

PR99 LSM2

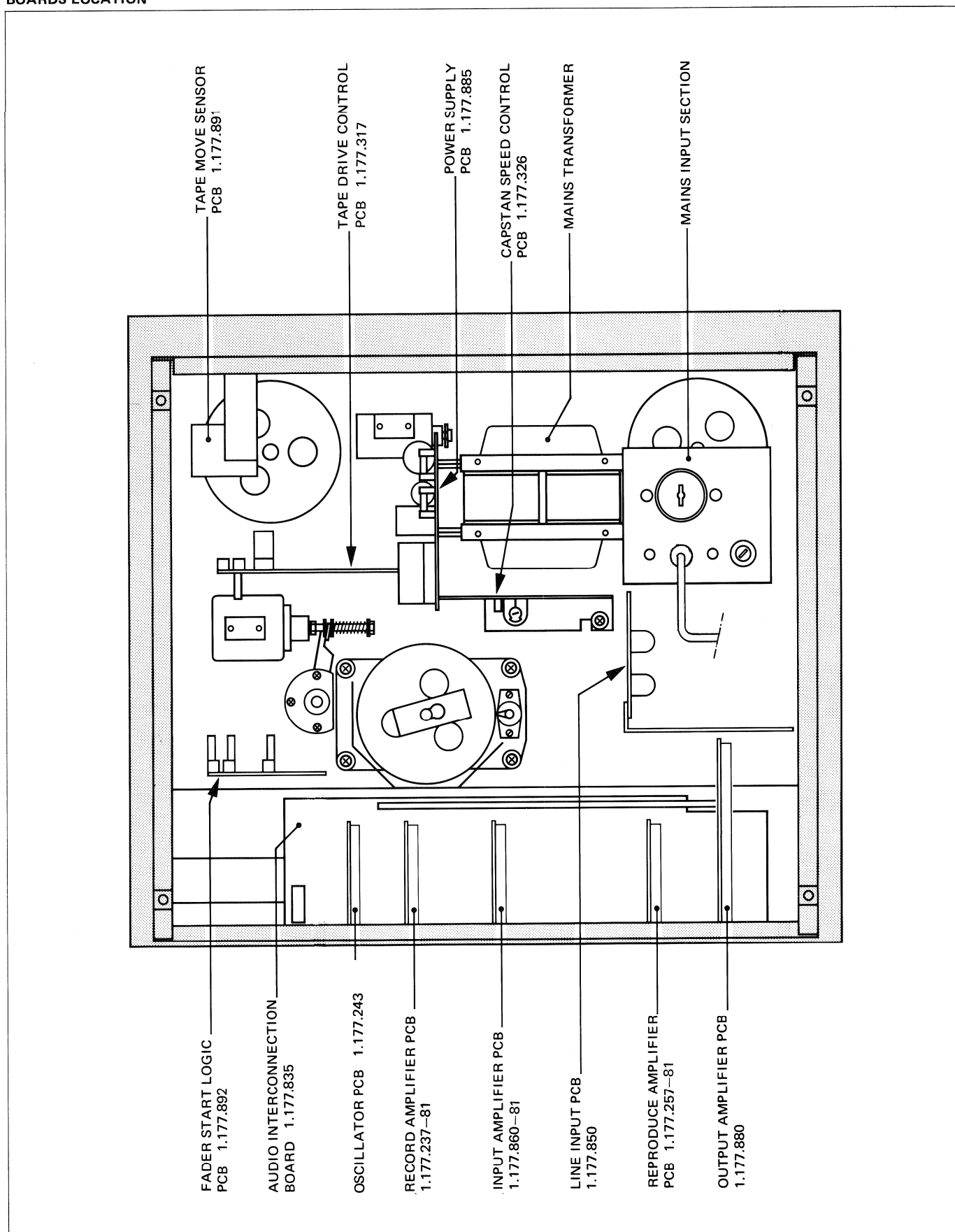
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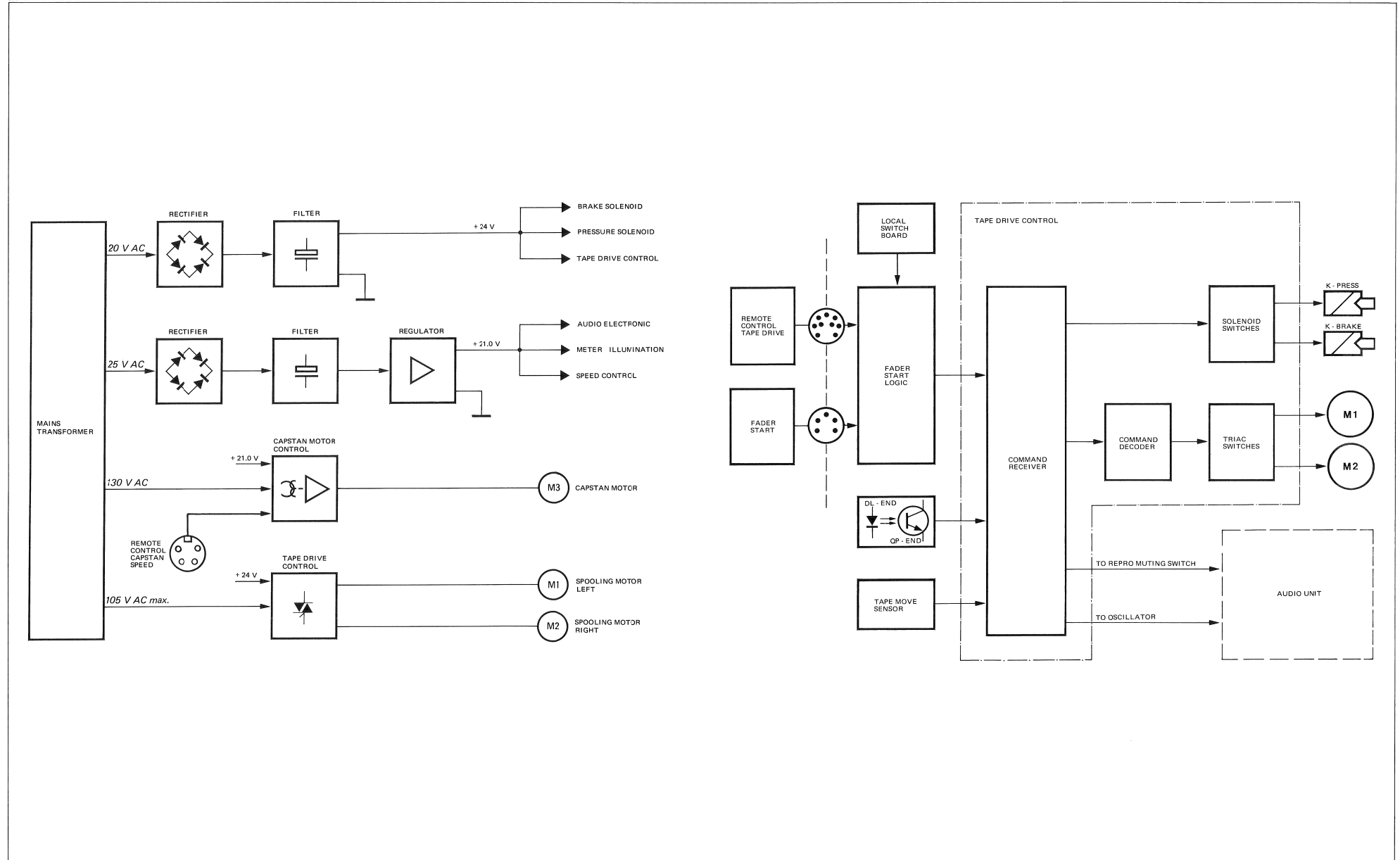
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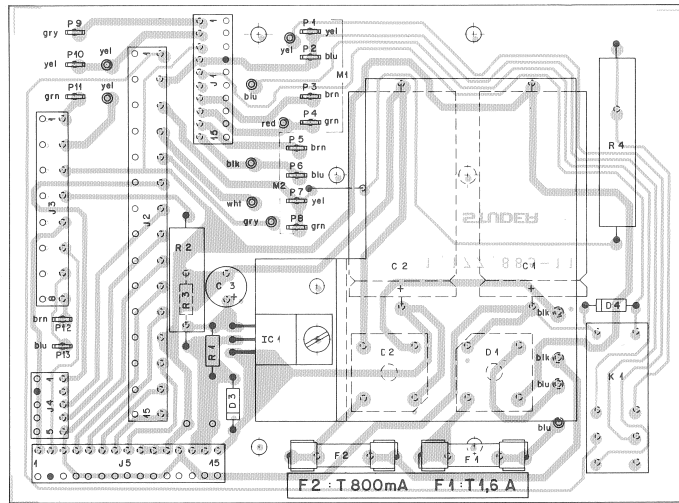
BOARDS LOCATION



BLOCKDIAGRAM / POWER SUPPLY AND TAPE DRIVE CONTROL



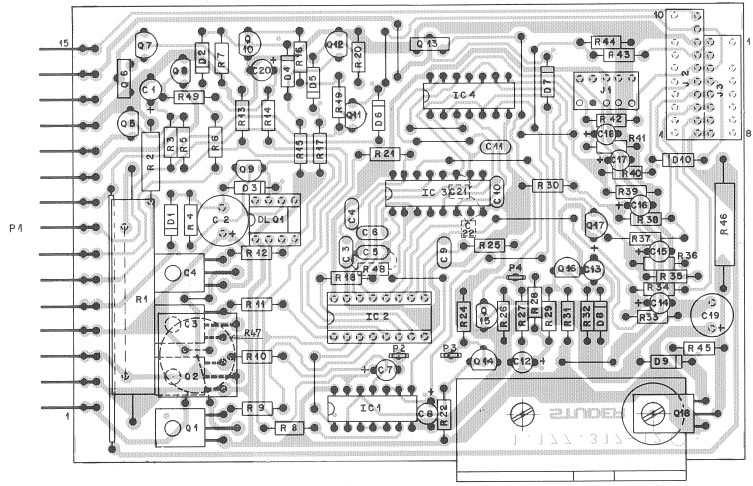
POWER SUPPLY PCB 1.177.885



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
C 1	59.25.5222	2200µF	-10% 35V EL	
C 2	59.25.5221	2200µF	-10% 35V EL	
C 3	59.25.5490	47µF	-10% 35V EL	
D 1	70.01.0230	35V 12A	Bridge Rect. SI	
D 2	70.01.0230	35V 12A	Bridge Rect. SI	
D 3	50.04.0121	1N4001	SI	
D 4	50.04.0121	1N4001	SI	
F 1	51.01.0119	1.6AT	5X20 Slow Blow	
F 2	51.01.0116	800mA T	5X20 Slow Blow	
IC 1	50.10.0104	LM317T	V Reg	
J 1	54.01.0290	10-Pol	Socket Strip	
J 2	54.01.0535	15-Pol	"	
J 3	54.01.0546	8-Pol	"	
J 4	54.01.0288	5-Pol	"	
J 5	54.01.0219	15-Pol	"	
K 1	56.01.0116	24V	Relais	
P1...13	54.02.0320	2,8X0,8	AMP Flat Pin	
R 1	57.38.3010	20Ω	1% 0,25W	
R 2	57.56.5220	22	10% 4W	
R 3	57.11.4672	47K	5% 0,33W	
R 4	59.59.4122	12K	5% 7W	

STUDER	Power Supply	IND. DATE	NAME	PAGE
		1.177.885.00		1 of 1

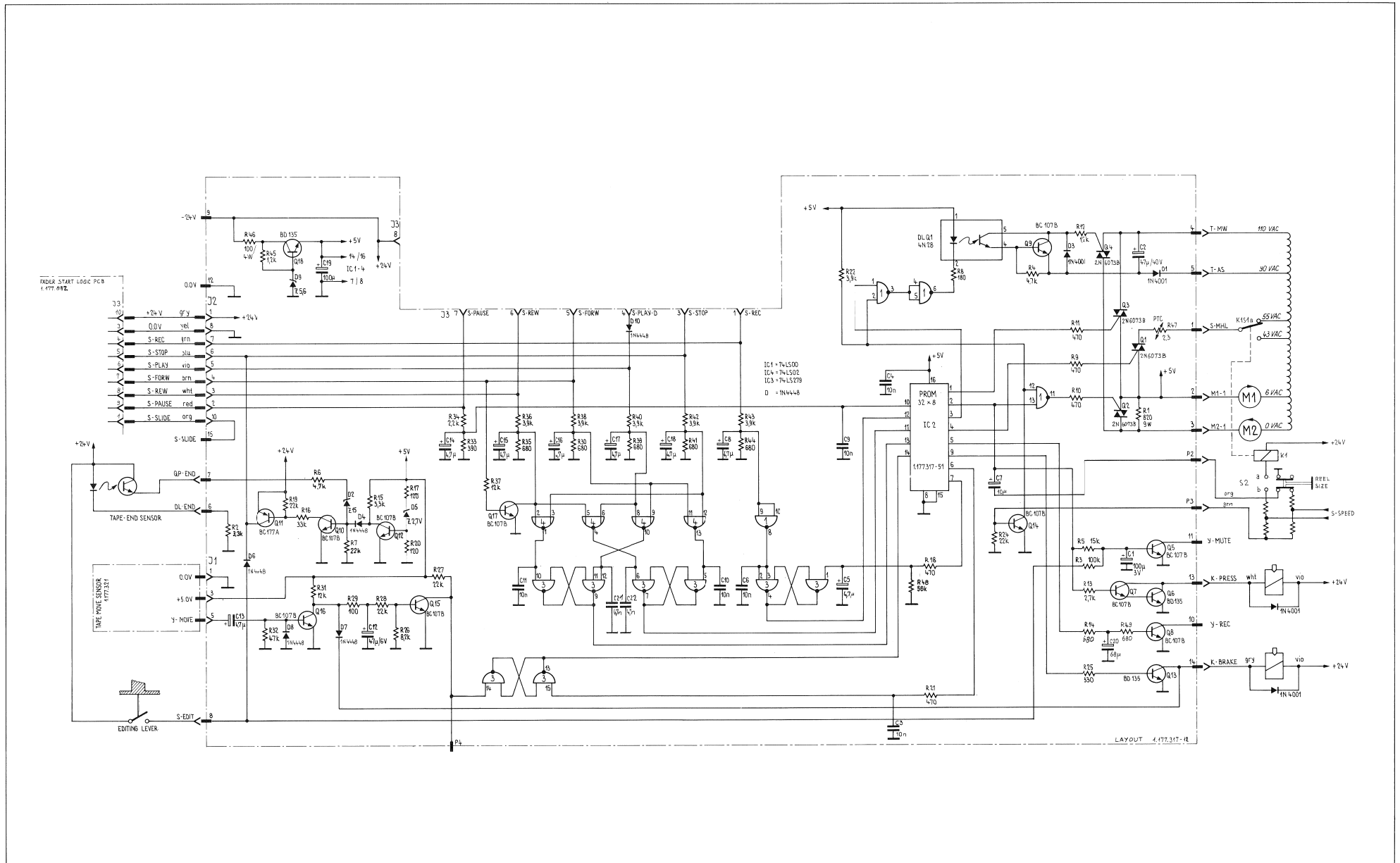
TAPE DRIVE CONTROL PCB 1.177.317



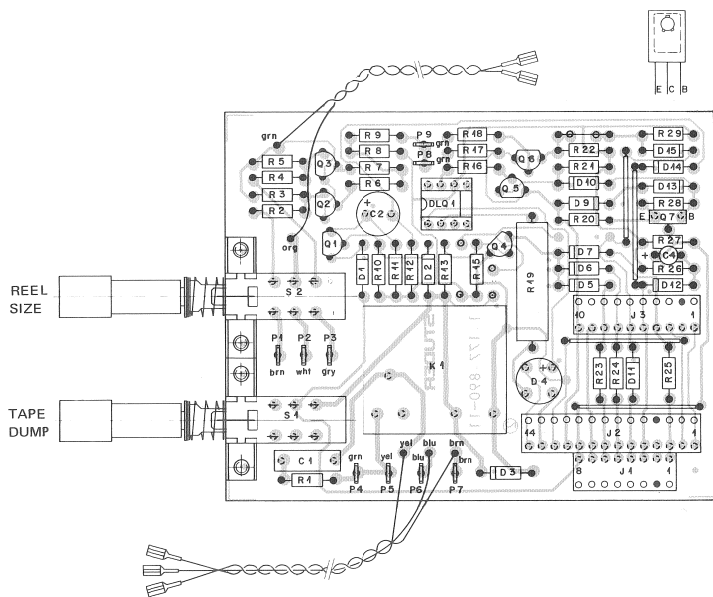
INC.	PQS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.	INC.	PQS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.	
C	1	59.22-3101	100 uF	10% 10V EI		R	4	57.11.4472	4.7 kOhm	5% 0.25W CF		
C	2	59.22-8670	47 uF	10% 40V Cer		R	5	57.11.4223	22 kOhm	5% 0.25W CF		
C	3	59.32-3103	10 nF	20% 40V Cer		R	6	57.11.4392	100 Ohm	5% 0.25W CF		
C	4	59.32-3103	10 nF	20% 40V Cer		R	7	57.11.4471	470 Ohm	5% 0.5 W CF		
C	5	59.22-8679	4.7 uF	10% 50V EI		R	8	57.11.4471	470 Ohm	5% 0.25W CF		
C	6	59.32-3103	10 nF	20% 40V Cer		R	9	57.11.4222	1.2 kOhm	5% 0.25W CF		
C	7	59.22-6.00	10 uF	10% 35V EI		R	10	57.11.4272	2.7 kOhm	5% 0.25W CF		
C	8	59.22-8679	4.7 uF	10% 50V EI		R	11	57.11.4681	680 Ohm	5% 0.25W CF		
C	9	59.32-3103	10 nF	20% 40V Cer		R	12	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	10	59.32-3103	10 nF	20% 40V Cer		R	13	57.11.4333	3.3 kOhm	5% 0.25W CF		
C	11	59.22-8679	4.7 uF	10% 50V EI		R	14	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	12	59.22-8679	4.7 uF	10% 50V EI		R	15	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	13	59.22-8679	4.7 uF	10% 50V EI		R	16	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	14	59.22-8679	4.7 uF	10% 50V EI		R	17	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	15	59.22-8679	4.7 uF	10% 50V EI		R	18	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	16	59.22-8679	4.7 uF	10% 50V EI		R	19	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	17	59.22-8679	4.7 uF	10% 50V EI		R	20	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	18	59.22-8679	4.7 uF	10% 50V EI		R	21	57.11.4332	3.3 kOhm	5% 0.25W CF		
C	19	59.22-3.01	100 uF	10% 10V EI		R	22	57.11.4392	3.9 kOhm	5% 0.25W CF		
C	20	59.04-0680	68 uF	20% 50V Cer		R	23	57.11.4392	3.9 kOhm	5% 0.25W CF		
(05)	C	21	59.32-3472	4700 pF	20% 40V Cer		R	24	57.11.4392	3.9 kOhm	5% 0.25W CF	
(05)	C	22	59.32-3472	4700 pF	20% 40V Cer		R	25	57.11.4392	3.9 kOhm	5% 0.25W CF	
D	1	50.04-0122	1 N 4001	any		R	26	57.11.4223	22 kOhm	5% 0.25W CF		
D	2	50.04-0122	1 N 4001	any		R	27	57.11.4223	22 kOhm	5% 0.25W CF		
D	3	50.04-0122	1 N 4001	5% 15V any		R	28	57.11.4223	22 kOhm	5% 0.25W CF		
D	4	50.04-0125	1 N 4448	any		R	29	57.11.4223	22 kOhm	5% 0.25W CF		
D	5	50.04-0106	2 247	5% 2.7V any		R	30	57.11.4223	22 kOhm	5% 0.25W CF		
D	6	50.04-0125	1 N 4448	any		R	31	57.11.4392	3.9 kOhm	5% 0.25W CF		
D	7	50.04-0125	1 N 4448	any		R	32	57.11.4392	3.9 kOhm	5% 0.25W CF		
D	8	50.04-0125	1 N 4448	any		R	33	57.11.4392	3.9 kOhm	5% 0.25W CF		
D	9	50.04-0125	1 N 4448	5% 5.0V any		R	34	57.11.4392	3.9 kOhm	5% 0.25W CF		
D	10	50.04-0125	1 N 4448	any		R	35	57.11.4392	3.9 kOhm	5% 0.25W CF		
DL	1	50.09-0126	4 N 28	1/11 = min.10%	0.11	R	36	57.11.4392	3.9 kOhm	5% 0.25W CF		
IC	1	50.06-0900	5M74LS00	LS-TTL any		R	37	57.11.4392	3.9 kOhm	5% 0.25W CF		

INC.	PQS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.	INC.	PQS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R	1	57.11.4390	3.9 kOhm	5% 0.25W CF		R	38	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	2	57.11.4392	3.9 kOhm	5% 0.25W CF		R	39	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	3	57.11.4392	3.9 kOhm	5% 0.25W CF		R	40	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	4	57.11.4392	3.9 kOhm	5% 0.25W CF		R	41	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	5	57.11.4392	3.9 kOhm	5% 0.25W CF		R	42	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	6	57.11.4392	3.9 kOhm	5% 0.25W CF		R	43	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	7	57.11.4392	3.9 kOhm	5% 0.25W CF		R	44	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	8	57.11.4392	3.9 kOhm	5% 0.25W CF		R	45	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	9	57.11.4392	3.9 kOhm	5% 0.25W CF		R	46	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	10	57.11.4392	3.9 kOhm	5% 0.25W CF		R	47	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	11	57.11.4392	3.9 kOhm	5% 0.25W CF		R	48	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	12	57.11.4392	3.9 kOhm	5% 0.25W CF		R	49	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	13	57.11.4392	3.9 kOhm	5% 0.25W CF		R	50	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	14	57.11.4392	3.9 kOhm	5% 0.25W CF		R	51	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	15	57.11.4392	3.9 kOhm	5% 0.25W CF		R	52	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	16	57.11.4392	3.9 kOhm	5% 0.25W CF		R	53	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	17	57.11.4392	3.9 kOhm	5% 0.25W CF		R	54	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	18	57.11.4392	3.9 kOhm	5% 0.25W CF		R	55	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	19	57.11.4392	3.9 kOhm	5% 0.25W CF		R	56	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	20	57.11.4392	3.9 kOhm	5% 0.25W CF		R	57	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	21	57.11.4392	3.9 kOhm	5% 0.25W CF		R	58	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	22	57.11.4392	3.9 kOhm	5% 0.25W CF		R	59	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	23	57.11.4392	3.9 kOhm	5% 0.25W CF		R	60	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	24	57.11.4392	3.9 kOhm	5% 0.25W CF		R	61	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	25	57.11.4392	3.9 kOhm	5% 0.25W CF		R	62	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	26	57.11.4392	3.9 kOhm	5% 0.25W CF		R	63	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	27	57.11.4392	3.9 kOhm	5% 0.25W CF		R	64	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	28	57.11.4392	3.9 kOhm	5% 0.25W CF		R	65	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	29	57.11.4392	3.9 kOhm	5% 0.25W CF		R	66	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	30	57.11.4392	3.9 kOhm	5% 0.25W CF		R	67	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	31	57.11.4392	3.9 kOhm	5% 0.25W CF		R	68	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	32	57.11.4392	3.9 kOhm	5% 0.25W CF		R	69	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	33	57.11.4392	3.9 kOhm	5% 0.25W CF		R	70	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	34	57.11.4392	3.9 kOhm	5% 0.25W CF		R	71	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	35	57.11.4392	3.9 kOhm	5% 0.25W CF		R	72	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	36	57.11.4392	3.9 kOhm	5% 0.25W CF		R	73	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	37	57.11.4392	3.9 kOhm	5% 0.25W CF		R	74	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	38	57.11.4392	3.9 kOhm	5% 0.25W CF		R	75	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	39	57.11.4392	3.9 kOhm	5% 0.25W CF		R	76	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	40	57.11.4392	3.9 kOhm	5% 0.25W CF		R	77	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	41	57.11.4392	3.9 kOhm	5% 0.25W CF		R	78	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	42	57.11.4392	3.9 kOhm	5% 0.25W CF		R	79	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	43	57.11.4392	3.9 kOhm	5% 0.25W CF		R	80	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	44	57.11.4392	3.9 kOhm	5% 0.25W CF		R	81	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	45	57.11.4392	3.9 kOhm	5% 0.25W CF		R	82	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	46	57.11.4392	3.9 kOhm	5% 0.25W CF		R	83	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	47	57.11.4392	3.9 kOhm	5% 0.25W CF		R	84	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	48	57.11.4392	3.9 kOhm	5% 0.25W CF		R	85	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	49	57.11.4392	3.9 kOhm	5% 0.25W CF		R	86	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	50	57.11.4392	3.9 kOhm	5% 0.25W CF		R	87	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	51	57.11.4392	3.9 kOhm	5% 0.25W CF		R	88	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	52	57.11.4392	3.9 kOhm	5% 0.25W CF		R	89	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	53	57.11.4392	3.9 kOhm	5% 0.25W CF		R	90	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	54	57.11.4392	3.9 kOhm	5% 0.25W CF		R	91	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	55	57.11.4392	3.9 kOhm	5% 0.25W CF		R	92	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	56	57.11.4392	3.9 kOhm	5% 0.25W CF		R	93	57.11.4392	3.9 kOhm	5% 0.25W CF	
R	57	57.11.4392	3.9 kOhm	5% 0.25W CF		R	94	57.11.4392	3.9 kOhm	5% 0.2	

TAPE DRIVE CONTROL PCB 1.177.317



FADER START LOGIC PCB (1 7/8 - 3 3/4 ips) 1.177.892



IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
C1	59.21.1224	0.22µF	20% 100V	
C2	59.36.5323	3.3µF	20% 35V TA	
C3				
C4	59.36.5323	3.3µF	20% 35V TA	
D1	50.04.0125	1N4448		
D2	"	"		
D3	"	"		
D4	70.01.0222	BYA53/50	Bridge 35V 0.8A	
D5	50.04.0125	1N4448		
D6	"	"		
D7	"	"		
D8	"	"		
D9	50.04.0125	1N4448		
D10	"	"		
D11	"	"		
D12	"	"		
D13	"	"		
D14	"	"		
D15	"	"		
D16	"	"		
D17	"	"		
D18	"	"		
D19	"	"		
D20	50.99.0126	4N28		
J1	54.01.0289	8Pol	AHP CIS	
J2	54.01.0290	10Pol	AHP CIS	
J3	54.01.0223	14Pol	31P CIS	

IND	DATE	NAME
④		
③		
②		
①		
○	24.11.91	Wasshala

STUDER Fader Start Logic 4/5/35 PL 1.177.892.00 PAGE 1 OF 3

IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
K1	56.99.0116		Relay	
PL.9	54.02.0220	25X 05	AHP Flat Pin	
Q1	50.02.0515	BC560C	FNP	BC177E
Q2	50.02.0426	BC550C	NPN	BC103C
Q3	50.02.0426	BC550P	NPN	BC103C
Q4	50.02.0426	BC550B	NPN	BC103C
Q5	50.02.0515	BC560E	FNP	BC177E
Q6	50.02.0515	BC560E	FNP	BC177E
Q7	50.02.0510	BD136-16	FNP	
R1	57.11.4100	10	2% 0207 HF	
R2	57.11.4224	220		
R3	57.11.4181	180		
R4	57.11.4224	220		
R5	57.11.4181	180		
R6	57.11.4681	680k		
R7	57.11.4681	680k		
R8	57.11.4100	10k		
R9	57.11.4234	220k		
R10	57.11.4223	22k		
R11	57.11.4103	10k		
R12	57.11.4103	10k		
R13	57.11.4123	12k		
R14				
R15	57.11.4223	22k		

IND	DATE	NAME
④		
③		
②		
①		
○	24.11.81	Wasshala

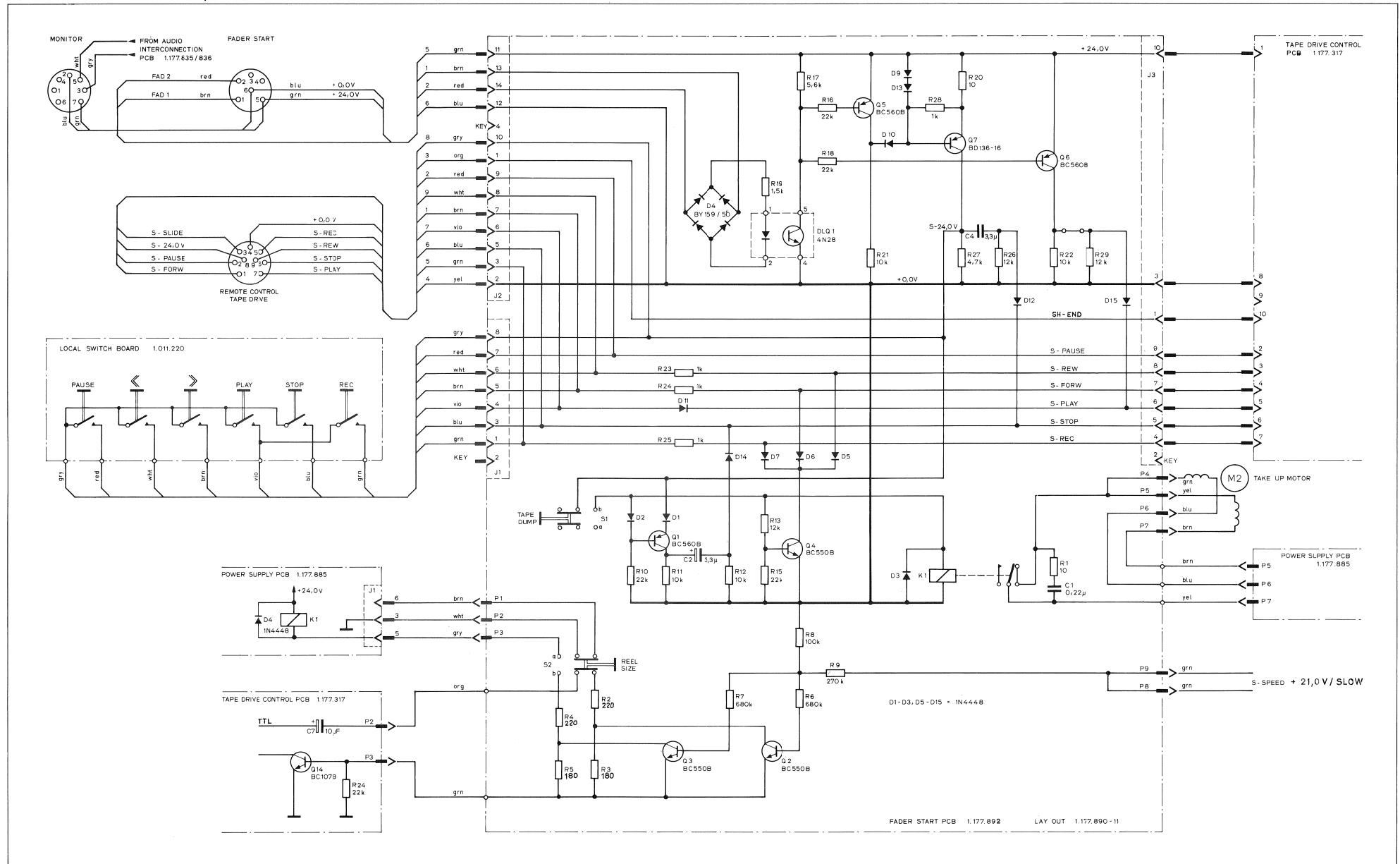
STUDER Fader Start Logic 4/7/25 PL 1.177.502.0 PAGE 2 OF 3

IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
R16	57.11.4223	22k	2% 0207 HF	
R17	57.11.4682	56k		
R18	57.11.4223	22k		
R19	57.56.5152	1.5k	10% 4W	
R20	57.11.4100	10	2% 0207 HF	
R21	57.11.4103	10k		
R22	57.11.4103	10k		
R23	57.11.4102	1k		
R24	57.11.4101	1k		
R25	57.11.4102	1k		
R26	57.11.4123	12k		
R27	57.11.4472	47k		
R28	57.11.4102	1k		
R29	57.11.4123	12k		
S1	1.177.100.07		Push button switch	
S2	1.177.100.07		"	

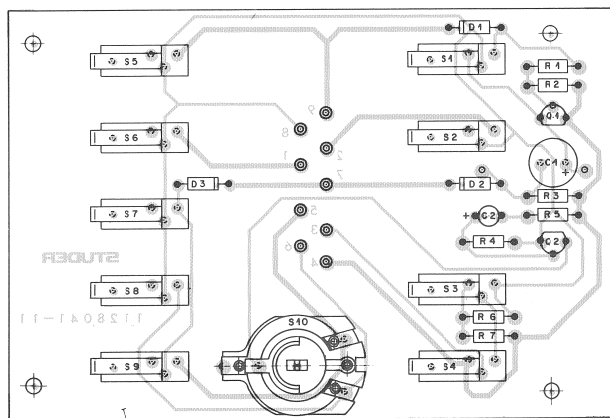
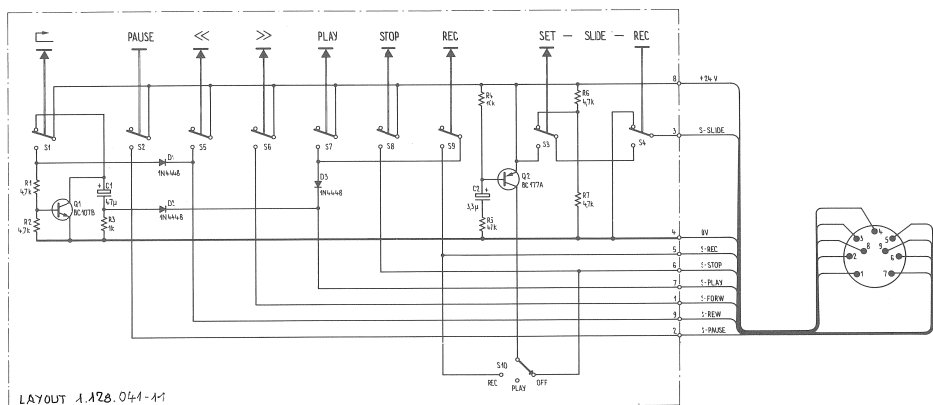
IND	DATE	NAME
④		
③		
②		
①		
○	24.11.81	Wasshala

STUDER Fader Start Logic 4/7/25 PL 1.177.892.0 PAGE 3 OF 3

FADER START LOGIC PCB (1 7/8-3 3/4 ips) 1.177.892

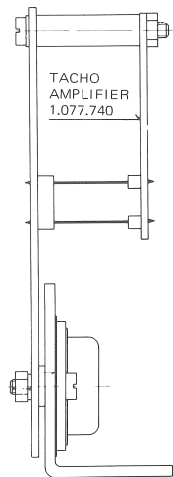
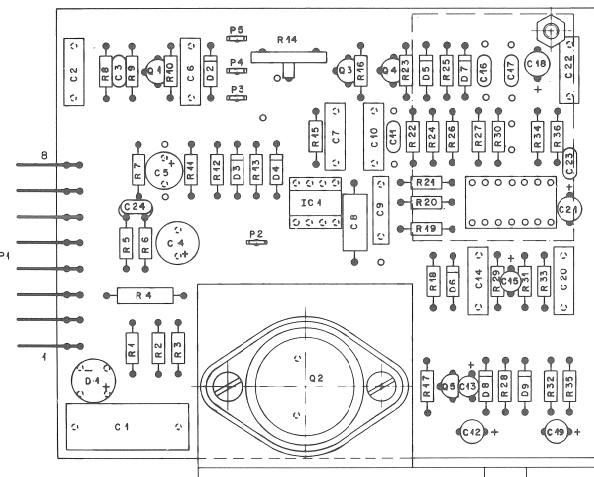
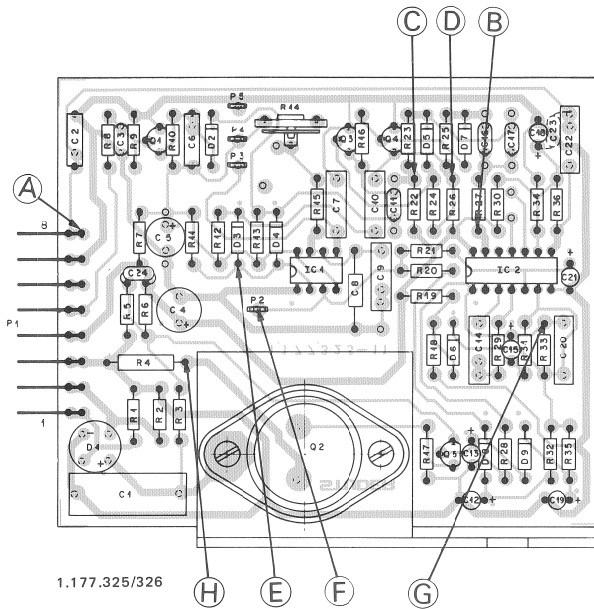


REMOTE CONTROL UNIT/COMMAND SWITCHES 1.128.040



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
C 01	59.22.6470	47 U	-10% 40V TT	
C 02	59.30.6339	3,3 U	-20% 35V TA	
D 01-3	50.04.0125	1 R 4446		SI
Q 01	50.03.0436	JMC 107 B		JPN
Q 02	50.03.0317	JMC 117 A		JPN
R 01	57.41.4472	4.7 K	5% .25W CSCH	
R 02	57.41.4472	4.7 K		
R 03	57.41.4102	1 K		(1)
R 04	57.41.4103	10 K		
R 05-07	57.41.4473	47 K		
S 01-09	55.99.0139	1 x U	Microw. NO	
S 10	55.99.0142	3 x U	Brush UNTER.	
				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
				IND DATE NAME 1.128.041
STUDER Lauwerkformteuerprint				PAGE 1 of 1

CAPSTAN SPEED CONTROL PCB 1.177.325/326/327



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C	1	59-99-0950	0.47 uF	10%, 150V, MP	
C	2	59-31-4104	0.1 uF	5%, 250V, MPFET	
C	3	59-32-8972	4700 uF	-20%, 40V, Cer	
C	4	59-22-6670	47 uF	10%, 25V, EI	
C	5	59-22-6670	47 uF	10%, 25V, EI	
C	6	59-31-4104	0.1 uF	5%, 250V, MPFET	
C	7	59-31-8103	0.47 uF	20%, 160V, PETP	
C	8	59-12-8152	1800 uF	1%, 125V, PS	
C	9	59-11-6472	4700 uF	20%, 160V, PC	
C	10	59-31-6472	4700 uF	20%, 160V, PETP	
C	11	59-32-3472	4700 uF	-20%, 40V, Cer	
C	12	59-22-6100	10 uF	10%, 35V, EI	
C	13	59-22-6100	10 uF	10%, 35V, EI	
C	14	59-31-1103	0.01 uF	20%, 160V, PETP	
C	15	59-22-6100	10 uF	10%, 35V, EI	
C	16	59-31-1103	0.01 uF	20%, 160V, PETP	
C	17	59-32-3472	4700 uF	-20%, 40V, Cer	
C	18	59-22-6100	10 uF	10%, 35V, EI	
C	19	59-22-6100	10 uF	10%, 35V, EI	
C	20	59-31-1224	0.22 uF	20%, 100V, MPFET	
C	21	59-22-6100	10 uF	10%, 35V, EI	
C	22	59-21-6473	0.04 uF	20%, 250V, MPFET	
C	23	59-32-1020	22 uF	20%, 500V, Cer	
C	24	59-32-1020	22 uF	20%, 500V, Cer	
C	25	59-32-1102	1000 uF	20%, 40V, Cer	
D	1	70-01-0233	8250 CND		
D	2	50-04-0125	1 N 4448	any	
D	3	50-04-0125	1 N 4448	any	
D	4	50-04-0125	1 N 4448	any	
D	5	50-04-0125	1 N 4448	any	
D	6	50-04-0125	1 N 4448	any	
D	7	50-04-0125	1 N 4448	any	
D	8	50-04-0125	1 N 4448	any	
D	9	50-04-0125	1 N 4448	any	
IC	1	50-05-0158	NE 555	Timer	MC1455P S.M

STUDER R2/02/11 RW CAPSTAN SPEED CONTROL 1.177.325.00 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
IC	1	50-05-0237	TBA 231	va 739 analog	SN76131N F&A.T
P	1	54-01-0580	B-Pole	Pin-Strip	AMP
P	2	54-01-0320		Flat-Pin 0.8	AMP
P	3	54-01-0320		Flat-Pin 0.8	AMP
P	4	54-01-0320		Flat-Pin 0.8	AMP
Q	1	50-03-0426	BC 107 B	NPN	RCA 411 M,RCA
Q	2	50-03-0427	MC 111	SPK-Power	
Q	3	50-03-0436	BC 107 B	NPN	
Q	4	50-03-0436	BC 107 B	NPN	
Q	5	50-03-0318	GC 17B B	PNP	
R	1	57-11-4473	4.7 kOhm	5%, 0.25W, CF	
R	2	57-11-4473	6.8 kOhm	5%, 0.25W, CF	
R	3	57-11-4403	0.8 kOhm	5%, 0.25W, CF	
R	4	57-12-4100	10 Ohm	5%, 0.25W, CF	
R	5	57-11-4222	2.2 kOhm	5%, 0.25W, CF	
R	6	57-11-4302	1 kOhm	5%, 0.25W, CF	
R	7	57-11-4021	820 Ohm	5%, 0.25W, CF	
R	8	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	9	57-11-4223	22 kOhm	5%, 0.25W, CF	
R	10	57-11-4473	4.7 kOhm	5%, 0.25W, CF	
R	11	57-11-4223	22 kOhm	5%, 0.25W, CF	
R	12	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	13	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	14	59-99-0226	10 kOhm	10%, 500ppm/100°C	
R	15	58-99-0279	86.6kOhm	5%, 0.05W, MF	
R	16	57-11-4223	22 kOhm	5%, 0.25W, CF	
R	17	57-11-4152	1.5 kOhm	5%, 0.25W, CF	
R	18	57-11-4151	1.5 kOhm	5%, 0.25W, CF	
R	19	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	20	57-11-4221	220 Ohm	5%, 0.25W, CF	
R	21	57-11-4472	4.7 kOhm	5%, 0.25W, CF	
R	22	57-11-4332	3.3 kOhm	5%, 0.25W, CF	
R	23	57-11-4223	22 kOhm	5%, 0.25W, CF	

STUDER R2/02/11 RW CAPSTAN SPEED CONTROL 1.177.325.00 PAGE 2

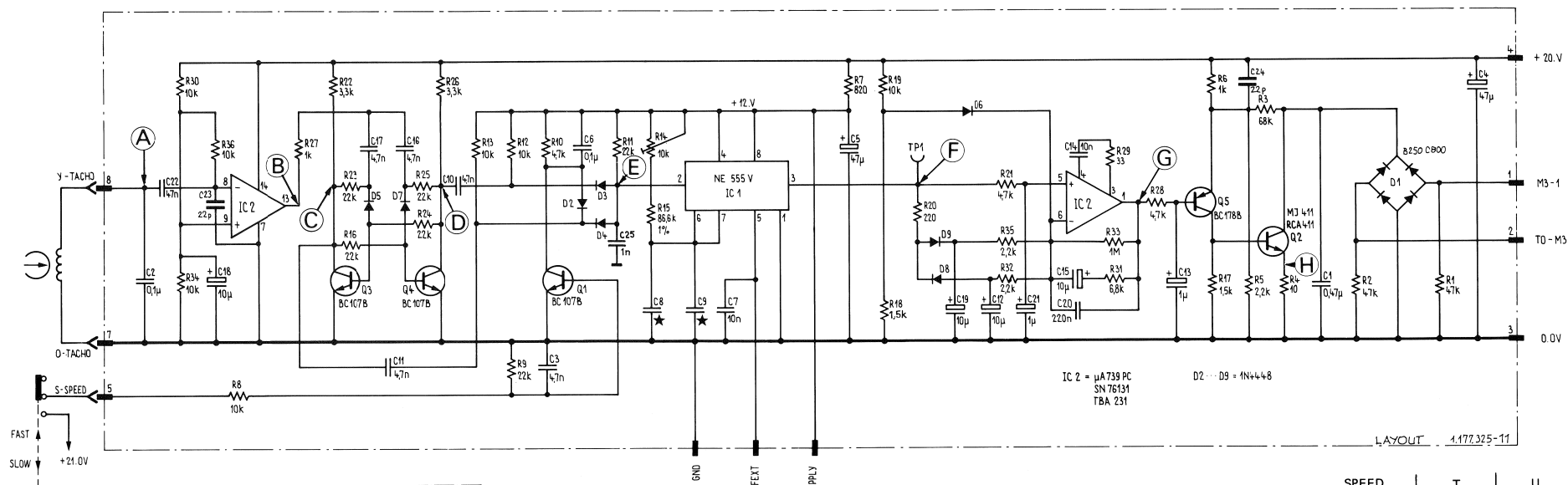
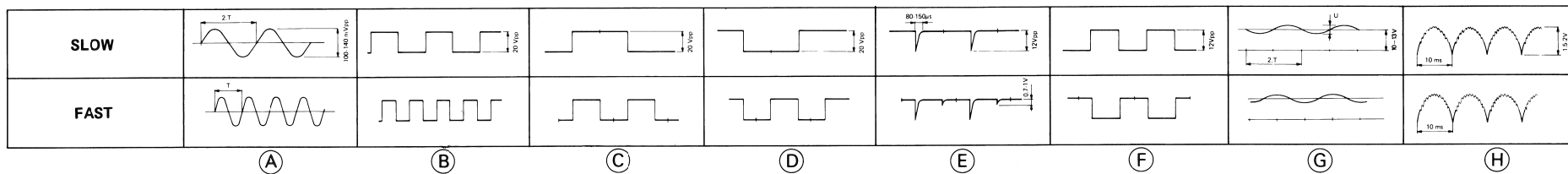
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R	24	57-11-4223	22 kOhm	5%, 0.25W, CF	
R	25	57-11-4223	22 kOhm	5%, 0.25W, CF	
R	26	57-11-4332	3.3 kOhm	5%, 0.25W, CF	
R	27	57-11-4472	4.7 kOhm	5%, 0.25W, CF	
R	28	57-11-4472	4.7 kOhm	5%, 0.25W, CF	
R	29	57-11-4330	3.3 Ohm	5%, 0.25W, CF	
R	30	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	31	57-11-4082	6.8 kOhm	5%, 0.25W, CF	
R	32	57-11-4222	2.2 kOhm	5%, 0.25W, CF	
R	33	57-11-4100	1 kOhm	5%, 0.25W, CF	
R	34	57-11-4103	10 kOhm	5%, 0.25W, CF	
R	35	57-11-4222	2.2 kOhm	5%, 0.25W, CF	
R	36	57-11-4303	1 kOhm	5%, 0.25W, CF	

F1E1:Electrolytic, Cer:Ceramic, MP:Metallized Paper, P5:Polystyrene, MPET:Metallized Polyester, PE:Polyester, Manufacturer: Sips:Siemens, Tit:Teled Instruments, Al:Alcise, H:Hamamatsu, P:Panasonic

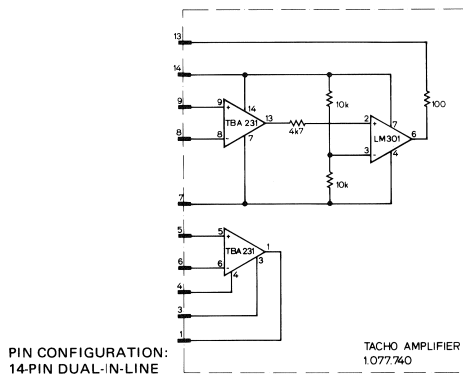
DR1G R2/02/08

STUDER R2/02/11 RW CAPSTAN SPEED CONTROL 1.177.325.00 PAGE 3

CAPSTAN SPEED CONTROL PCB 1.177.325/326/327



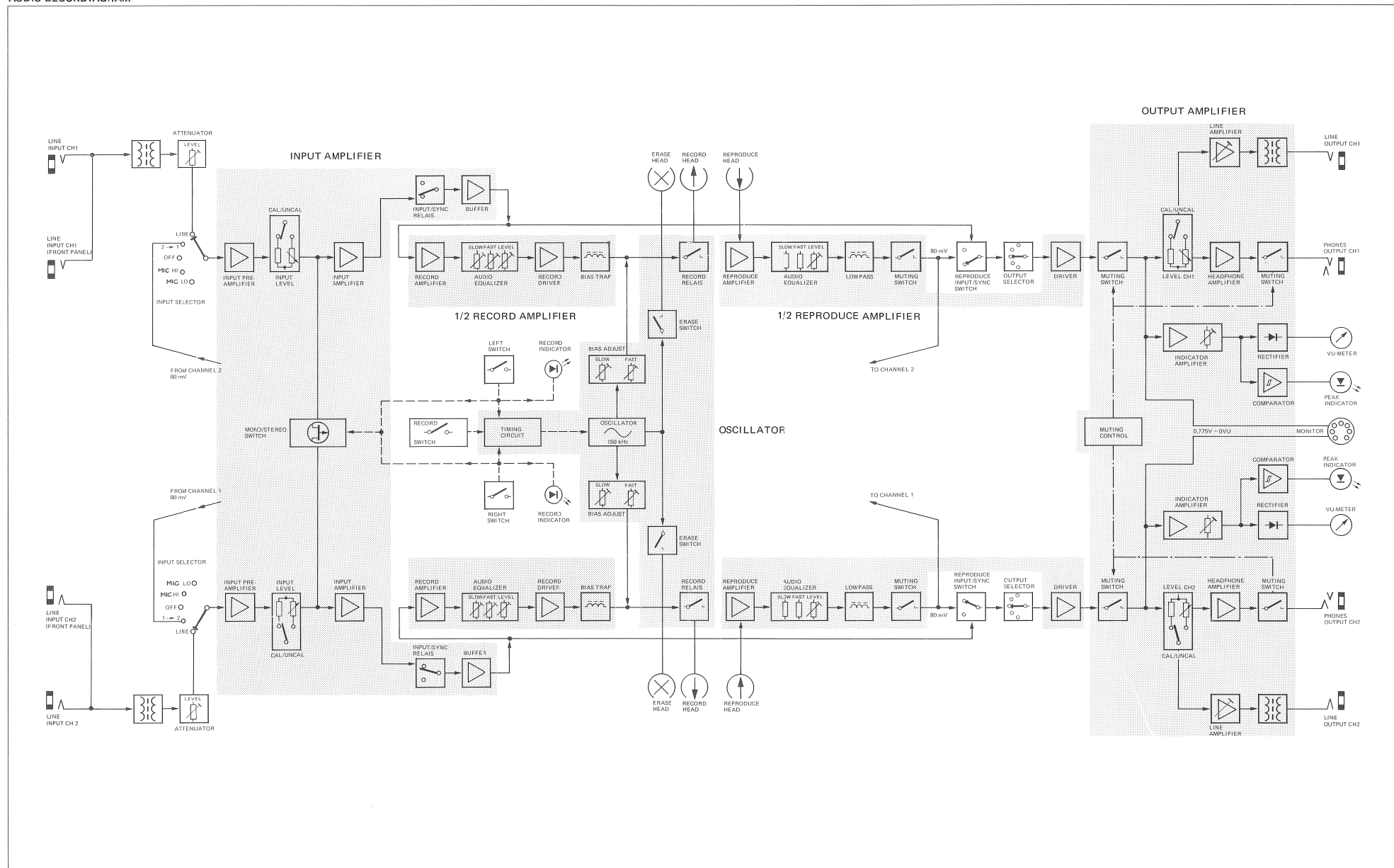
SPEED CONTROL	T	U
1.177.325	625 μs	1 Vpp
1.177.326	833 μs	2.5 Vpp
1.177.327	1666 μs	3 Vpp



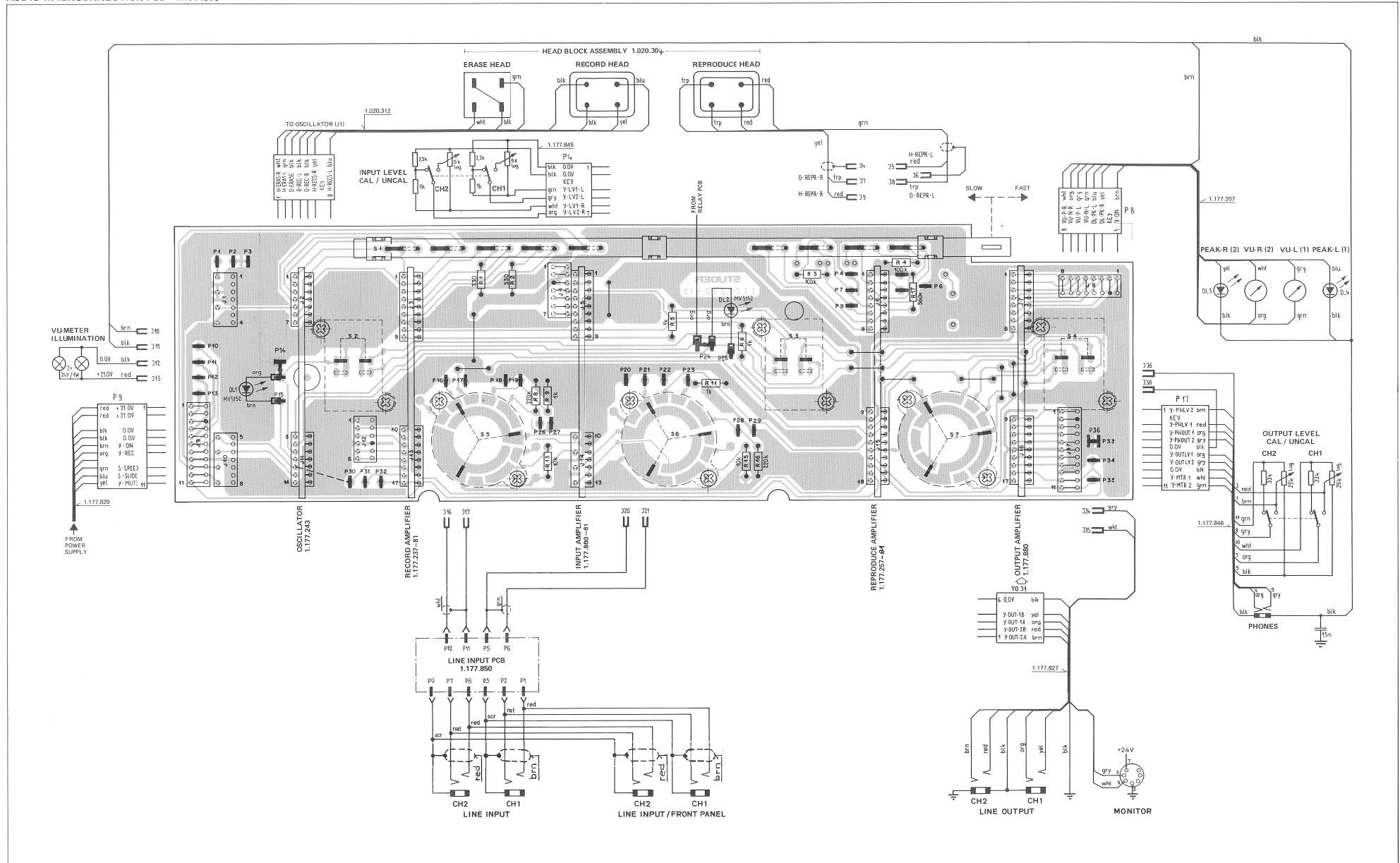
VERSION 1.177.327:
INSTEAD OF THE
REMOVED IC2
THE SUB-ASSEMBLY
TACHO AMPLIFIER
1.077.740 IS PLUGGED
INTO THE IC2 SOCKET

TYPE	SPEED	CAPSTAN SHAFT φ	C-MOTOR NO.	SPEED CONTROL	C8 ★	C9 ★
HS	7 1/2" - 15"	9.06 mm	1.021.320	1.177.325	1.6 nF	4.7 nF
STD	3 3/4" - 7 1/2"	4.51 mm	1.021.300	1.177.325	1.6 nF	4.7 nF
LS	1 7/8" - 3 3/4"	3.00 mm	1.021.304	1.177.326	1.6 nF	6.8 nF
SLS	15/16" - 1 7/8"	3.00 mm	1.021.304	1.177.327	5.6 nF	10 nF

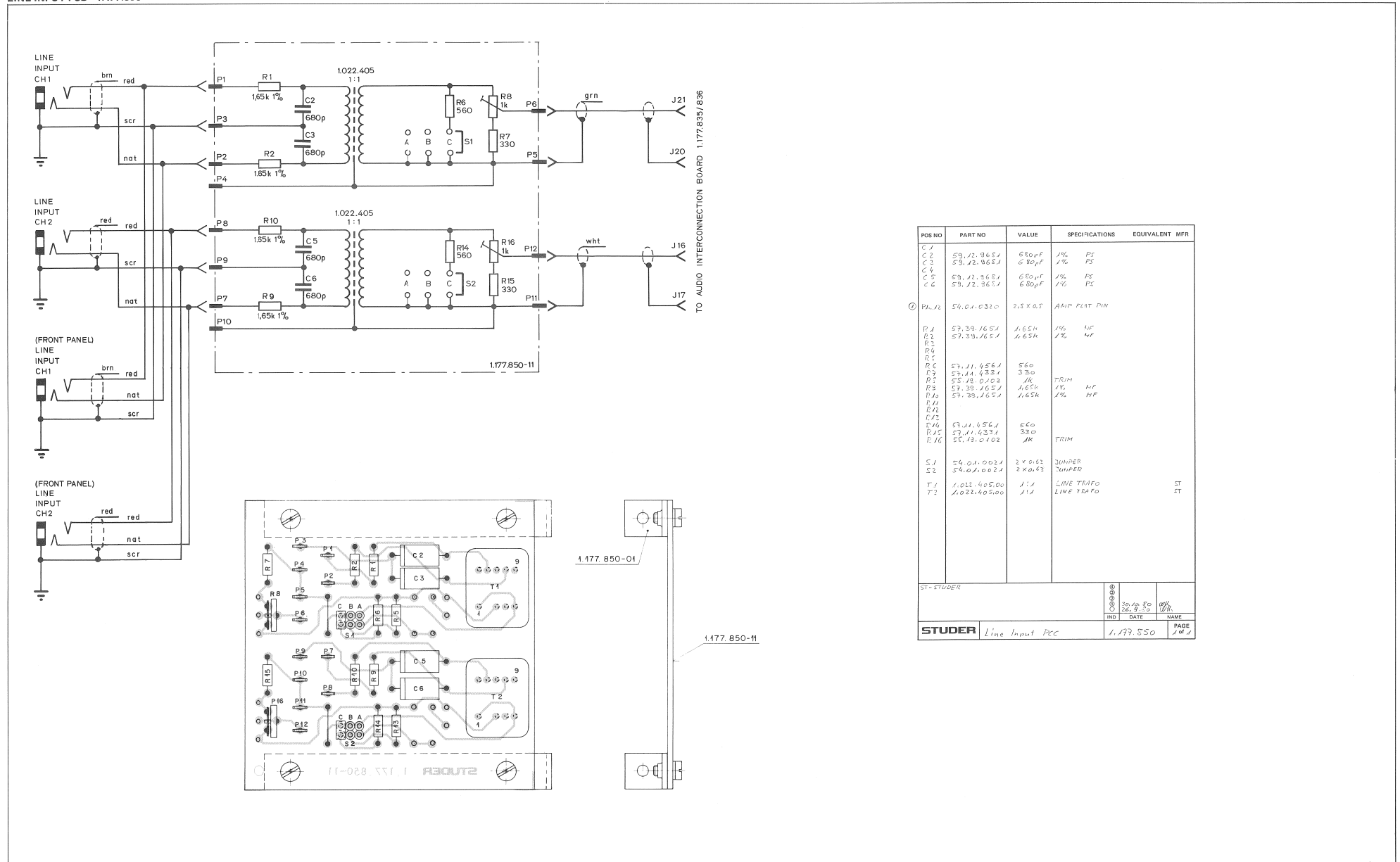
AUDIO BLOCKDIAGRAM



AUDIO INTERCONNECTION PCB 1.177.835



LINE INPUT PCB 1.177.850



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
C 1	59.12.965/1	680pF	1% PS	
C 2	59.12.965/1	680pF	1% PS	
C 3	59.12.965/1	680pF	1% PS	
C 4	59.12.965/1	680pF	1% PS	
C 5	59.12.965/1	680pF	1% PS	
C 6	59.12.965/1	680pF	1% PS	
P1, R2	54.01.032/0	2.5 X 0.5	ANIP FLAT PIN	
P 1	59.39.165/1	1.65k	1% HF	
P 2	59.39.165/1	1.65k	1% HF	
R 3				
R 4				
R 5				
R 6	59.11.456/1	560		
R 7	59.11.433/1	330		
R 8	59.39.165/1	1.65k	TRIM HF	
R 9	59.39.165/1	1.65k	1% HF	
R 10	59.39.165/1	1.65k	1% HF	
R 11				
R 12				
R 13				
R 14	59.11.456/1	560		
R 15	59.11.433/1	330		
R 16	59.39.165/1	1.65k	TRIM	
R 17	59.13.0102	1K		
R 18	59.13.0102	1K	TRIM	
S 1	54.01.002/1	2 X 0.625	SLIPPER	
S 2	54.01.002/1	2 X 0.625	SLIPPER	
T 1	1.022.405.000	1:1	LINE TRAF0	ST
T 2	1.022.405.000	1:1	LINE TRAF0	ST

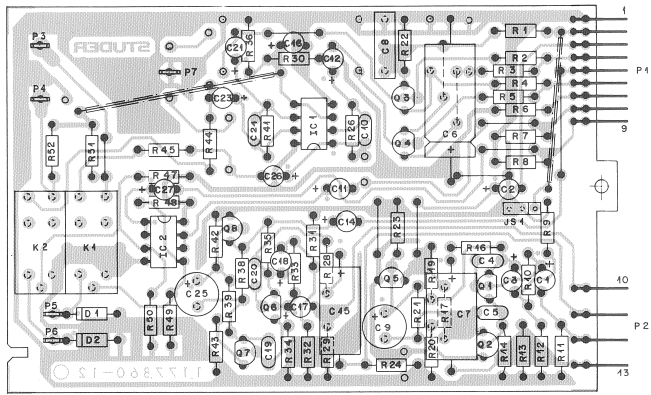
STUDER

IND DATE NAME

1.177.850

PAGE 1/01

INPUT AMPLIFIER PCB 1.177.860-81



IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
C1	58.30.4100	10µF	-20% 16V TH	
C2	58.30.4100	10µF		
C3	58.30.4320	32µF		
C4	58.32.1152	1500µF	-10% 50V CER	
C5	58.32.0470	47µF	-20% 50V CER	
C6	58.25.4221	220µF	-10% 25V EL	
C7	58.25.3121	125µF	-10% 16V EL	
C8	58.31.1104	0.1µF	20% 100V HFFTP	
C9	58.22.5470	47µF	20% 25V EL	
C10	58.32.0470	47µF	-20% 50V CER	
C11	58.30.4100	10µF	-20% 16V TA	
C12	58.30.4100	10µF		
C13	58.30.4100	10µF	-20% 16V TA	
C15	58.25.3121	125µF	-10% 16V EL	
C16	58.30.4100	10µF	-20% 16V TA	
C17	58.30.4100	10µF		
C18	58.30.4320	32µF		
C19	58.32.0470	47µF	-20% 50V CER	
C20	58.32.1152	1500µF	-10% 50V CER	
C21	58.30.4100	10µF	-20% 16V TA	
C22	58.30.4100	10µF		
C23	58.30.4100	10µF	-20% 16V TA	
C24	58.22.0470	47µF	-20% 50V CER	
C25	58.22.5470	47µF	20% 25V EL	
C26	58.30.4100	10µF	-20% 16V TA	
C27	58.20.4100	10µF		

IND	DATE	NAME
④		
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①	24.11.81	Wanghofer

STUDER Input Amplifier PL 1.177.860-81 PAGE 1 OF 4

IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
D1	50.04.0125	M4443		
D2	50.04.0125	M4443		
IC1	50.08.0106	NE5532A		
IC2	50.05.0246	RC4558		
J51	54.01.0020	2X .63	Contact Pin (3X)	
	54.01.0021	2X .63	Bridge	
K1	56.02.1001		Relay	
K2	56.02.1001		Relay	
P1	54.01.0220	8 Pcl	Pin-Strip	ANP
P2	54.01.0470	4 Pcl	Pin-Strip	ANP
P2...	54.02.0320	23 P0.8	Flat Pin	ANP
Q1	50.03.0436	BC560C	NPN	BC103C
Q2	50.03.0437	BC550B	NPN	BC103C
Q3	50.03.0329	P1228E	P-CM J-FET	
Q4	50.03.0329	P1228E	P-CM J-FET	
Q5	50.03.0436	BC550B	NPN	BC107E
Q6	50.03.0436	BC560C	PNP	
Q7	50.03.0437	BC550C	NPN	BC103C
Q8	50.03.0436	BC550B	NPN	BC107B

IND	DATE	NAME
④		
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②		
①	24.11.81	Wanghofer

STUDER Input Amplifier PL 1.177.860-81 PAGE 2 OF 4

IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
R1	57.11.4104	100k	2% 0207 MF	
R2	57.11.4103	10k		
R3	57.11.4103	10k		
R4	57.11.4103	10k		
R5	57.11.4103	10k		
R6	57.11.4470	47k		
R7	57.11.4472	47k		
R8	57.11.4472	47k		
R9	57.11.4184	150k		
R10	57.11.4223	22k		
R11	57.11.4223	220k		
R12	57.11.4104	100k		
R13	57.11.4153	15k		
R14	57.11.4472	47k		
R15				
R16	57.11.4181	180		
R17	57.11.4224	220		
R18				
R19	57.11.4153	15k		
R20	57.11.4470	47k		
R21	57.11.4472	47k		
R22	57.11.4184	15k		
R23	57.11.4223	22k		
R24	57.11.4153	15k		
R25				
R26	57.11.4223	22k		
R27				
R28	57.11.4181	150		
R29	57.11.4224	220k		
R30	57.11.4104	100k		

IND	DATE	NAME
④		
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②		
①	24.11.81	Wanghofer

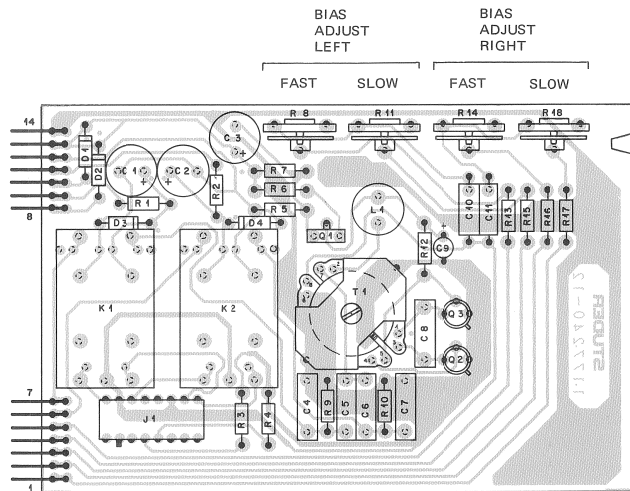
STUDER Input Amplifier PL 1.177.860-81 PAGE 3 OF 4

IND POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
R31	57.11.4184	150k	2% 0207 MF	
R32	57.11.4104	100k		
R33	57.11.4223	22k		
R34	57.11.4472	47k		
R35	57.11.4153	15k		
R36	57.11.4104	100k		
R37				
R38	57.11.4224	220		
R39	57.11.4472	47k		
R40				
R41	57.11.4223	22k		
R42	57.11.4333	33k		
R43	57.11.4470	47k		
R44	57.11.4472	47k		
R45	57.11.4472	47k		
R46	57.11.4472	47k		
R47	57.11.4472	47k		
R48	57.11.4472	47k		
R49	57.11.4472	47k		
R50	57.11.4472	47k		
R51	57.11.4104	100k		
R52	57.11.4104	100k		

IND	DATE	NAME
④		
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①	24.11.81	Wanghofer

STUDER Input Amplifier PL 1.177.860-81 PAGE 4 OF 4

OSCILLATOR PCB 1.177.243



INC.	POS.ND.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C.....1		59-22-4101	100 uF	10%, 16V, EI	
C.....2		59-22-2221	220 uF	10%, 6.3V, EI	
C.....3		59-11-4472	4700 pF	2-5%, 160V, PC	
C.....4		59-11-4472	4700 pF	2-5%, 160V, PC	
C.....5		59-11-4472	4700 pF	2-5%, 160V, PC	
C.....6		59-11-4472	4700 pF	2-5%, 160V, PC	
C.....7		59-11-4472	4700 pF	2-5%, 160V, PC	
C.....8		59-08-0516	12 uF	5%, 160V, PC	
C.....9		59-22-4979	4.7 uF	10%, 50V, EI	
C.....10		59-04-8221	220 pF	5%, 160V, PS	
C.....11		59-04-8221	220 pF	5%, 160V, PS	
D.....1		50-04-0125	1 N 444B		any
D.....2		50-04-0125	1 N 444B		any
D.....3		50-04-0125	1 N 444B		any
D.....4		50-04-0125	1 N 444B		any
J.....1		54-01-0306	8-Pole	Socket-Strip	AMP
K.....1		56-04-0150	2 x U	500 Ohm, 12V	NiO
K.....2		56-04-0150	2 x U	500 Ohm, 12V	NiO
L.....1		62-02-2122	1.2 mH	5% RDC max, 0.1 Ohm	
P.....1		54-01-0223	7-Pole	Pin-Strip	AMP
P.....2		54-01-0223	7-Pole	Pin-Strip	AMP
Q.....1		50-03-0510	BD 136-16	Medium Power PNP	
Q.....2		50-03-0434	BFE 18	PNP	
Q.....3		50-03-0434	BFE 18	PNP	
R.....1		57-11-4331	330 Ohm	5%, 0.25W, CF	
R.....2		57-11-4331	330 Ohm	5%, 0.25W, CF	
R.....3		57-11-4101	100 Ohm	5%, 0.25W, CF	
R.....4		57-11-4101	100 Ohm	5%, 0.25W, CF	
R.....5		57-11-4562	5.6 kOhm	5%, 0.25W, CF	
R.....6		57-11-4100	10 Ohm	5%, 0.25W, CF	

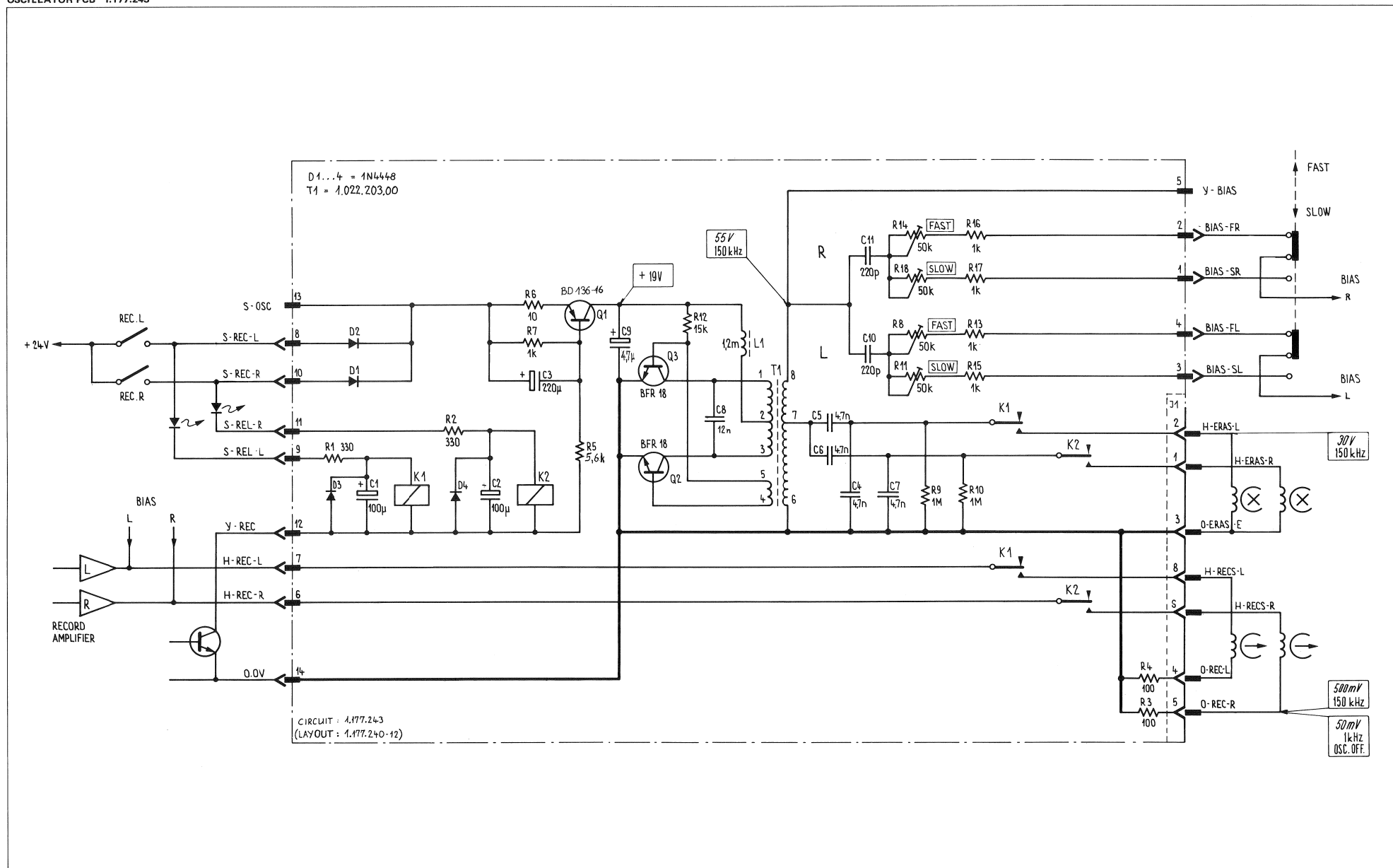
S T U D E R RZ/11/30 RM OSCILLATOR 6 77 2-Track 1.177.243.00 PAGE 1

INC.	POS.ND.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R.....7		57-11-4102	1 kOhm	5%, 0.25W, CF	
R.....8		58-19-0503	50 kOhm	20%, 0.15W, PCF	
R.....9		57-11-4105	1 MOhm	5%, 0.25W, CF	
R.....10		57-11-4105	1 MOhm	5%, 0.25W, CF	
R.....11		58-19-0503	50 kOhm	20%, 0.15W, PCF	
R.....12		57-11-4153	15 kOhm	5%, 0.25W, CF	
R.....13		57-11-4102	1 kOhm	5%, 0.25W, CF	
R.....14		58-19-0503	50 kOhm	20%, 0.15W, PCF	
R.....15		57-11-4102	1 kOhm	5%, 0.25W, CF	
R.....16		57-11-4102	1 kOhm	5%, 0.25W, CF	
R.....17		57-11-4102	1 kOhm	5%, 0.25W, CF	
R.....18		58-19-0503	50 kOhm	20%, 0.15W, PCF	
T.....1		L-022-203-00		Oscillator Coil	5

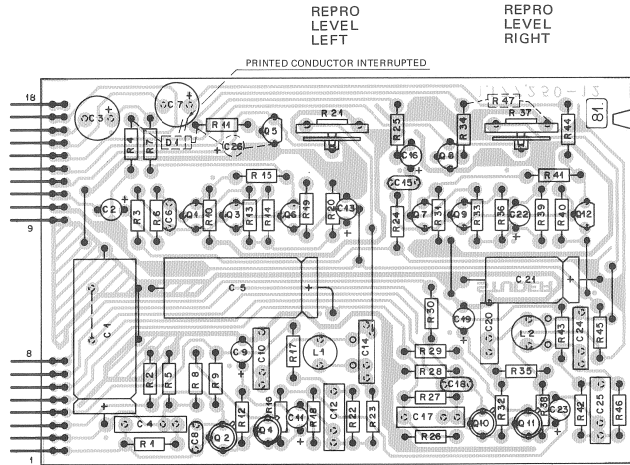
EI=Electrolytic, C=Ceramic, PS=Polystyrene, NiO=NiO, D=Osmo, PC=Polycarbonate, CF=Carbonfilm, PCF=Pot. Carbon Film, Manufacturer: Ray=Raychem, TI=Texas Instruments, A=SGS-Ates, M=Maschinenbau Teledyne, A=Antonmet

ORIG RZ/02/08 (02) R1/2/221
S T U D E R RZ/11/30 RM OSCILLATOR 8 77 2-Track 1.177.243.00 PAGE 2

OSCILLATOR PCB 1.177.243



REPRODUCE AMPLIFIER PCB (NAB 1 7/8 · 3 3/4 ips) 1.177.257-81



IND.	PDS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C.....1		50.25.0182	1600 uF	10%, 30V EI	
C.....2		50.22.0479	4.7 uF	10%, 500V EI	
C.....3		50.22.0202	22 uF	10%, 500V EI	
C.....4		50.11.0423	220 pF	5%, 600V PC	
C.....5		50.25.0187	1600 uF	10%, 30V EI	
C.....6		50.32.0101	100 pF	20%, 500V Cer	
C.....7		50.22.0202	22 uF	10%, 500V EI	
C.....8		50.32.0101	100 pF	20%, 500V Cer	
C.....9		50.22.0479	4.7 uF	10%, 500V EI	
C.....10		50.99.0259	2700 pF	10%, 50V PETP	
C.....11		50.22.0479	4.7 uF	10%, 500V EI	
C.....12		50.11.0103	0.01 uF	5%, 1800V PC	
C.....13		50.22.0101	100 pF	10%, 100V EI	
C.....14		50.11.0581	500 pF	5%, 4000V PC	
C.....15		50.32.0101	100 pF	20%, 500V Cer	
C.....16		50.25.0479	4.7 uF	10%, 500V EI	
C.....17		50.11.0221	220 pF	5%, 4000V PC	
C.....18		50.25.0181	100 pF	20%, 500V Cer	
C.....19		50.22.0479	4.7 uF	10%, 500V EI	
C.....20		50.99.0259	2700 pF	10%, 4000V PETP	
C.....21		50.25.0101	100 pF	10%, 25V EI	
C.....22		50.22.0101	100 pF	10%, 100V EI	
C.....23		50.22.0479	4.7 uF	10%, 500V EI	
C.....24		50.11.0581	500 pF	5%, 4000V PC	
C.....25		50.11.0101	0.01 uF	5%, 1600V PC	
C.....26		50.35.0395	3.3 uF	20%, 350V TA	
D.....1		50.04.0125	1N 444B		
L.....1		62.02.1222	2.2 mH	5%	
L.....2		62.02.1222	2.2 mH	5%	
P.....1		54.01.0270	B-Pin	Pin=54/rip	AMP
P.....2		54.01.0271	10-Pin	Pin=54/rip	AMP
Q.....1		50.03.0439	BC 109 C	NPN	any
Q.....2		50.03.0407	BC 109 C	TO18, NPN	

STUDER 82/07/06 RW REPRODUCE-AMPLIFIER 4.75/9.5 1.177.257-81 PAGE 1

IND.	PDS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R.....3		50.03.0436	BC 107 B	NPN	
R.....4		50.03.0407	BC 109 C	TO18, NPN	
R.....5		50.03.0436	BC 107 B	NPN	
R.....6		50.03.0436	BC 107 B	NPN	
R.....7		50.03.0436	BC 107 B	NPN	
R.....8		50.03.0436	BC 107 B	NPN	
R.....9		50.03.0436	BC 107 B	NPN	
R.....10		50.03.0407	BC 109 C	TO18, NPN	
R.....11		50.03.0407	BC 109 C	TO18, NPN	
R.....12		50.03.0436	BC 107 B	NPN	
R.....13		57.11.4224	220 kohm	5%, 0.25W CF	
R.....14		57.11.4311	330 Ohm	5%, 0.25W CF	
R.....15		57.11.4354	150 kohm	5%, 0.25W CF	
R.....16		57.11.4482	6.8 kohm	5%, 0.25W CF	
R.....17		57.11.4102	1 kohm	5%, 0.25W CF	
R.....18		57.11.4102	1 kohm	5%, 0.25W CF	
R.....19		57.11.4102	1 kohm	5%, 0.25W CF	
R.....20		57.11.4480	68 Ohm	5%, 0.25W CF	
R.....21		57.11.4470	4.7 Ohm	5%, 0.25W CF	
R.....22		57.11.4323	12 kohm	5%, 0.25W CF	
R.....23		57.11.4304	100 kohm	5%, 0.25W CF	
R.....24		57.11.4356	150 kohm	5%, 0.25W CF	
R.....25		57.11.4480	68 Ohm	5%, 0.25W CF	
R.....26		57.11.4102	1 kohm	5%, 0.25W CF	
R.....27		57.11.4323	12 kohm	5%, 0.25W CF	
R.....28		57.11.4304	100 kohm	5%, 0.25W CF	
R.....29		57.11.4323	12 kohm	5%, 0.25W CF	
R.....30		57.11.4304	100 kohm	5%, 0.25W CF	
R.....31		57.11.4323	12 kohm	5%, 0.25W CF	
R.....32		57.11.4304	100 kohm	5%, 0.25W CF	
R.....33		57.11.4323	12 kohm	5%, 0.25W CF	
R.....34		57.11.4304	100 kohm	5%, 0.25W CF	
R.....35		57.11.4323	12 kohm	5%, 0.25W CF	
R.....36		57.11.4304	100 kohm	5%, 0.25W CF	
R.....37		57.11.4323	12 kohm	5%, 0.25W CF	
R.....38		57.11.4304	100 kohm	5%, 0.25W CF	
R.....39		57.11.4323	12 kohm	5%, 0.25W CF	
R.....40		57.11.4304	100 kohm	5%, 0.25W CF	
R.....41		57.11.4323	12 kohm	5%, 0.25W CF	
R.....42		57.11.4304	100 kohm	5%, 0.25W CF	
R.....43		57.11.4323	12 kohm	5%, 0.25W CF	
R.....44		57.11.4304	100 kohm	5%, 0.25W CF	
R.....45		57.11.4323	12 kohm	5%, 0.25W CF	
R.....46		57.11.4304	100 kohm	5%, 0.25W CF	
R.....47		57.11.4323	12 kohm	5%, 0.25W CF	

STUDER 82/07/06 RW REPRODUCE-AMPLIFIER 4.75/9.5 1.177.257-81 PAGE 2

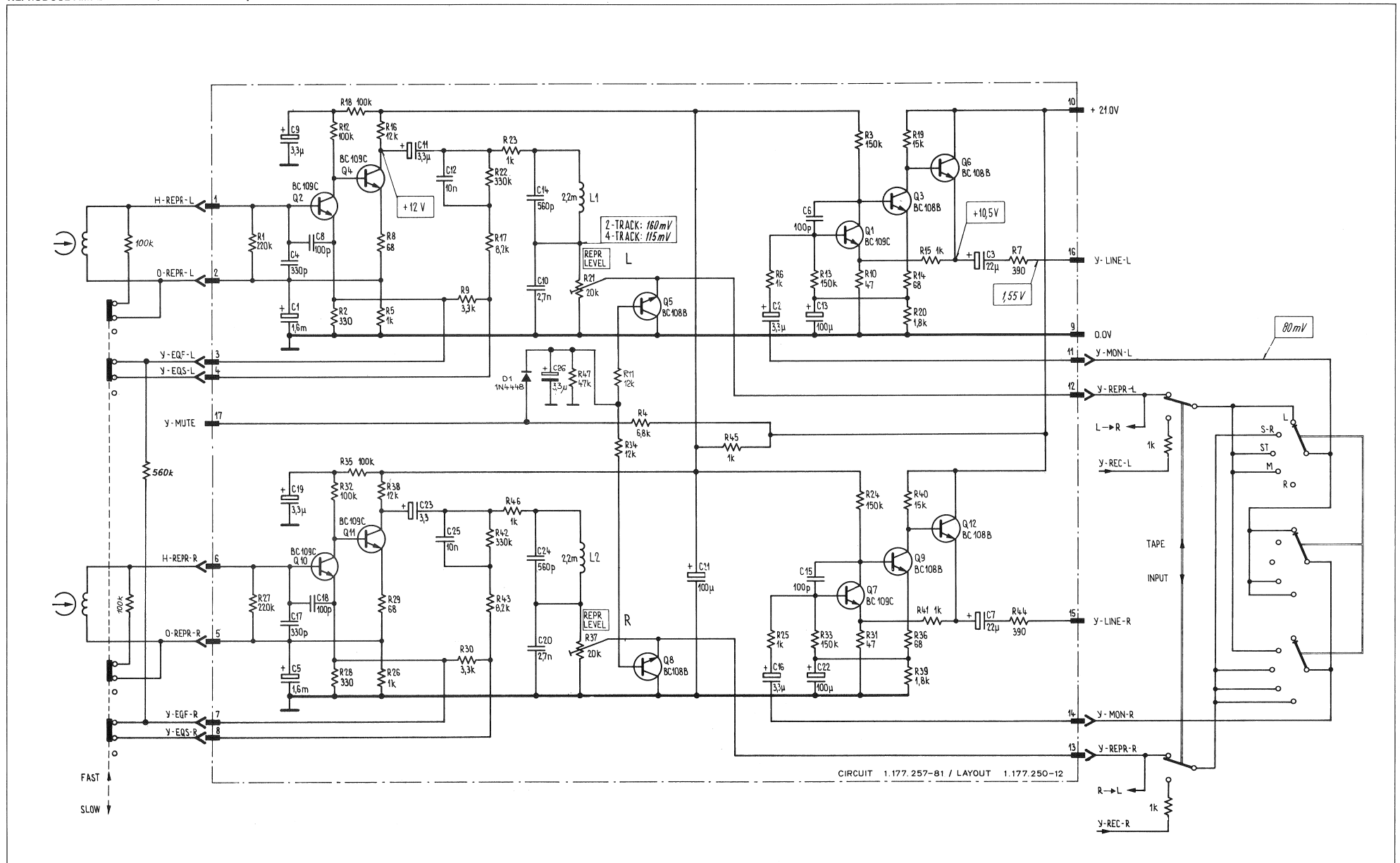
IND.	PDS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R.....27		57.11.4224	220 kohm	5%, 0.25W CF	
R.....28		57.11.4311	330 Ohm	5%, 0.25W CF	
R.....29		57.11.4480	68 Ohm	5%, 0.25W CF	
R.....30		57.11.4323	12 kohm	5%, 0.25W CF	
R.....31		57.11.4470	4.7 Ohm	5%, 0.25W CF	
R.....32		57.11.4304	100 kohm	5%, 0.25W CF	
R.....33		57.11.4356	150 kohm	5%, 0.25W CF	
R.....34		57.11.4323	12 kohm	5%, 0.25W CF	
R.....35		57.11.4304	100 kohm	5%, 0.25W CF	
R.....36		57.11.4480	68 Ohm	5%, 0.25W CF	
R.....37		58.14.0203	20 kohm	20%, 0.15W PCF, lin	
R.....38		57.11.4323	12 kohm	5%, 0.25W CF	
R.....39		57.11.4182	1.8 kohm	5%, 0.25W CF	
R.....40		57.11.4356	150 kohm	5%, 0.25W CF	
R.....41		57.11.4102	1 kohm	5%, 0.25W CF	
R.....42		57.11.4304	330 kohm	5%, 0.25W CF	
R.....43		57.11.4822	8.2 kohm	5%, 0.25W CF	
R.....44		57.11.4304	100 kohm	5%, 0.25W CF	
R.....45		57.11.4102	1 kohm	5%, 0.25W CF	
R.....46		57.11.4102	1 kohm	5%, 0.25W CF	
R.....47		57.11.4373	47 kohm	5%, 0.25W CF	

EI=Electrolytic, Cer=Ceramic, PC=Polycarbonate, PETP=Polyester, CF=Carbon Film, PCF=MaxCarbon Film
 Manufacturer: Signisignica, Telefun Instruments

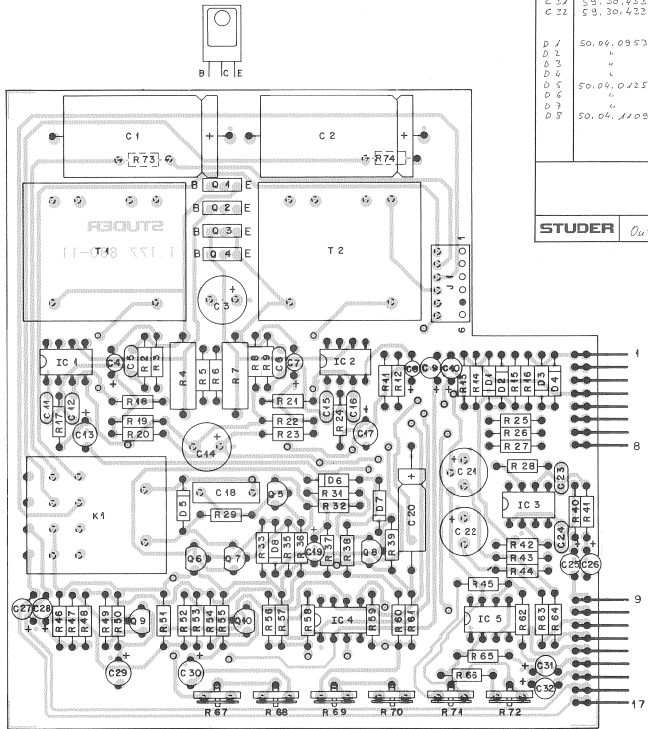
DRG 82/07/06

STUDER 82/07/06 RW REPRODUCE-AMPLIFIER 4.75/9.5 1.177.257-81 PAGE 3

REPRODUCE AMPLIFIER PCB (NAB 1 7/8 - 3 3/4 ips) 1.177.257-81



OUTPUT AMPLIFIER PCB 1.177.880



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
C 1	59.25.3222	220nF	-10% 16V	EL
C 2	59.25.3222	220nF	-10% 16V	EL
C 3	59.27.5401	100nF	-10% 25V	EL
C 4	59.30.4120	22nF	-20% 16V	TA
C 5	59.30.0320	25nF		HER
C 6	59.31.0220	22nF		HER
C 7	59.30.4220	22nF	-20% 16V	TA
C 8	59.30.4339	33nF	-20% 16V	TA
C 9	59.30.4100	10nF	-20% 16V	TA
C 10	59.30.4100	10nF	-20% 16V	TA
C 11	59.30.0320	25nF		HER
C 12	59.32.0101	100pF		HER
C 13	59.30.4339	33nF	-20% 16V	TA
C 14	59.32.0101	100pF		HER
C 15	59.32.0320	33nF	-10% 25V	EL
C 16	59.32.0404	40nF		REC
C 17	59.30.4339	33nF	-20% 16V	TA
C 18	59.31.1106	100nF	20%	HER
C 19	59.30.4220	22nF	-20% 16V	TA
C 20	59.28.5220	25nF	-10% 40V	EL
C 21	59.32.4101	100nF	-10% 16V	EL
C 22	59.32.4104	100nF	-10% 16V	EL
C 23	59.32.4330	33nF		HER
C 24	59.32.4330	33nF		HER
C 25	59.30.4339	33nF	-20% 16V	TA
C 26	59.30.4339	33nF	-20% 16V	TA
C 27	59.30.0339	33nF	-20% 16V	TA
C 28	59.30.0339	33nF	-20% 16V	TA
C 29	59.30.4100	10nF	-20% 16V	TA
C 30	59.30.4100	10nF	-20% 16V	TA
C 31	59.30.4339	33nF	-20% 16V	TA
C 32	59.30.4339	33nF	-20% 16V	TA
D 1	50.06.0953	AA 116		
D 2	"	"		
D 3	"	"		
D 4	"	"		
D 5	50.06.0225	JN4445		
D 6	"	"		
D 7	"	"		
D 8	50.06.1108	20V	5% 0.4 W D?	

① 13.2.1951 Waag/Mueller
 ② 5.11.1950 Waag/Mueller
 ③ 19.9.1950 Waag/Mueller
 IND DATE NAME PAGE 1 of 5
STUDER Output Amplifier 1.177.880.00

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
IC 1	50.05.0144	LM301AH		
IC 2	50.05.0144	LM301AH		
IC 3	50.05.0245	RC455P		
IC 4	50.05.0245	RC455P		
IC 5	50.05.0245	RC455P		

① 13.2.1951 Waag/Mueller
 ② 5.11.1950 Waag/Mueller
 ③ 19.9.1950 Waag/Mueller
 IND DATE NAME PAGE 2 of 5
STUDER Output Amplifier 1.177.880.00

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
K 1	54.01.0216	6 P01	AMP C15	
K 1	56.04.0121	P24	ReLW	
F 1	54.01.0170	8P01	AMP C15	
F 1	54.01.0170	8P01	AMP C15	
B 1	50.03.0510	BO126-16	PWP	
B 1	50.03.0485	BO125-16	NPN	
B 3	50.03.0510	BO126-16	PWP	
B 4	50.03.0485	BO125-16	NPN	
B 5	50.03.0515	BC560E	NPN	BC491C
B 6	50.03.0436	BC550B	NPN	BC491B
B 7	50.03.0436	BC550B	NPN	BC491B
B 8	50.03.0436	BC550B	NPN	BC491B
B 9	50.03.0436	BC550B	NPN	BC491B
B 10	50.03.0436	BC550B	NPN	BC491B
R 1	57.11.4233	33k		
R 2	57.11.4159	1k5		
R 4	57.63.4471	470	5% 0.5W	
R 6	57.11.4100	10		
R 6	57.11.4100	10		
R 3	57.63.4471	470	5% 0.5W	
R 5	57.11.4159	1k5		
R 9	57.11.4333	33k		
R 11	57.11.4159	1k5		
R 12	57.11.4232	2.2k		
R 14	57.11.4232	2.2k		
R 15	57.11.4332	3.3k		
R 16	57.11.4332	3.3k		
R 18	57.11.4100	10k		
R 19	57.11.4333	3.3k		
R 20	57.11.4100	10k		
R 21	57.11.4100	10k		
R 22	57.11.4100	10k		
R 23	57.11.4100	10k		
R 24	57.11.4100	10k		

① 13.2.1951 Waag/Mueller
 ② 5.11.1950 Waag/Mueller
 ③ 19.9.1950 Waag/Mueller
 IND DATE NAME PAGE 3 of 5
STUDER Output Amplifier 1.177.880.00

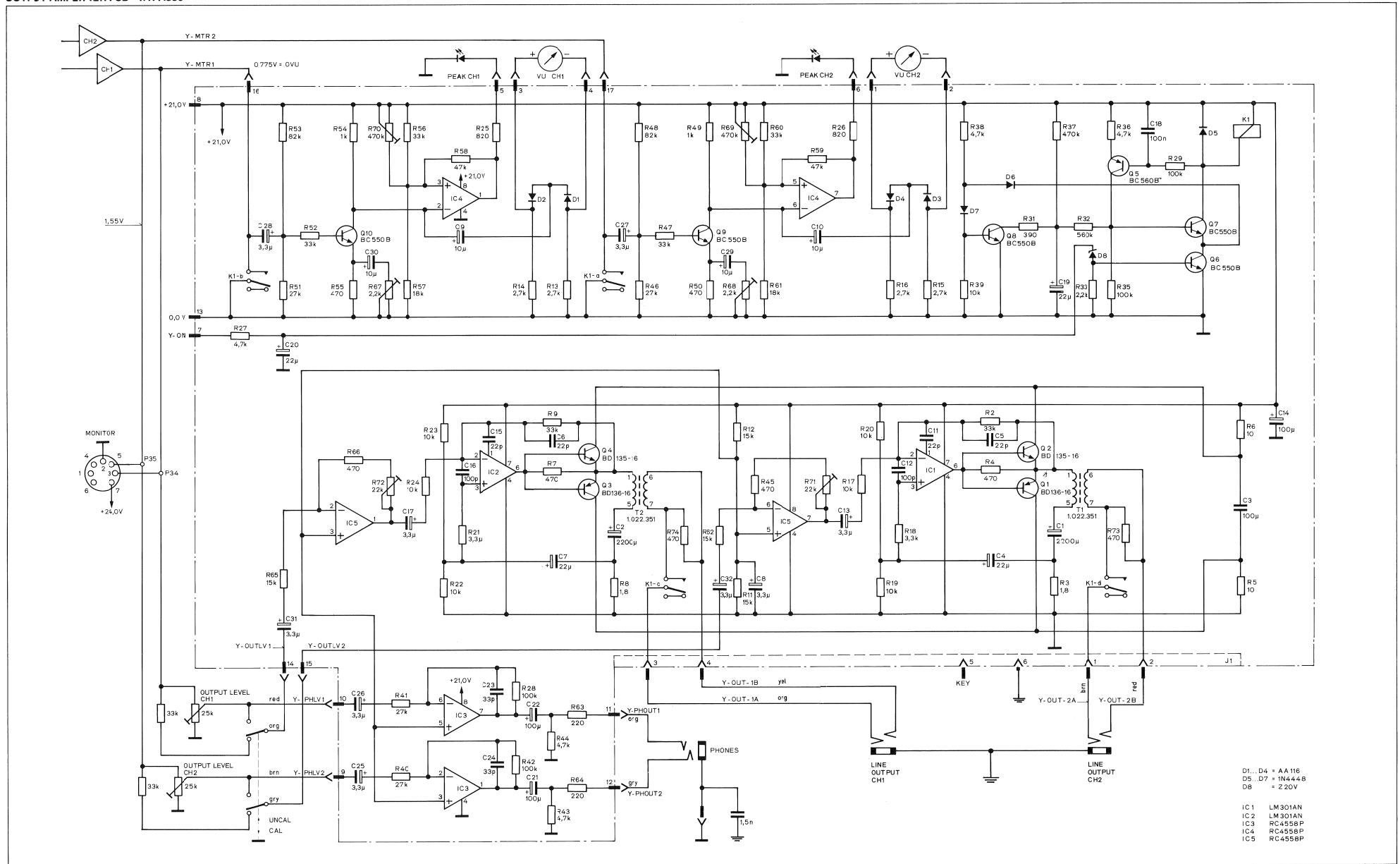
POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
R 25	59.11.6221	220		
R 26	59.11.6221	220		
R 27	59.11.4472	47k		
R 28	59.11.4472	47k		
R 29	59.11.4472	47k		
R 30	59.11.4472	47k		
R 31	59.11.4472	47k		
R 32	59.11.4472	47k		
R 33	59.11.4472	47k		
R 34	59.11.4472	47k		
R 35	59.11.4472	47k		
R 36	59.11.4472	47k		
R 37	59.11.4472	47k		
R 38	59.11.4472	47k		
R 39	59.11.4472	47k		
R 40	59.11.4472	47k		
R 41	59.11.4472	47k		
R 42	59.11.4472	47k		
R 43	59.11.4472	47k		
R 44	59.11.4472	47k		
R 45	59.11.4472	47k		
R 46	59.11.4472	47k		
R 47	59.11.4472	47k		
R 48	59.11.4472	47k		
R 49	59.11.4472	47k		
R 50	59.11.4472	47k		
R 51	59.11.4472	47k		
R 52	59.11.4472	47k		
R 53	59.11.4472	47k		
R 54	59.11.4472	47k		
R 55	59.11.4472	47k		
R 56	59.11.4472	47k		
R 57	59.11.4472	47k		
R 58	59.11.4472	47k		
R 59	59.11.4472	47k		
R 60	59.11.4472	47k		
R 61	59.11.4472	47k		
R 62	59.11.4472	47k		
R 63	59.11.4472	47k		
R 64	59.11.4472	47k		
R 65	59.11.4472	47k		
R 66	59.11.4472	47k		
R 67	59.02.4222	2.2k		
R 68	59.02.4222	2.2k		
R 69	59.02.4144	100k		
R 70	59.02.4106	100k		

① 13.2.1951 Waag/Mueller
 ② 5.11.1950 Waag/Mueller
 ③ 19.9.1950 Waag/Mueller
 IND DATE NAME PAGE 4 of 5
STUDER Output Amplifier 1.177.880.00

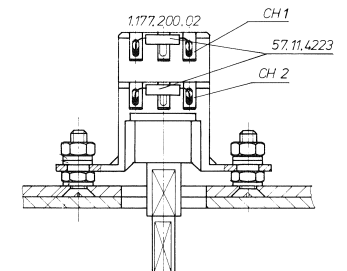
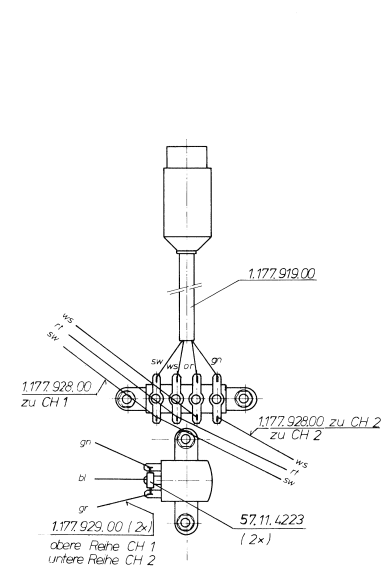
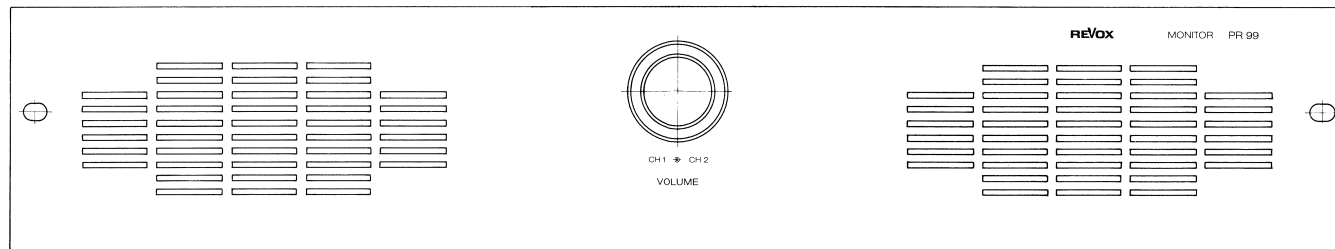
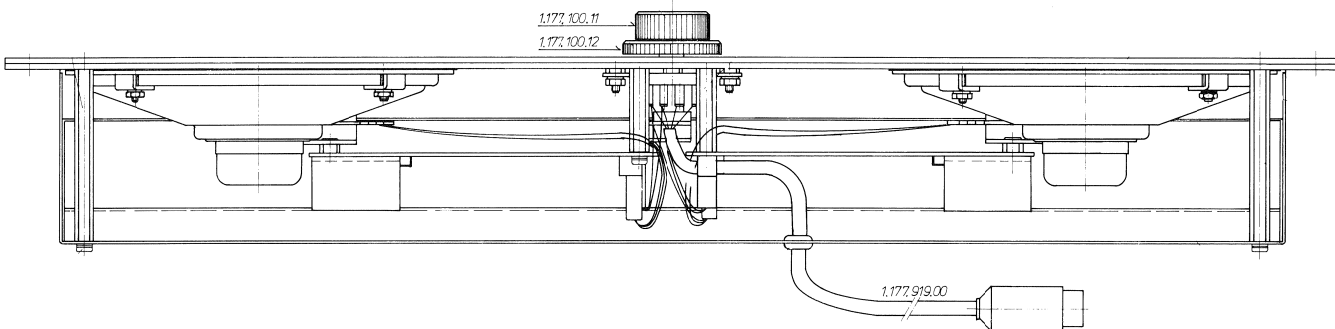
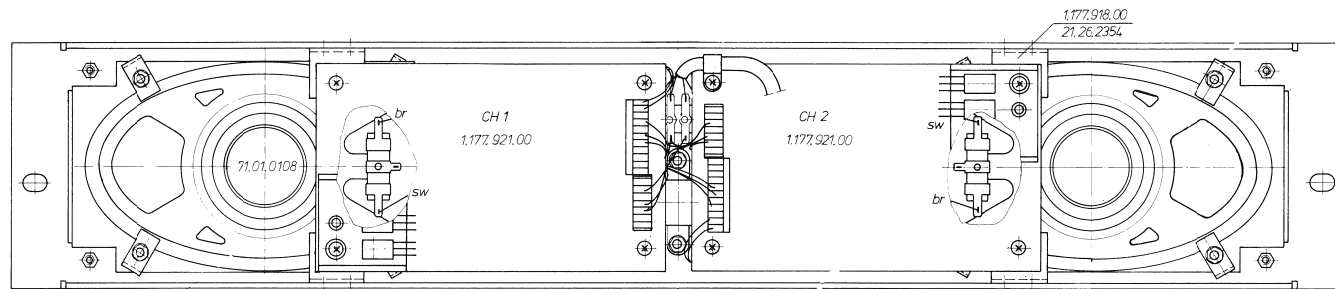
POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
R 71	58.02.4223	2.2k		
R 72	58.02.4223	2.2k		
R 73	59.11.4474	47k		
R 74	59.11.4474	47k		
T 1	A.022.35.6.0	1:1.27	Transformer	ST
T 2	A.022.35.6.0	1:1.27	Transformer	ST

① 13.2.1951 Waag/Mueller
 ② 5.11.1950 Waag/Mueller
 ③ 19.9.1950 Waag/Mueller
 IND DATE NAME PAGE 5 of 5
STUDER Output Amplifier 1.177.880.00

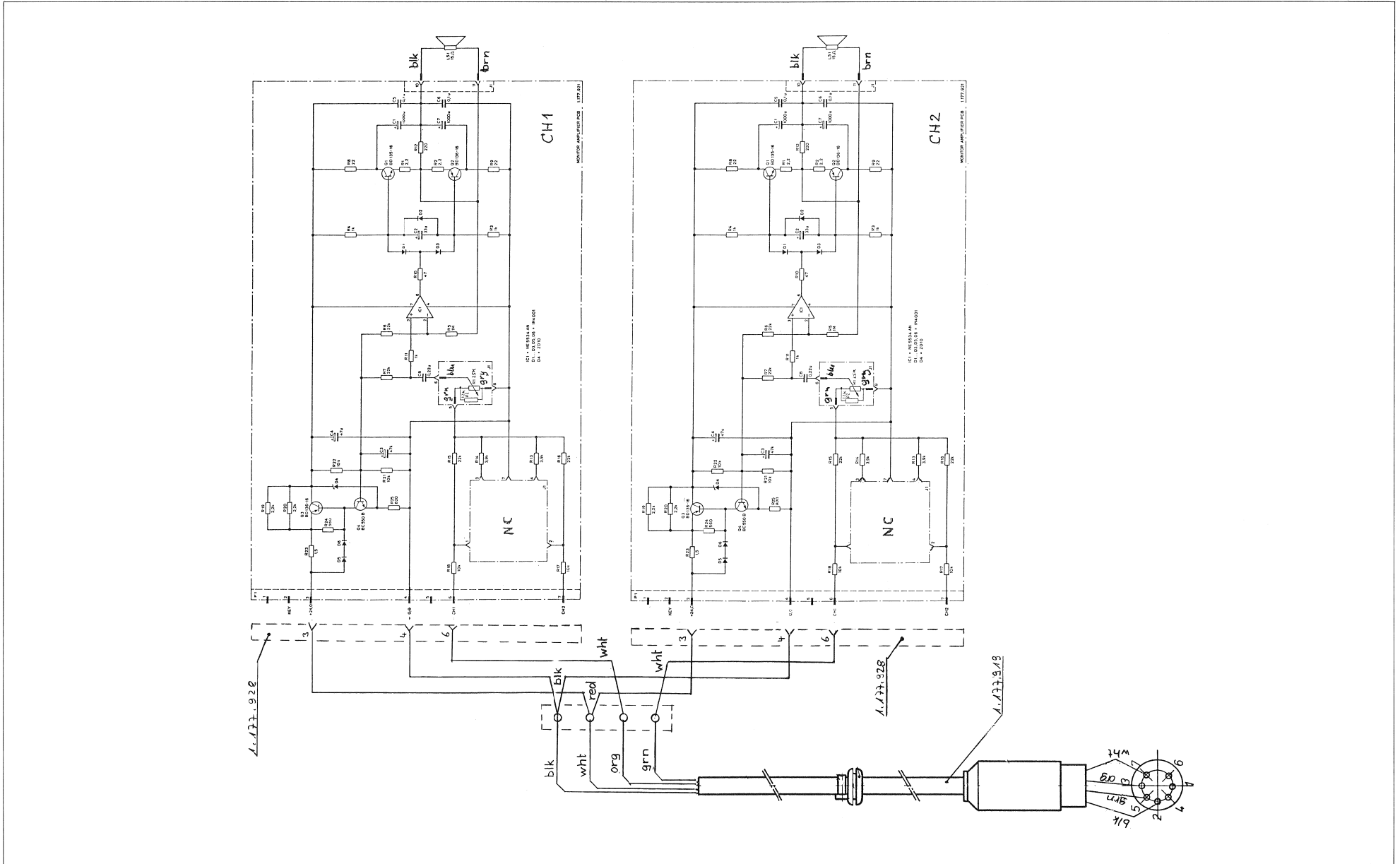
OUTPUT AMPLIFIER PCB 1.177.880



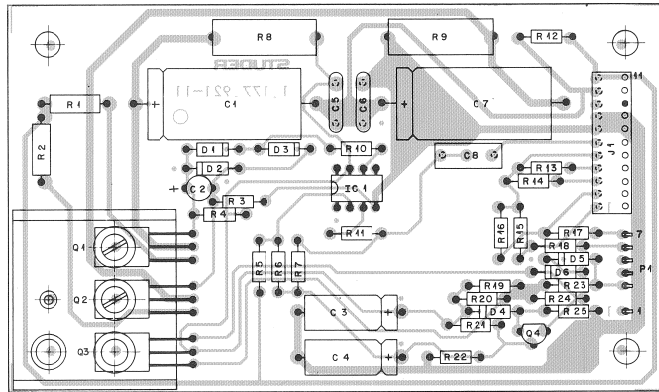
MONITOR PANEL/2CH



MONITOR PANEL/2CH



MONITOR PANEL/2CH



POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
CA	57.25.4402	1000u	-10% 25F EL	
CB	57.30.3330	33u	-20% 10K 7H	
CC	57.25.4470	47u	-10% 25V EL	
CD	57.25.4470	47u	-10% 25V EL	
CE	57.32.3404	0.1u	+20% 25V NFR	
CF	57.37.3404	0.1u	+20% 25V NFR	
CG	57.25.4402	1000u	-10% 25V EL	
CH	57.12.2224	0.22u	5% 100V NFR7P	
DI...3	50.04.0422	1A400A		57
DI	50.04.1144	2A70		57
DI...6	50.04.0422	1A400A		57
IC 1	50.05.0284	16553948	OP AMP	
IC 1	59.01.0784	11 P01	SOCKET STIP AMP	
IC 1	59.01.0784	1 P01	SOCKET STIP AMP	
Q1	50.03.0495	BD135/16	NPN	
Q2	50.03.0570	BD135/16	NPN	
Q3	50.03.0570	BD135/16	NPN	
Q4	50.03.0436	BC107B	NPN	8C 107B
P1	57.13.4229	2.2	.5W	
P2	57.13.4229	2.2	.5W	
P3	57.11.4102	1k		
P4	57.11.4102	1k		
P5	57.11.4102	1k		
P6	57.11.4223	22k		
P7	57.11.4223	22k		
P8	57.56.5220	32	10% 4W DR	
P9	57.56.5220	32	10% 4W DR	
P10	57.11.4470	4.7		
P11	57.11.4402	1k		
P12	57.11.4274	220		
P13	57.11.4392	3.9k		
P14	57.11.4392	3.9k		
P15	57.11.4223	22k		
P16	57.11.4223	22k		
P17	57.11.4102	1k		
P18	57.11.4102	1k		
P19	57.11.4223	22k		
P20	57.11.4223	22k		
P21	57.11.4102	1k		
P22	57.11.4102	1k		

POS NO	PART NO	VALUE	SPECIFICATIONS	EQUIVALENT MFR
R23	57.11.4159	1.5		
R24	57.11.4561	560		
R25	57.11.4421	4420		