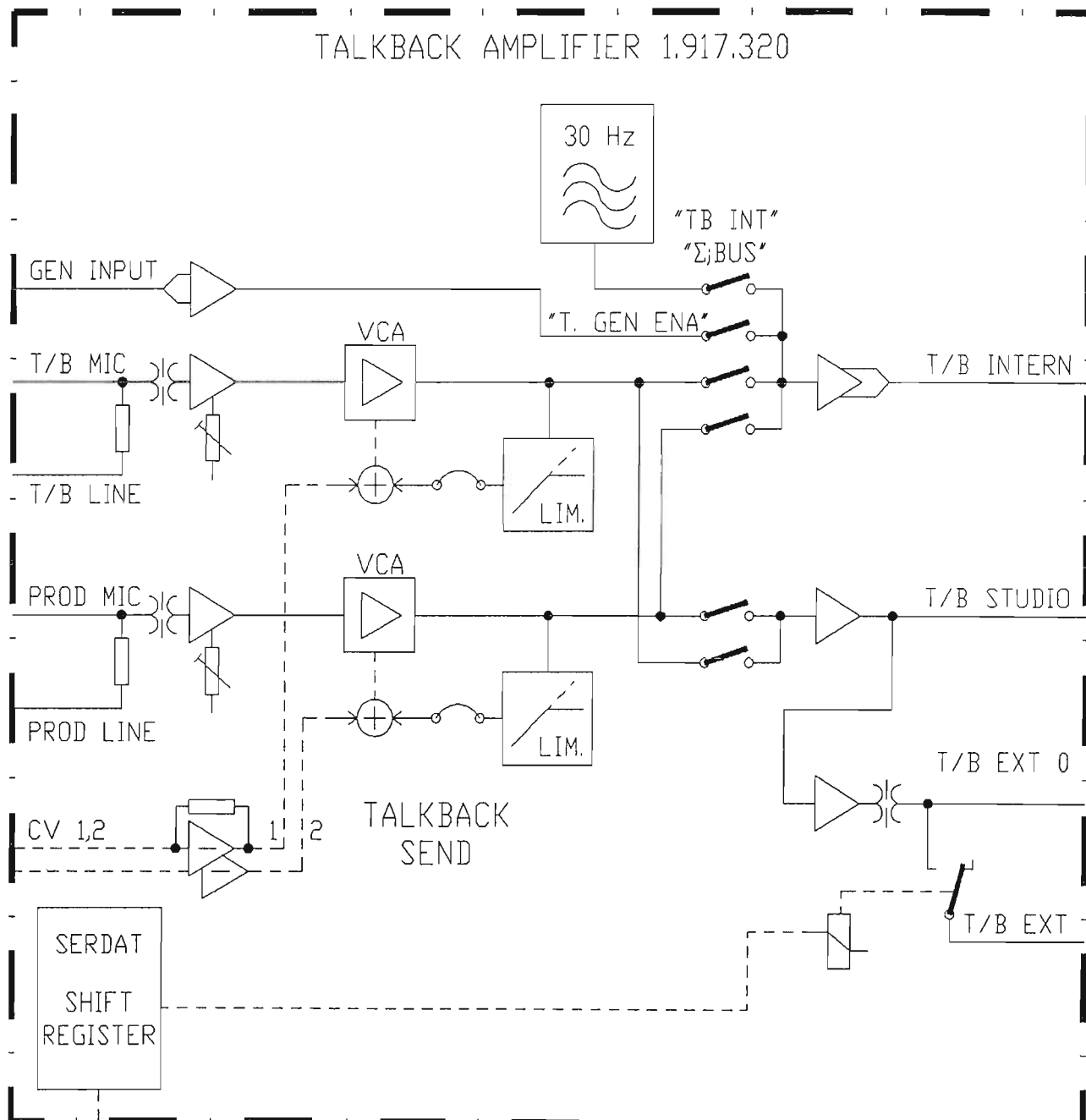
CER=Ceramic, PE=Polyester
 MF=Metal Film, PMG=Cermet

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

1.917.312.00 CR/STUDIO-MONITOR AMPL/OUT 2 SCA90/08/0100

1.917.312.00 CR/STUDIO-MONITOR AMPL/OUT 2 SCA90/03/0101

TALKBACK AMPLIFIER 1.917.320.00



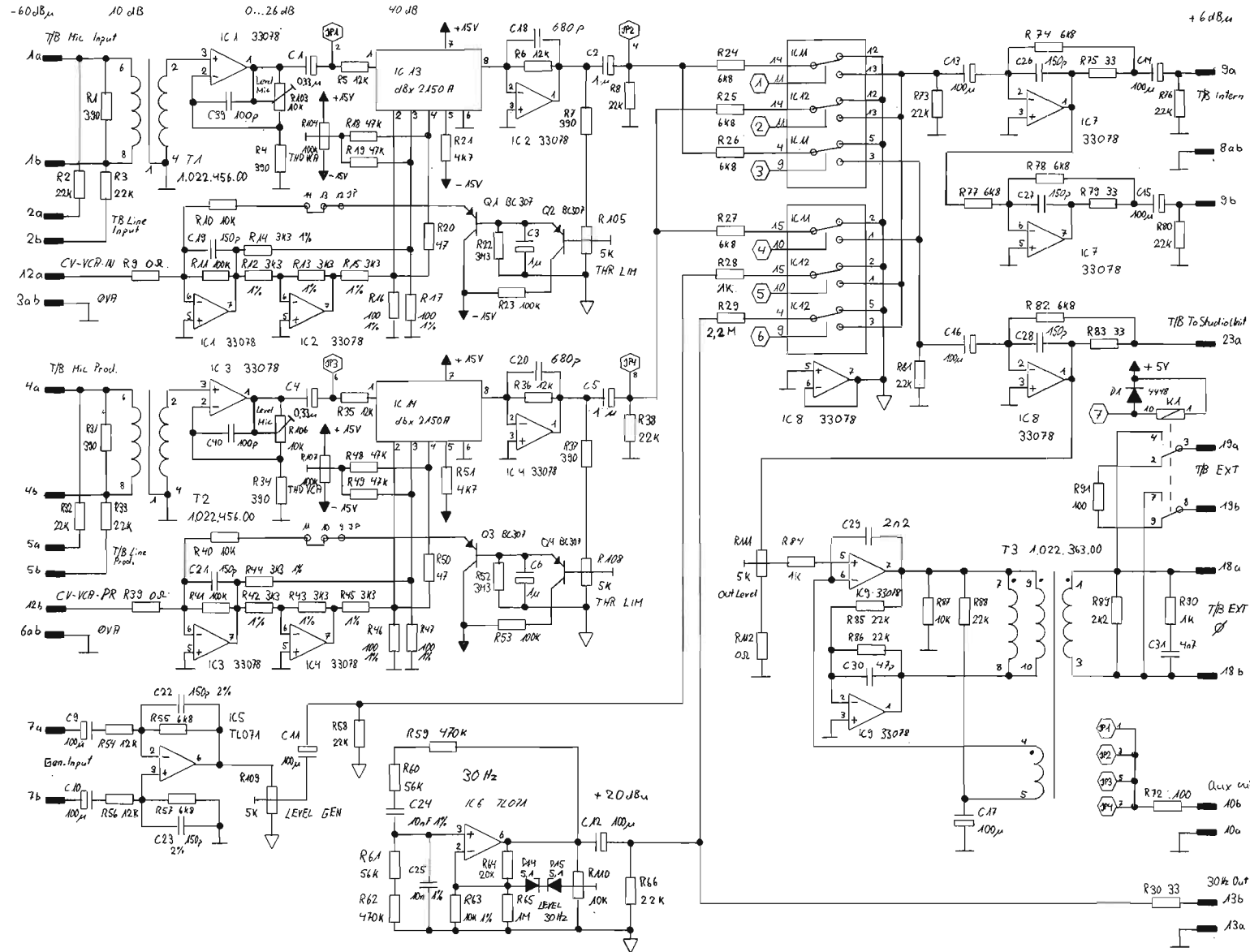
Pin location list

1.917.320

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

TALKBACK AMPLIFIER

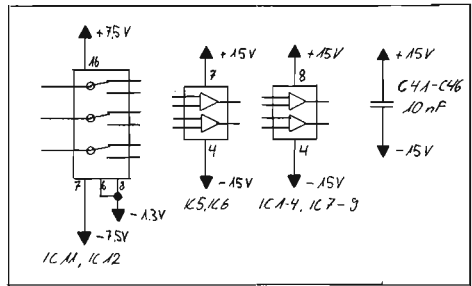
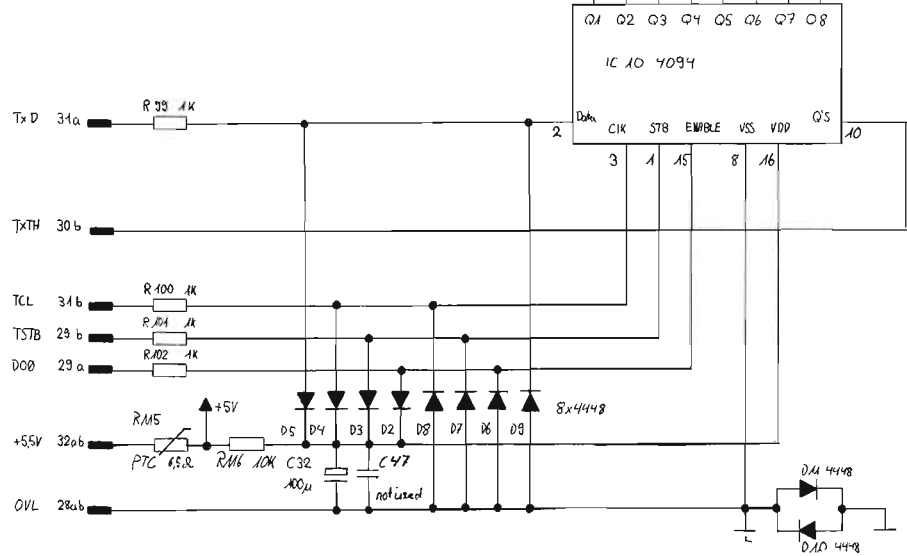
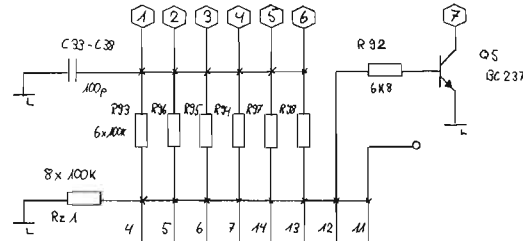
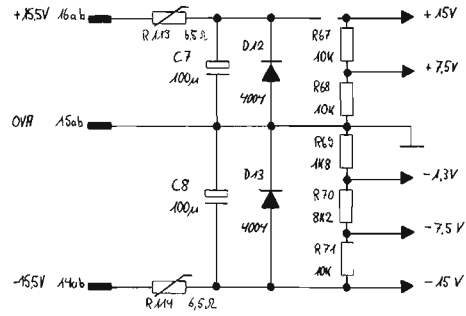
1.917.320.00



STUDER
TALK BACK AMPLIFIER
PAGE 1 OF 2
1.917.320.00
① 12.06.89 Emi
② 07.02.92 Emi

TALKBACK AMPLIFIER ESE

1.917.320.00



0 12,06,89 Emi	1 05,11,80 Emi	2 07,02,92 Emi	PAGE 2 OF 2
STUDER			1.917.320.00
TALKBACK AMPLIFIER			

TALKBACK AMPLIFIER

1.917.320.00

