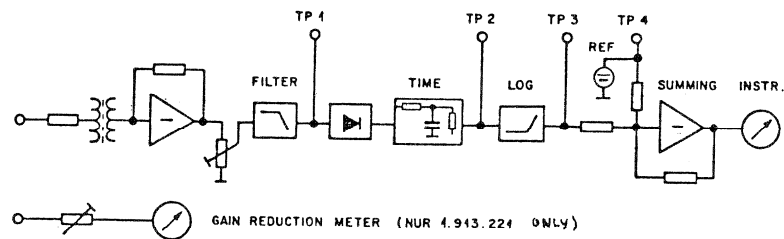


## PEAK PROGRAM METER

Aussteuerungsmesser mit symmetrisch, erd-freiem Eingang. Dynamisches Verhalten gemäss IEC / DIN Normen.

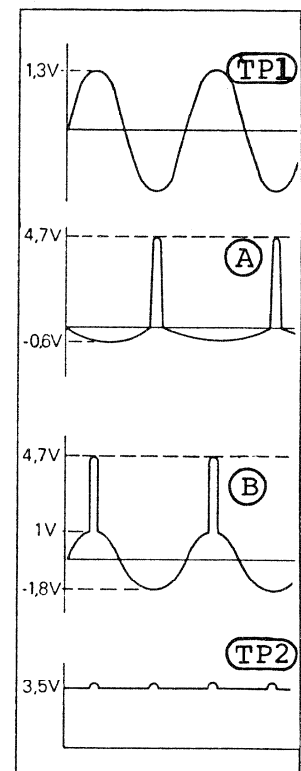
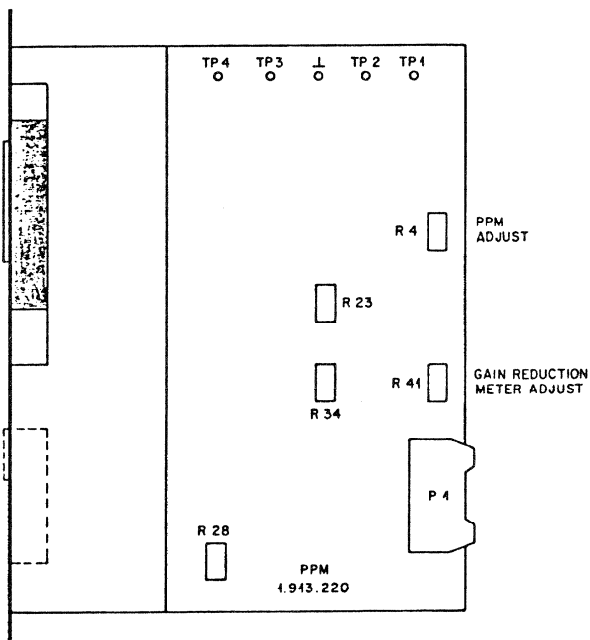
## Blockschaltbild



## PEAK PROGRAM METER

Level indicator with balanced and floating input. Dynamic response according to IEC / DIN standards.

## Block Diagram



## Abgleich

- 1) Leitungspegel + 6 ... + 15 dB 1 kHz am Eingang.
- 2) + 3,5 V an TP2 mit R4 (Pegel PPM)
- 3) 0 dB am Instrument mit R28
- 4) - 30 dB am Instrument mit R34
- 5) - 40 dB am Instrument mit R23

## Calibration

- 1) Line level +6 ... +15 dB 1 kHz at input
- 2) +3.5 V at TP2, adjust with R4 (level PPM)
- 3) 0 dB at instrument adjust with R28
- 4) -30 dB at instrument adjust with R34
- 5) -40 dB at instrument adjust with R23

Die mechanische Nullstellung des Messwerkes liegt bei Referenzanzeige 0 dB. Für Pegel, deren Anzeige 0 ... + 6 dB ergibt, wechselt die Polarität der Ausgangsspannung am Verstärker 4.2.

The mechanical zero position of the instrument corresponds to the reference indication 0 dB. For levels which give a deflection of 0 ... +6 dB on the scale, the amplifier 4.2 changes the polarity of the output voltage.

TECHNISCHE DATEN

Eingangsempfindlichkeit für Referenzanzeige (0 dB):  
 + 6 dBu ... + 15 dBu  
 Eingangsimpedanz >10 kOhm

Anzeigebereich:  
 - 40 dB ... + 6 dB

Genauigkeit bei 20° C, 1 kHz  
 - 40 dB ... + 6 dB: ± 0,5 dB

Frequenzgang bei Referenzanzeige 0° C ... 50° C,  
 31,5 Hz ... 15 kHz: ± 0,5 dB

Temperatureinfluss bei Referenzanzeige, 1 kHz,  
 0° C ... 50° C: < Fehler 0,5 dB

Dynamisches Verhalten:

Überschwingen: ≤ 1 dB

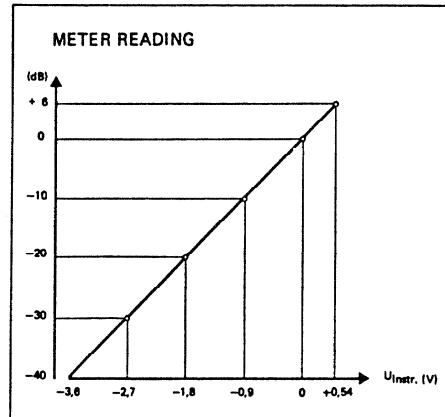
Ansprechzeit auf  
 - 1 dB + 0,5 dB: 10 ms  
 - 4 dB ± 1 dB: 3 ms

Rücklaufzeit 0 ... - 20 dB: 1,7 s ± 0,3 s

Stromaufnahme bei ± 15 V: Ca 15 mA

MECHANISCHE DATEN

Frontplatte dunkelgrau gespritzt  
 Abmessungen Frontplatte 170 x 80 mm  
 Tiefe 135 mm  
 Gewicht 360 gr



SPECIFICATIONS

Input sensitivity for reference indication (0 dB):  
 +6 dBu ... +15 dBu  
 Input impedance >10 kOhm

Indicating range  
 -40 dB ... +6 dB

Accuracy at 20° C, 1 kHz  
 -40 dB ... +6 dB: ± 0.5 dB

Frequency response at reference indication  
 0° C ... 50° C  
 31.5 Hz ... 15 kHz: ± 0.5 dB

Influence of temperature at reference indication,  
 1 kHz 0° C ... 50° C: error 0.5 dB

Dynamic response:

Overswing: 1 dB

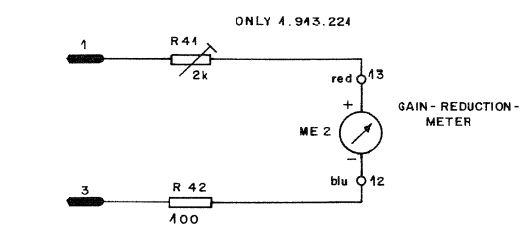
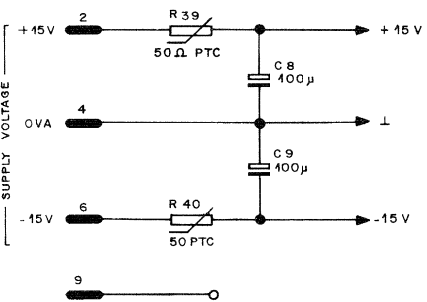
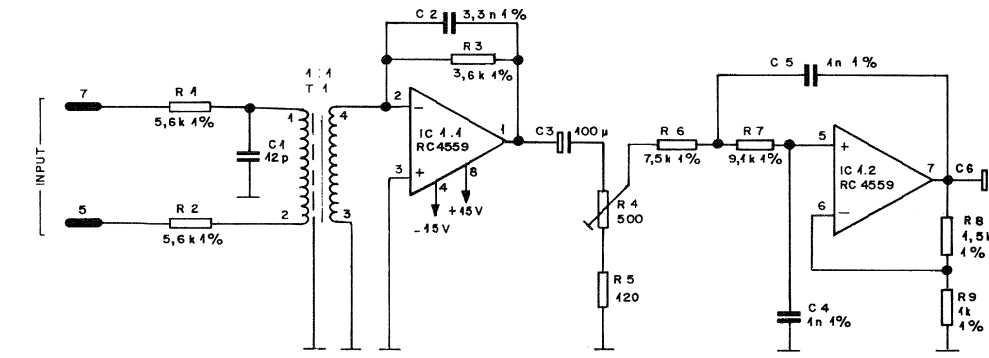
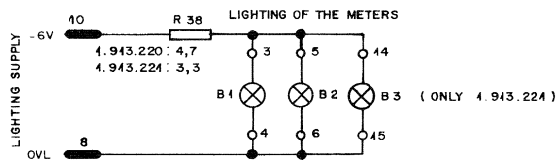
Attack time to  
 -1 dB + 0.5 dB: 10 ms  
 -4 dB ± 1 dB: 3 ms

Return time 0 ... -20 dB: 1.7 s ± 0.3 s

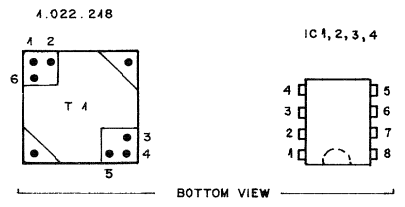
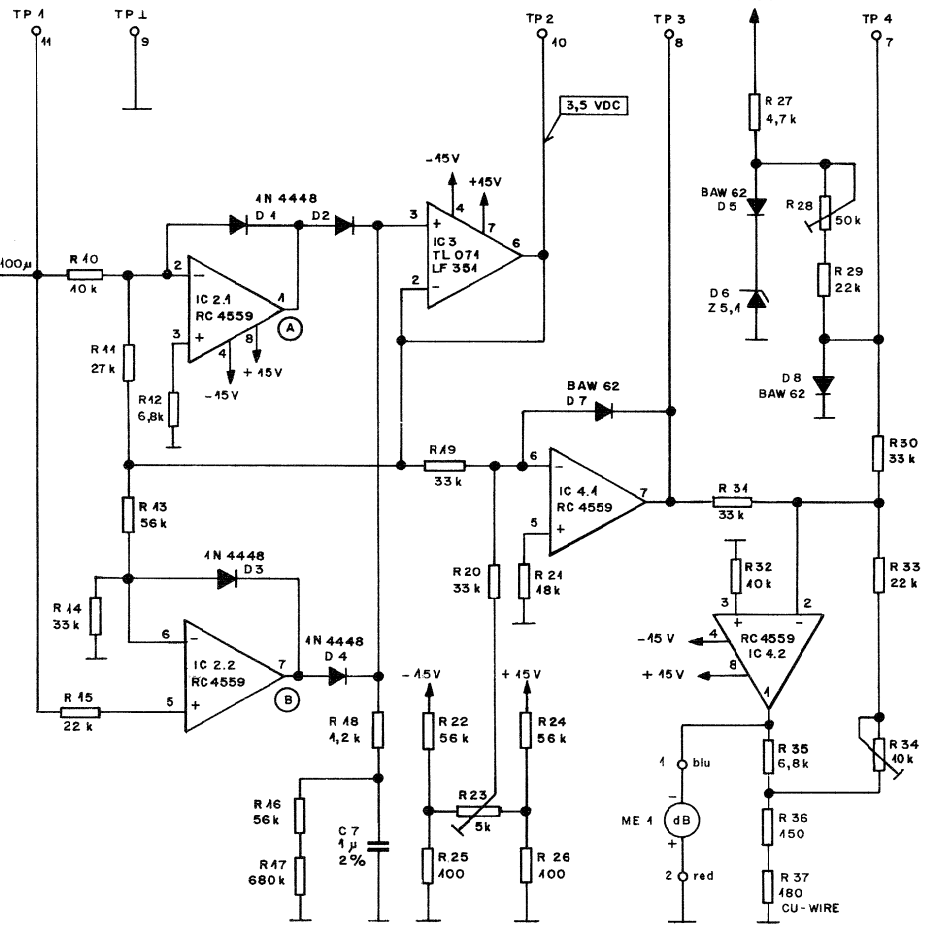
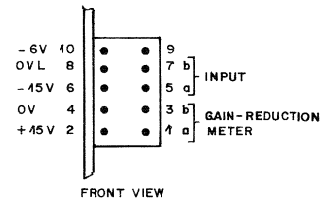
Connected load at ± 15 V: approx. 15 mA

PHYSICAL DATA

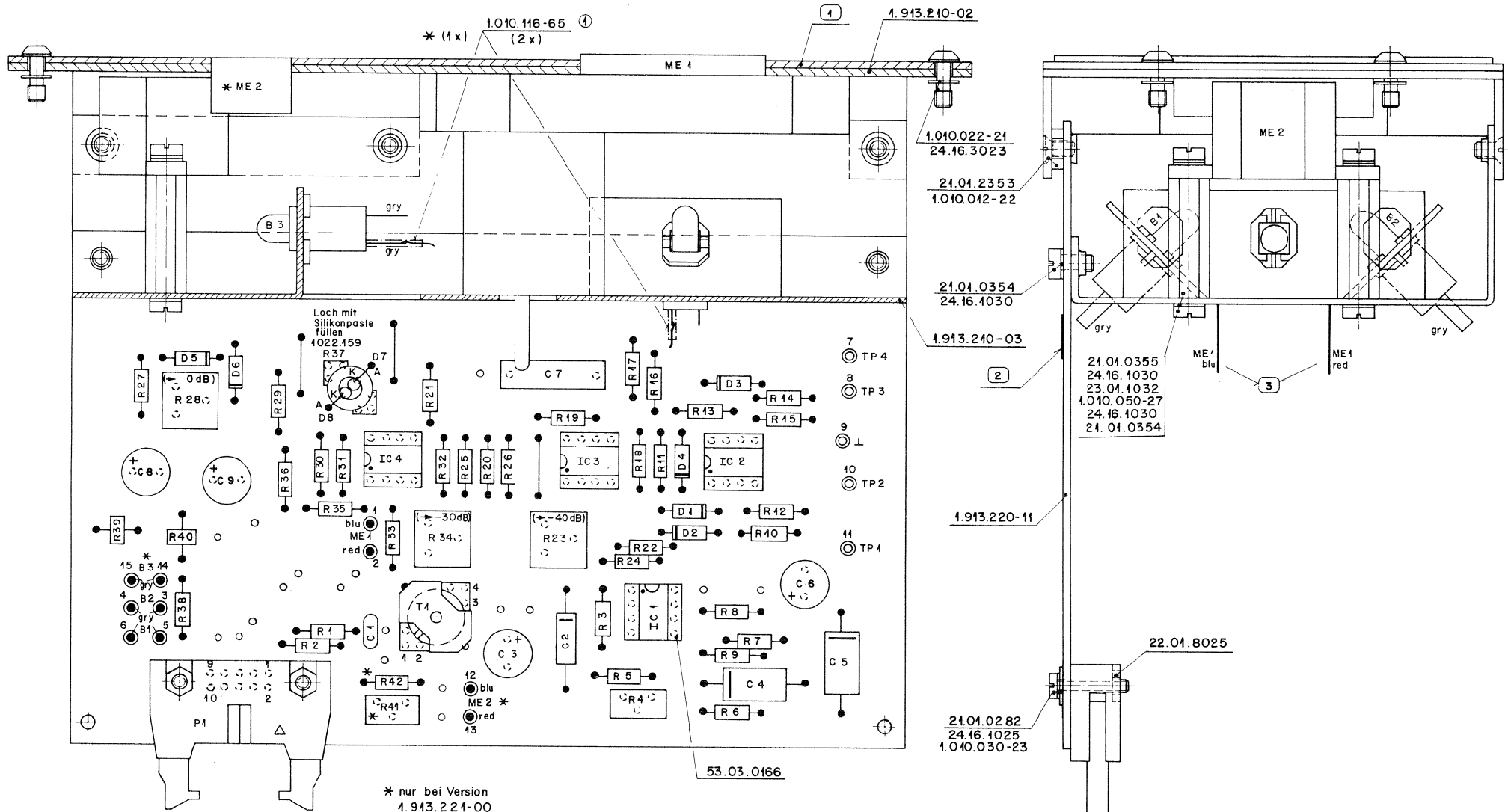
Front panel laquered charcoal grey  
 Dimensions of front panel 170 x 80 mm  
 Depth 135 mm  
 Weight 360 g



- ADJUSTMENT :**
- 3,5 V DC AT TP 2 - R 4
  - 0 dB AT ME 1 - R 28
  - 30 dB AT ME 1 - R 34
  - 40 dB AT ME 1 - R 23



DATE	21.10.82		
SIGN	<i>My</i>		
REGENSCHORF ZÜRICH	PEAK PROGRAMME METER	SC 1.913.220/221	



Gültig für :	1	2	3
1.913.220-00	1.913.210-01	1.913.220-04	1.913.210-93
1.913.221-00	1.913.221-01	1.913.221-04	1.913.221-93

Werkstoff Norm-Nr DIN-Bez. Abmessung	Gute		Anmerkung 10.12.84 A.Ho <i>MM</i> <i>VR</i>
	Oberfläche Ben.		
Zugehörige Unterlagen PL	Freimasstoleranz	Maßstab 2:1	Ausgabe 11.2.83 A.Ho <i>MM</i> <i>VR</i>
Ersatz für:	Ersetzt durch:	Kopie für Datum Gez Gepr Gcs Index	
Benennung <b>STUDER</b> REGENDORF ZÜRICH		Peak Programme Meter	
Nummer		1.913.220-00	

INDI	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C1	59.34.1120	12pF	5%	
	C2	59.12.7332	3,3nF	1%	
	C3	59.22.5101	100μF	16V	
	C4	59.12.9102	1 nF	1%	
	C5	59.12.9102	1nF	1%	
	C6	59.22.5101	100μF	16V	
	C7	59.99.0508	1 μF	2%	
	C8	59.22.5101	100μF	16V	
	C9	59.22.5101	100μF	16V	
	D1	50.04.0125	1N4448		any
	D2	50.04.0125	1N4448		any
	D3	50.04.0125	1N4448		any
	D4	50.04.0125	1N4448		any
	D5	50.04.0132	BAW62		only PH
	D6	50.04.1112	ZPD 5,1	5,1V at 5mA, 5%	ITT
	D7	50.04.0132	BAW62		only PH
	D8	50.04.0132	BAW62		only PH
	IC1	50.09.0107	RC4559NB		RA, TI
	IC2	50.09.0107	RC4559NB		RA, TI
	IC3	50.09.0103	TL071CP	LF351N	TI, N
	IC4	50.09.0107	RC4559NB		RA, TI
	ME1	1.913.001.01		Peak Programme Meter	
	ME2	1.169.900.02		Gain-Reduction-Meter (only 1.913.221)	

INDI	DATE	NAME	
④			
③			
②			
①			
○	20-8-81	<i>NY</i>	also valid for PPM with gain reduction meter 1.913.221
<b>STUDER</b>	PEAK PROGRAMME METER	1.913.220	PAGE 1 OF 3

INDI	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R1	57.11.3562	5,6k	1%	
	R2	57.11.3562	5,6k	1%	
	R3	57.11.3362	3,6k	1%	
	R4	58.01.7501	500	TRIM	
	R5	57.11.4121	120		
	R6	57.11.3752	7,5k	1%	
	R7	57.11.3912	9,1k	1%	
	R8	57.11.3152	1,5k	1%	
	R9	57.11.3102	1k	1%	
	R10	57.11.4103	10k		
	R11	57.11.4273	27k		
	R12	57.11.4682	6,8k		
	R13	57.11.4563	56k		
	R14	57.11.4333	33k		
	R15	57.11.4223	22k		
	R16	57.11.4563	56k		
	R17	57.11.4684	680k	2%	
	R18	57.11.4122	1,2k		
	R19	57.11.4333	33k		
	R20	57.11.4333	33k		
	R21	57.11.4183	18k		
	R22	57.11.4563	56k		
	R23	58.01.8502	5k	TRIM	
	R24	57.11.4563	56k		
	R25	57.11.4101	100		
	R26	57.11.4101	100		
	R27	57.11.4472	4,7k		
	R28	58.01.8503	50k	TRIM	
	R29	57.11.4223	22k		
	R30	57.11.4333	33k		

INDI	DATE	NAME	
④			
③			
②			
①			
○	20-8-81	<i>NY</i>	
<b>STUDER</b>	PEAK PROGRAMME METER	1.913.220	PAGE 2 OF 3

INDI	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R31	57.11.4333	33k		
	R32	57.11.4103	10k		
	R33	57.11.4223	22k		
	R34	58.01.8103	10k	TRIM	
	R35	57.11.4682	6,8k		
	R36	57.11.4151	150		
	R37	1.022.159.00	180	Cu-Wire	STUDER
	R38	57.11.4479	47Ω	1.913.221 : 3,3Ω	
	R39	57.99.0206	50Ω	PTC	
	R40	57.99.0206	50Ω	PTC	
	R41	58.01.7202	2k	TRIM only 1.913.221	
	R42	57.11.4101	100	only 1.913.221	
	T1	1.022.218.00	1:1	Input Trafo	STUDER
	B1	51.02.0144	6V, 30mA	Lamp	
	B2	51.02.0144	6V, 30mA	Lamp	
	B3	51.02.0144	6V, 30mA	Lamp	
	P1	54.14.2011		Connector	
	X1C	53.03.0166		IC-Socket 8pins	

INDI	DATE	NAME	
④			
③			
②			
①			
○	20-8-81	<i>NY</i>	
<b>STUDER</b>	PEAK PROGRAMME METER	1.913.220	PAGE 3 OF 3