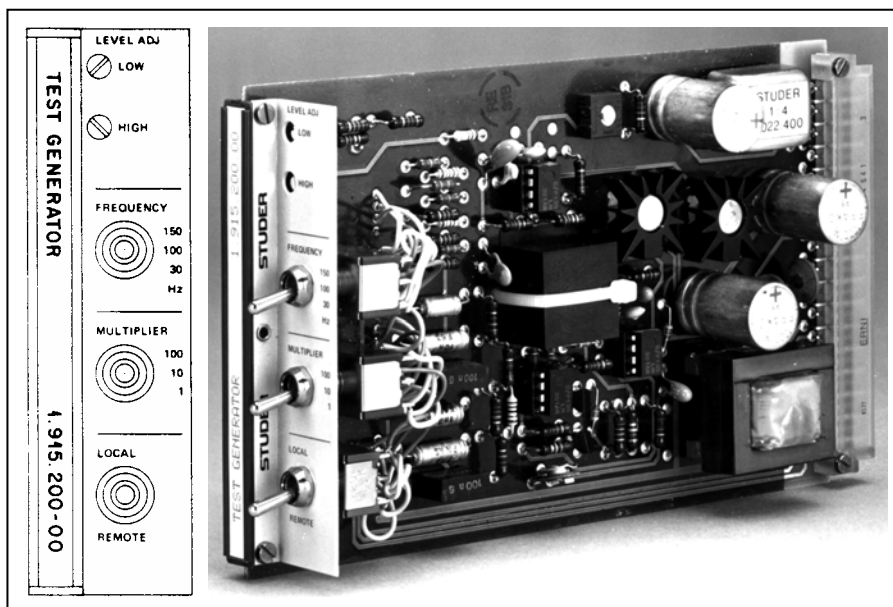


Audio Generator

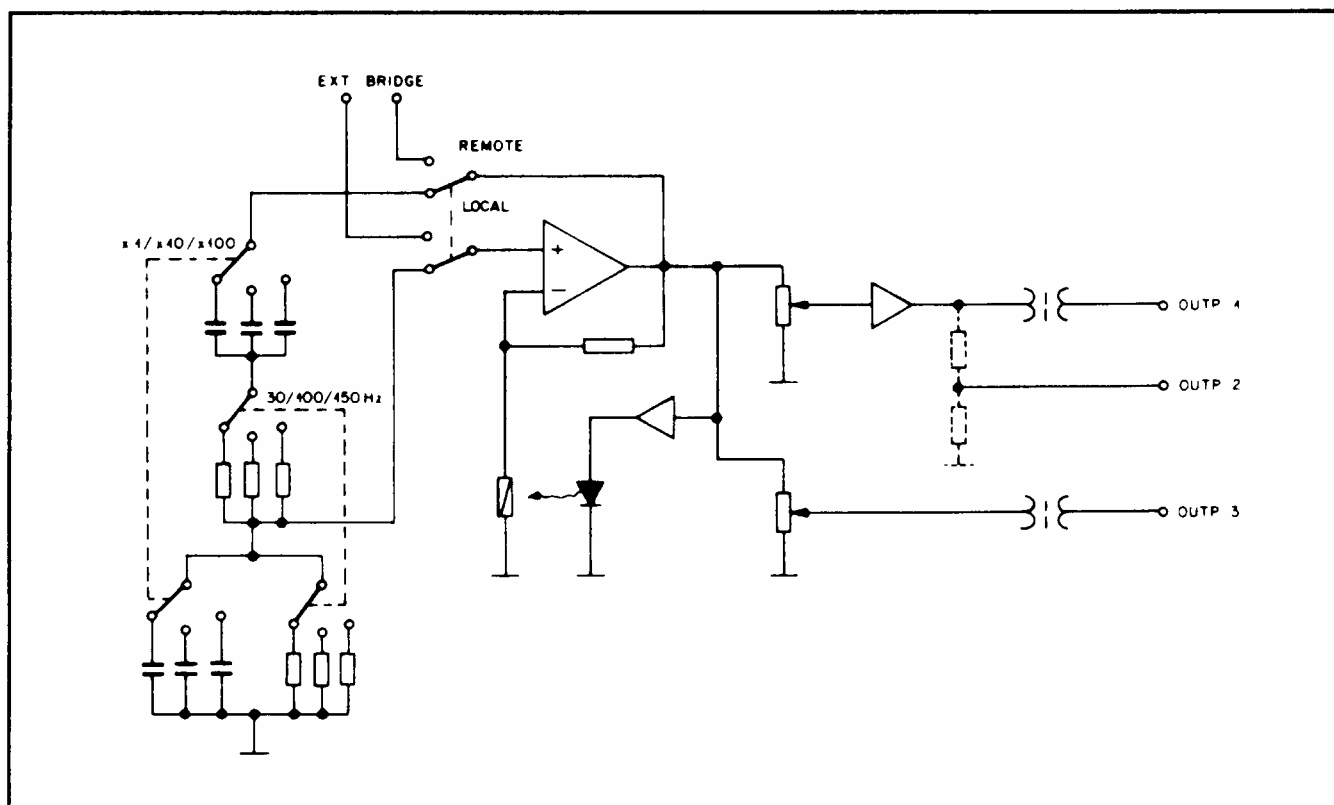
1.915.200

This oscillator circuit provides a convenient source of 9 fixed audio frequencies with stable signal level, accommodated on one Euro-card. It is well suited for quick frequency-response measurements or for other calibration work in an audio system.



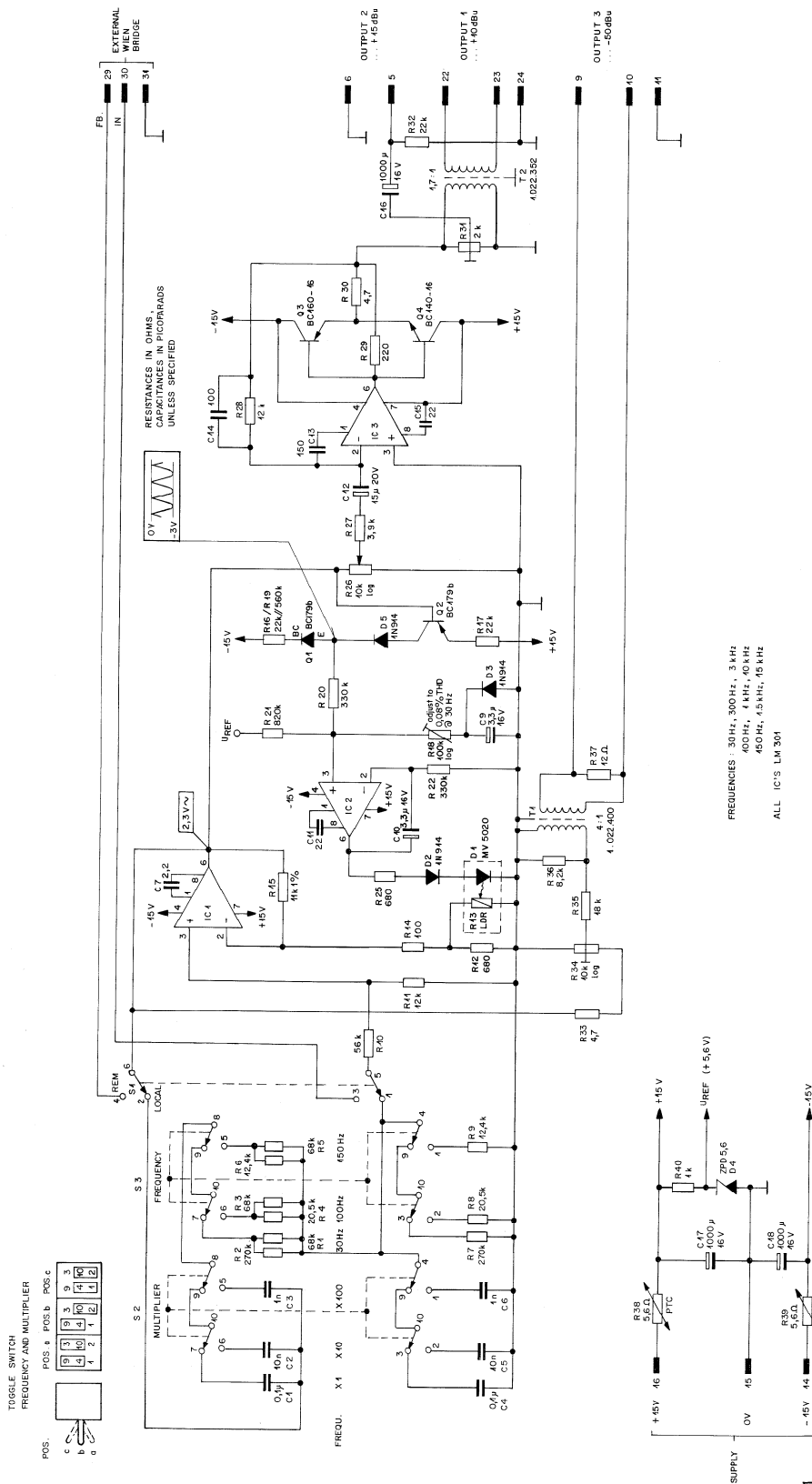
Two three-position rocker switches allow the selection of the 9 frequencies, a third switch permits changeover to an external Wien-bridge, if external frequency control should be desired.

An output amplifier with level control on its input is also implemented, providing three different outputs, as far as levels and balanced/unbalanced configurations are concerned.



Technical Specifications

General:	Frequencies	30 / 100 / 150 / 300 Hz / 1 / 1.5 / 3 / 10 / 15 kHz , fixed (accuracy $\pm 5\%$)
	Settling time	< 5 s (30 Hz) < 1 s (1 kHz)
	Level accuracy	+0.1/–0.2 dB (0...50° C)
	Operating temperature	–10...+55° C
	Supply	±15 V , regulated within ± 0.2 V (< 25 mA)
Output 1:	balanced and floating	separately adjustable
	Output level range	–∞...+10 dBu (0...2.45 V _{rms})
	Level uniformity vs. frequency	±0.1 dB (20° C)
	THD	< 0.25% , 30 Hz...15 kHz < 0.1% , 100 Hz...10 kHz
	Output impedance	< 30 Ω
	Minimum load	200 Ω
Output 2:	unbalanced	separately adjustable
	Output level range	–∞...+15 dBu (0...4.4 V _{rms})
	Level uniformity vs. frequency	±0.2 dB (20° C)
	THD	< 0.15% , 30 Hz...15 kHz < 0.1% , 100 Hz...10 kHz
	Minimum load	200 Ω
Output 3:	balanced and floating	separately adjustable
	Output level range	–∞...–50 dBu (0...2.5 mV _{rms})
	Level uniformity vs. frequency	±0.2 dB (20° C)
	THD	< 0.2% , 30 Hz...15 kHz
	Output impedance	12 Ω
	Minimum load	200 Ω
Dimensions:	Euro-card	100 × 160 mm, 7M units wide
	Weight	approx. 350 g
Ordering Information:	Audio generator 30 Hz...15 kHz	1.915.200.xx

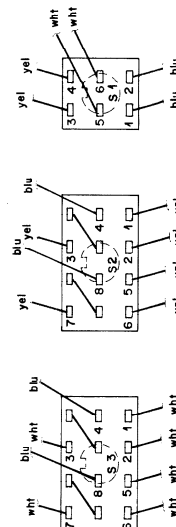
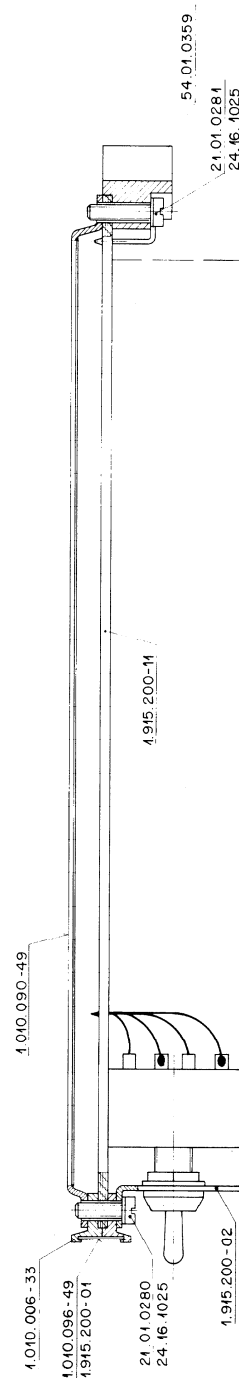
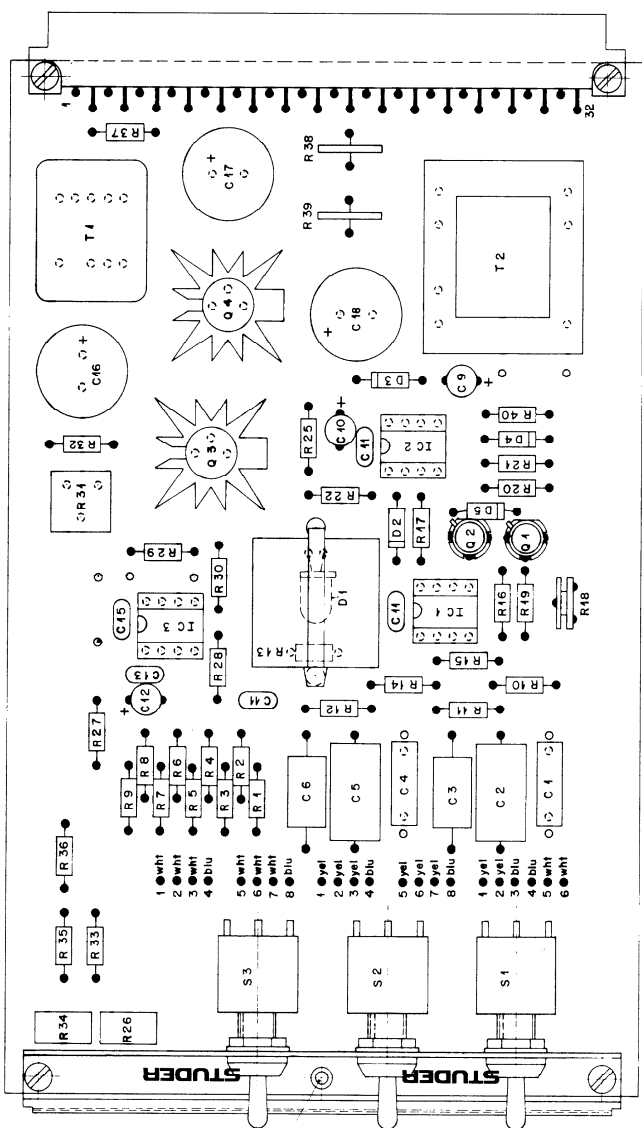
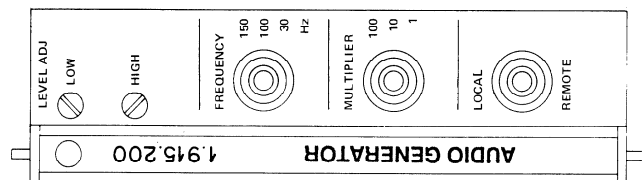


FREQUENCIES : 30Hz, 300Hz, 3kHz, 400Hz, 4kHz, 40kHz, 450Hz, 4.5kHz, 15kHz
ALL IC'S LM 301

Ersetzt für:	Ersetzt durch:	Kopie für:
STUDER REGENSDORF ZÜRICH	AUDIO GENERATOR	Numer: 1.915.200

Änderung	1.	2.	3.	83	Si	Wc	③
29.10.79	Si	Wc					①
16.10.78	Si	Sk					②
Datum	Gez.	Gepr.	Gez.				Index

AUDIO GENERATOR



Hersteller Studer AG	PL	2-1	30.10.79 Ho	1.915.200-00
Zugabe für Lieferant				
Hersteller				
STUDER REGENSIONE ZÜRICH	AUDIO GENERATOR		1.915.200-00	

AUDIO GENERATOR

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C	1	59.99.0254	0,1μ 2% 100V	PE
C	2	59.12.7103	0,01μ 1% 63V	PS
C	3	59.12.9102	1000p 1% 500V	PS
C	4	59.99.0254	0,1μ 2% 100V	PE
C	5	59.12.7103	0,01μ 1% 63V	PS
C	6	59.12.9102	1000p 1% 500V	PS
C	7	59.34.0229	2,2p	CER
C	8			
C	9	59.36.3339	3,3μ 20% 16V	TA
C	10	59.36.3339	3,3μ 20% 16V	TA
C	11	59.32.0220	22p 20% 400V	CER
C	12	59.36.4150	15μ 20% 25V	TA
C	13	59.32.1151	150p 10% 400V	CER
C	14	59.32.0101	100p 20% 400V	CER
C	15	59.32.0220	22p 20% 400V	CER
C	16	59.22.4102	1000μ -10% 16V	EL
C	17	59.22.4102	1000μ -10% 16V	EL
C	18	59.22.4102	1000μ -10% 16V	EL
D	1	50.04.2104	MV5020	LED
D	2	50.04.0125	1N4448	SI 1N914
D	3	50.04.0125	1N4448	SI 1N914
D	4	50.04.1104	25.6	5% 0.4W
D	5	50.04.0125	1N4448	SI 1N914
IC	1	50.05.0144	LM301AN	OP AMP
IC	2	50.05.0144	LM301AN	OP AMP
IC	3	50.05.0144	LM301AN	OP AMP
Q	1	50.03.0305	BC179B	PNP
Q	2	50.03.0305	BC179B	PNP
Q	3	50.03.0315	BC160-16	PNP
Q	4	50.03.0316	BC140-16	NPN
R	1	57.41.4683	68k 5% 1/4W	CSCH
R	2	57.39.2673	267k 1% 1/4W	MF
R	3	57.41.4683	68k 5% 1/4W	CSCH
R	4	57.39.2052	20.5k 1% 1/4W	MF
R	5	57.41.4683	68k 5% 1/4W	CSCH
R	6	57.39.1242	12.4k 1% 1/4W	MF
R	7	57.39.2673	267k 1% 1/4W	MF
R	8	57.39.2052	20.5k 1% 1/4W	MF
R	9	57.39.1242	12.4k 1% 1/4W	MF
R	10	57.41.4563	56k 5% 1/4W	CSCH
R	11	57.41.4123	12k 5% 1/4W	CSCH
R	12	57.41.4681	680 5% 1/4W	CSCH
R	13	57.99.0135	1k LDR 100UX	
R	14	57.41.4101	100 5% 1/4W	CSCH
R	15	57.39.1102	11k 1% 1/4W	MF
R	16	57.41.4223	22k 5% 1/4W	CSCH
R	17	57.41.4223	22k 5% 1/4W	CSCH
R	18	58.02.8104	100k LOG 20% 0.1W	PSCH
R	19	57.41.4564	560k 5% 1/4W	CSCH
R	20	57.41.4334	330k 5% 1/4W	CSCH
R	21	57.41.4824	820k 5% 1/4W	CSCH
R	22	57.41.4334	330k 5% 1/4W	CSCH
R	23			
R	24			
R	25	57.41.4681	680 5% 1/4W	CSCH
R	26	58.01.7103	10k 10% 1/4W	PMG
R	27	57.39.3921	3,92k 1% 1/4W	MF
R	28	57.41.4123	12k 5% 1/4W	CSCH
R	29	57.41.4221	220 5% 1/4W	CSCH
R	30	57.41.4479	4,7 5% 1/4W	CSCH
R	31	58.01.8202	2k 10% 1/4W	PMG
R	32	57.41.4223	22k 5% 1/4W	CSCH
R	33	57.41.4479	4,7 5% 1/4W	CSCH
R	34	58.01.7103	10k 10% 1/4W	PMG
R	35	57.41.4183	18k 5% 1/4W	CSCH
R	36	57.41.4822	8,2k 5% 1/4W	CSCH
R	37	57.41.4120	12 5% 1/4W	CSCH
R	38	57.99.0209	5,6 PTC	
R	39	57.99.0209	5,6 PTC	
R	40	57.41.4102	1k 5% 1/4W	CSCH
S	1	55.01.0112	2xON-ON	SWITCH AU KIPP
S	2	55.01.0114	4xON-ON-ON	SWITCH AU KIPP
S	3	55.01.0114	4xON-ON-ON	SWITCH AU KIPP
T	1	1.022.400.00	4:1	TRAFO
T	2	1.022.352.00		

ST
ST

CER=Ceramic, PE=Polyester, PS=Polystyrol, PMG=Trimmer, MF=Metal Film, CSCH=Carbon Film
 PSCH=Poti, EL=Electrolytic, TA=Tantalum

MANUFACTURER: ST=Studer

1.915.200 AUDIO GENERATOR

WE 24/03/80

END

