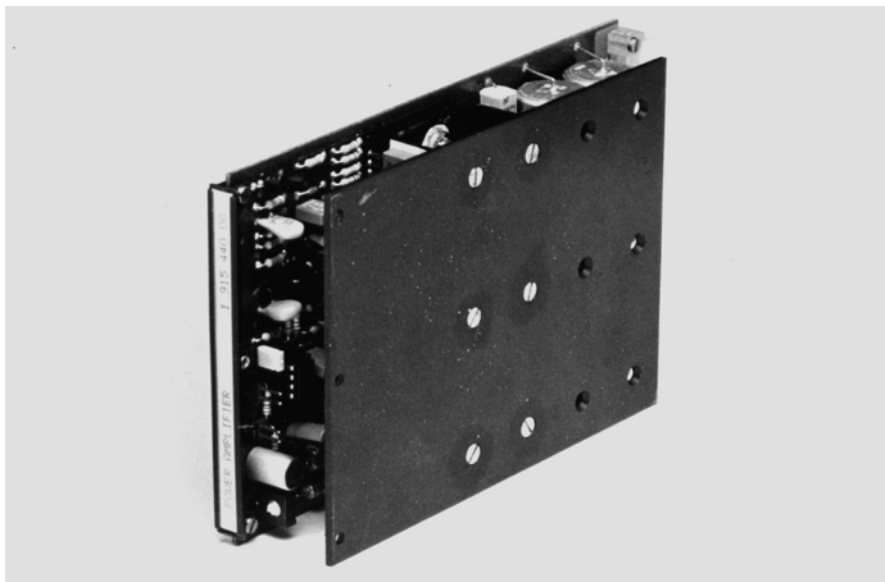


40 W Power Amplifier

1.915.440/441

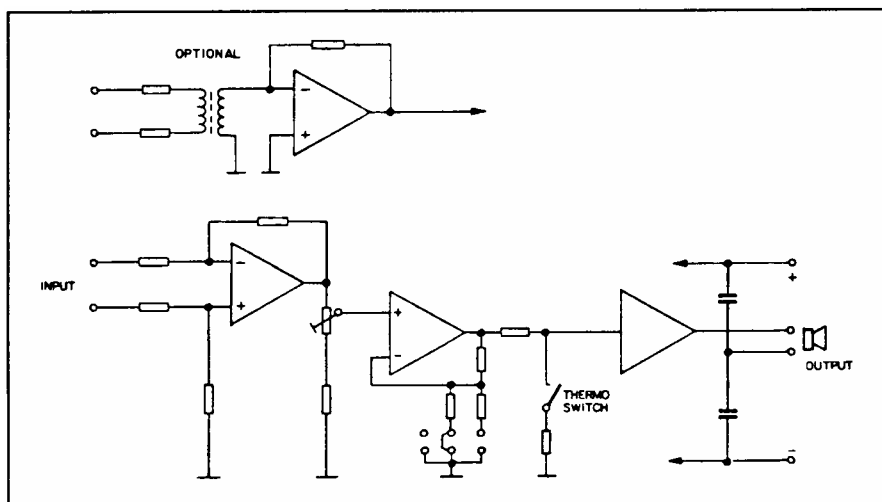
For applications where higher power level is needed, a 40 W amplifier has been realized on a Euro-card. Its width is 32 mm, which equals 7M widths approximately.



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

Special Features

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



Technical Specifications

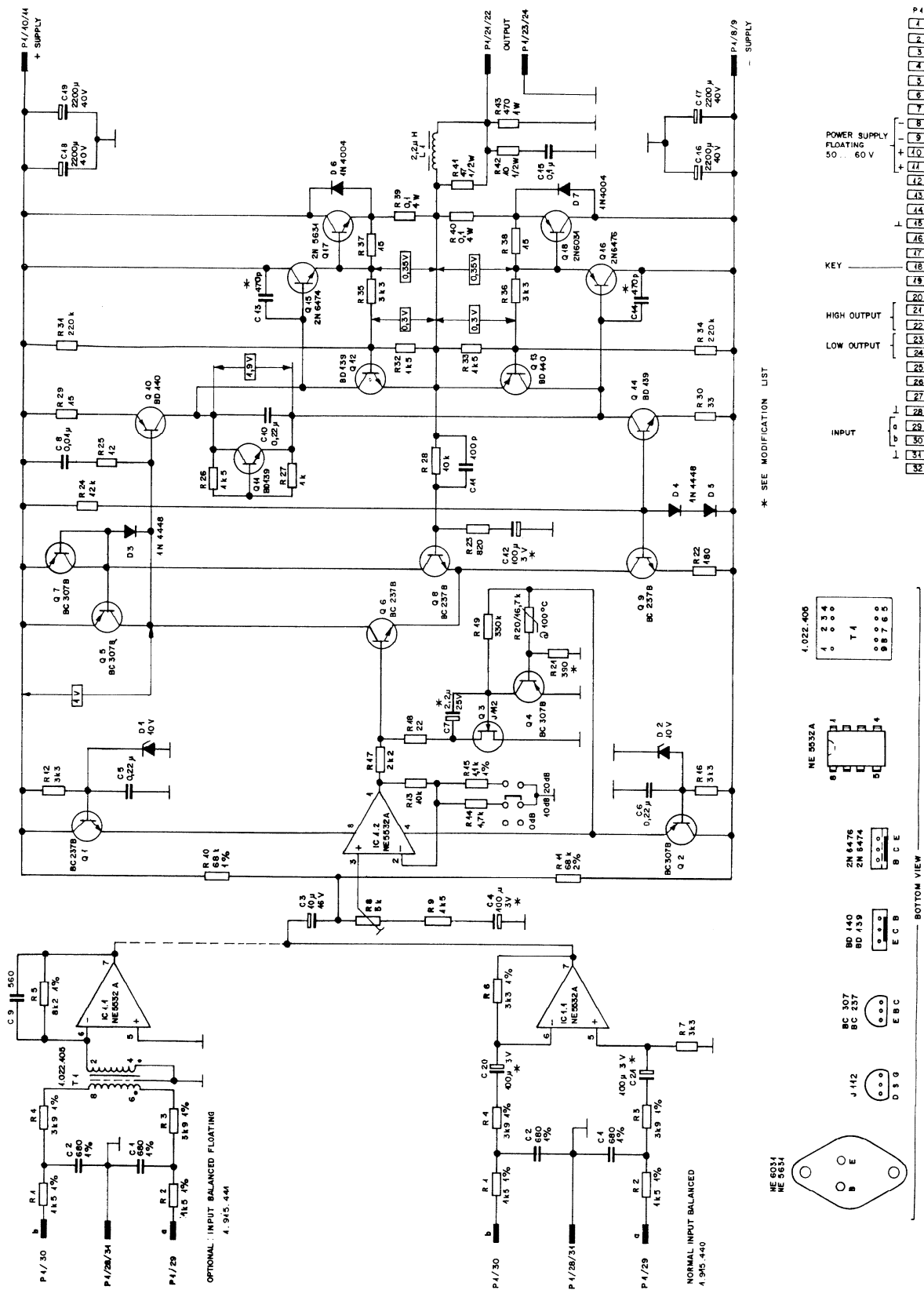
Audio:	Power output	40 W/4 Ω , continuous, sine-wave,
	THD	< 0.1 % , 30 Hz...15 kHz (up to rated output)
	Output impedance	0.1 Ω
	Input impedance	10 kΩ
	Common mode rejection	> 50 dB , 30 Hz...16 kHz (with input transformer)
	Input sensitivity	-12...+18 dBu (0.195...6.2 V _{rms}) for rated output (adjustable with jumper in three 10 dB-increments, plus fine-trim range of 12 dB)
	Frequency response	+0.5/-1 dB , 30 Hz...15 kHz
	S/N	105 dB @ maximum gain 90 dB @ minimum gain

Supply: **45 V_{DC}** (70 mA idling, 1.5 A @ 40 W/4 Ω)

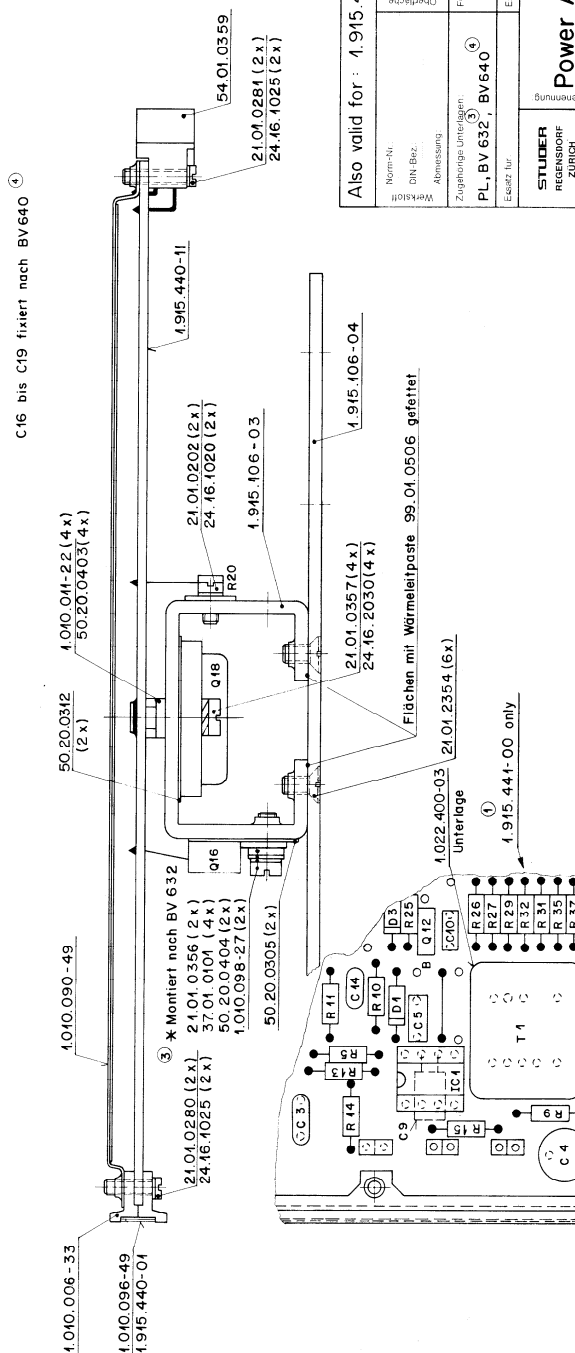
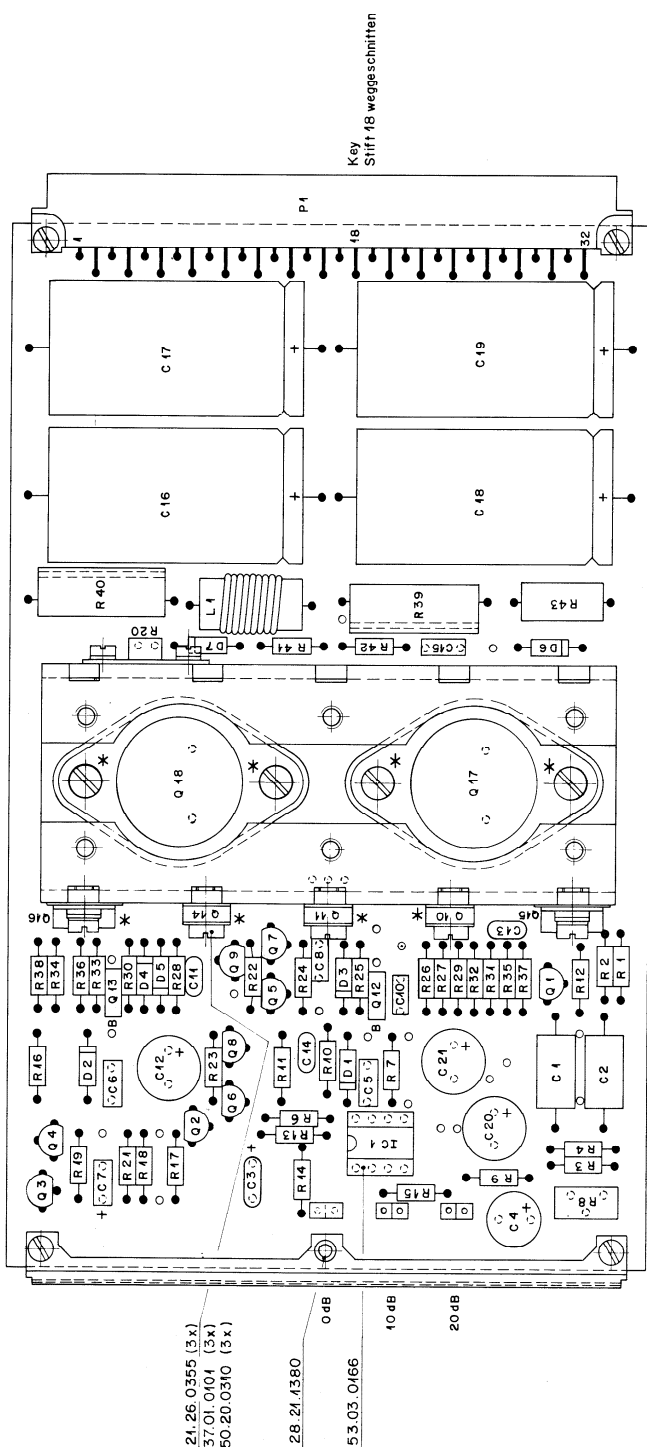
Dimensions: Euro-card **100 × 160 mm, 7M units wide**

Ordering Information:

Euro-cards	<ul style="list-style-type: none">40 W power amplifier with transformerless input40 W power amplifier with input transformer	1.915.440.xx 1.915.441.xx
19"/1U standard products		
40 W power amplifier	<ul style="list-style-type: none">Mono version, 19"/1UStereo version, 19"/1U19"/1U mounting frame (without amplifier cards)	75.700.80311 75.700.80322 1.918.120.xx



DATE:	12. 1. 82	24.5.83	24. 6. 83	23.11. 83	
SIGN:	<i>fr</i>	<i>Me</i>	<i>Me</i>	<i>Me</i>	
STUDER REGENSDORF ZÜRICH	POWER AMPLIFIER OPTIONAL : INP. BALANCED FLOATING				SC 1.915.440 1. 915. 444



Also valid for: 1.915.441-00		①	
Normal-Nr.	Qute	Überfläche	
DIN-Bez.	Beh.		
Abmessung			
Zugfestigkeit unterlegen			
PL, BV 63 ^② , BV 640 ^④	Freimassolanz:	Maßstab	
	2:1		
Exakt zur	Erreicht durch		

STUDB REGENSBORF ZÜRICH		Benennung	
Power Amplifier		1.915.441-00	

Kopie für		Datum		Orz		dara		das		Index	
Ausgabe		4.9.81		Ho		1h		1h		1h	
Änderung		25.5.83		A Ho		1h		1h		1h	
		4.4.84		A Ho		1h		1h		1h	
		10.1.86		A Ho		1h		1h		1h	
		25.5.87		7h		1h		1h		1h	

①	②	③	④	⑤	⑥

40W POWER AMPLIFIER

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

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
	R.36	57.11.4332	3,3k	
	R.37	57.11.4150	15	
	R.38	57.11.4150	15	
	R.39	57.56.5108	0,1 10% 4W WW	
	R.40	57.56.5108	0,1 10% 4W WW	
	R.41	57.11.4470	47 0,4W	
	R.42	57.11.4100	10 0,4W	
	R.43	57.13.4471	470 1W	
	T.1	1.022.405.00	1:1 INPUT TRANSFORMER	ST

MODIFICATION LIST

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

PS=Polystyrene, EL=Electrolytic, SAL=Solid Aluminium, PE=Polyester, CER=Ceramic, SI=Silicium, T=Texas Instruments, R=RCA
WW=Wire Wound

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

Also Valid for: 1.915.441 ①

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

END
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