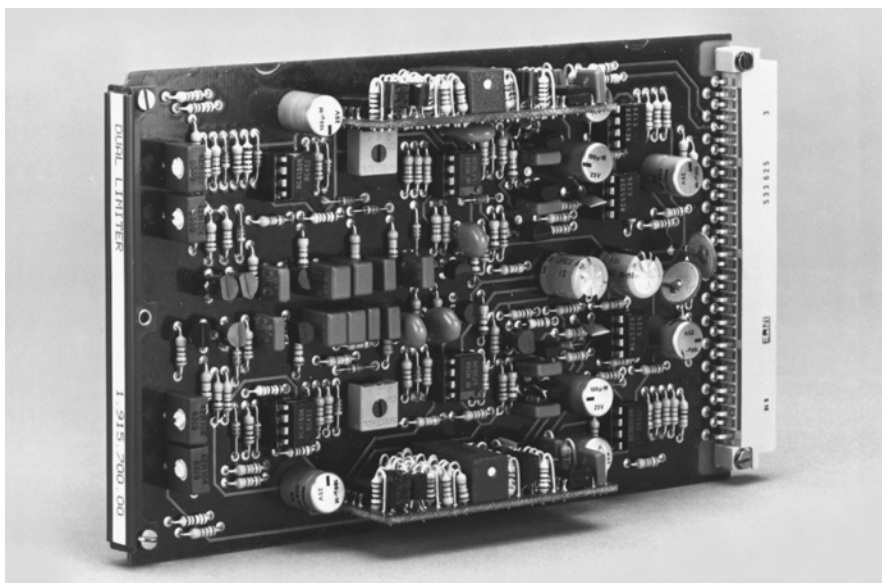


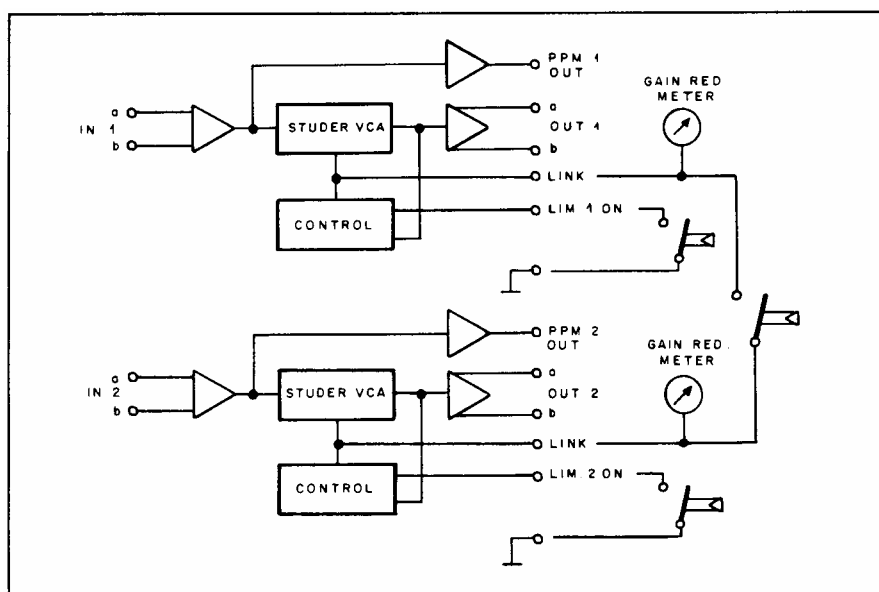
Dual Limiter

1.915.700

In sound work there are numerous situations where the signal amplitude has to be limited to a pre-determined level in order to prevent overloading of succeeding equipment, such as light modulators in film work, or radio transmitters. With this limiter, excessive levels are automatically reduced to a preset level, and, since regulation is controlled by the program's energy content, the performance of this limiter is free of any "pumping" effects. Gain reduction is achieved with a Studer Voltage Controlled Amplifier (VCA) which ensures low noise performance and negligible distortion.



Two identical, independent limiter circuits are contained on one Euro-card, plus additional, separate gain stages to drive peak program meters. The perfect tracking of the two VCAs makes this Dual Limiter suitable for stereo work as well, in which case a simple electrical connection is needed to link the units.



Note: Gain reduction meters (*not supplied*) can be connected to the LINK outputs as well, if required.

Technical Specifications

Input:	Impedance	5.4 kΩ , balanced configuration 2.7 kΩ , unbalanced configuration
	Overload point	+20 dBu (7.75 V _{rms})
Output:	Impedance	< 50 Ω , unbalanced
	Frequency response	+0/-0.5 dB , 30 Hz...15 kHz +0/-3 dB , 2 Hz...200 kHz
	Gain	0 dB , limiter off
	Output noise level	-102 dBu , Limiter on -106 dBu , Limiter off
	Limiting ratio	20:1
	Threshold	-15 dBu...+3 dBu , adjustable
	Limited output level	-14 dBu...+4 dBu , depending on threshold setting
	Attack time	1 ms
	Release time	50 ms...5 s , program-dependent

PPM Section:	Output impedance	< 50 Ω , unbalanced
	Maximum output level	+20 dBu
	Gain	2.5 dB...27 dB , adjustable
	Frequency response	+0/-3 dB , 2 Hz...200 kHz

Supply: **± 15 V** (100 mA)

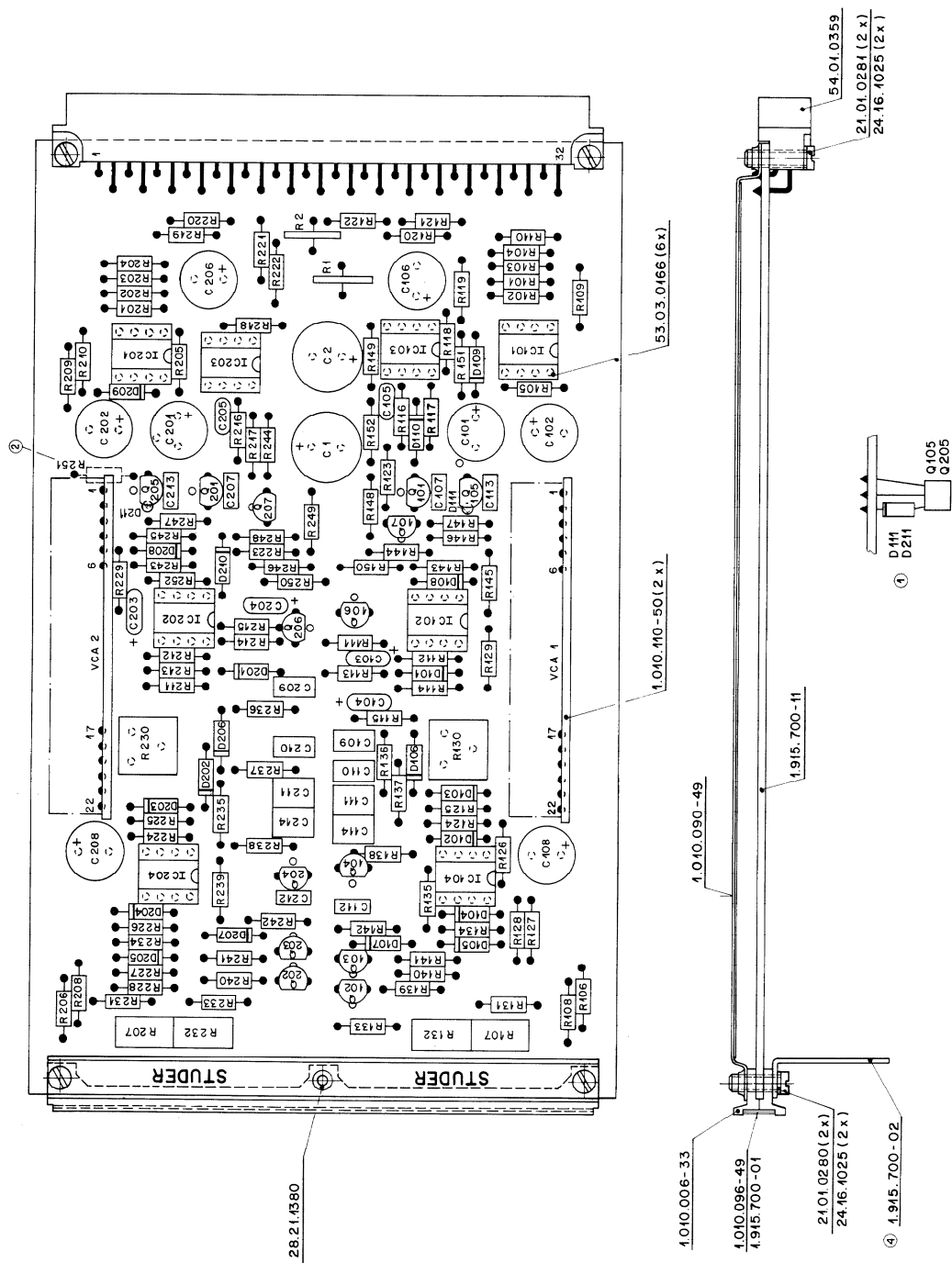
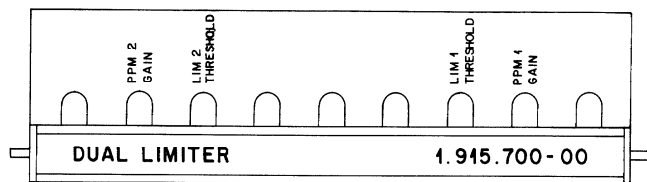
Dimensions: Euro-card **100 × 160 mm, 7 M units wide**

Ordering Information: Dual limiter

1.915.700.xx

DATE:	3.3.83	16.7.84				
SIGN:	<i>ml</i>	<i>ml</i>				
STUDER REGENSDORF ZÜRICH	DUAL LIMITER					SC 1.915.700

DUAL LIMITER



Norm.Nr.:	_____	Güte:	_____	20.12.84	A Ho	W	④
Dim. Bez.:	_____	Beh.:	_____	4.4.84	A Ho	W	③
Abmessung:	_____	Fräsmaschinen:	_____	3.1.84	A Ho	W	②
Zugehörige Unterlagen:	_____	Maßstab:	_____	14.12.82	A Ho	W	①
PL	_____	Datum	_____	18.9.82	Ho	W	①
Erstellt durch:	_____	Gez.	_____	_____	Gez.	_____	_____
Kopie für:	_____	Index	_____	_____	_____	_____	_____
STUDER REGISDRUP ZÜRICH	_____	Benennung:	Dual Limiter	1.915.700-00	_____	_____	_____

DUAL LIMITER

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1		59.22.4221	220µ 16V	EL	R...43		57.11.4224	220k	
C....2		59.22.4221	220µ 16V	EL	R...44		57.11.4223	22k	
C....1		59.22.4101	100µ 16V	EL	R...45		57.11.4103	10k	
C....2		59.22.4101	100µ 16V	EL	R...46		57.11.4105	1M	
C....3		59.26.2100	10µ 16V	EL, SAL	R...47		57.11.6106	10M	
C....4		59.26.5109	1µ 16V	EL, SAL	R...48		57.11.4105	1M	
C....5		59.34.4151	150p	CER	R...49		57.11.4473	47k	
C....6		59.22.4101	100µ 16V	EL	R...50		57.11.6106	10M	
C....7		59.06.5104	100n	PETP	R...51		57.11.4105	1M	
C....8		59.22.4101	100µ 16V	EL	R...52		57.11.4105	1M	
C....9		59.06.5154	150n 5%	PETP	④⑤ VCA...1	1.911.290.81	STUDER VCA-BOARD	ST	
C....10		59.06.5224	220n 5%	PETP	④⑤ VCA...2	1.911.290.81	STUDER VCA-BOARD	ST	
C....11		59.06.5474	470n 5%	PETP	XIC	53.03.0166	DIP8POL		
C....12		59.06.5104	100n	PETP					
C....13		59.06.5104	100n	PETP					
C....14		59.06.5474	470n 5%	PETP					
D....1		50.04.0125	1N4448	SI					
D....2		50.04.0125	1N4448	SI					
D....3		50.04.0125	1N4448	SI					
D....4		50.04.0125	1N4448	SI					
D....5		50.04.0125	1N4448	SI					
D....6		50.04.0125	1N4448	SI					
D....7		50.04.0125	1N4448	SI					
D....8		50.04.0125	1N4448	SI					
D....9		50.04.0125	1N4448	SI					
D....10		50.04.0125	1N4448	SI					
① D....11		50.04.0125	1N4448	SI					
IC....1		50.09.0106	NE5532N DUAL OP	XR5532N	SIG, EX				
IC....2		50.09.0101	LF353N DUAL OP	TL072	N, TI				
IC....3		50.09.0106	NE5532N DUAL OP	XR5532N	SIG, EX				
IC....4		50.09.0107	RC4559NB DUAL OP		RA, TI				
Q....1		50.03.0350	J112 J-FET		SIX, N				
Q....2		50.03.0496	BC560 PNP		SIE				
Q....3		50.03.0496	BC560 PNP		SIE				
Q....4		50.03.0350	J112 J-FET		SIX, N				
Q....5		50.03.0350	J112 J-FET		SIX, N				
Q....6		50.03.0350	J112 J-FET		SIX, N				
Q....7		50.03.0496	BC560 PNP		SIE				
R....1		57.99.0209	5,6	PTC	PH				
R....2		57.99.0209	5,6	PTC	PH				
R....1		57.11.4272	2,7k 2%						
R....2		57.11.4272	2,7k 2%						
R....3		57.11.4272	2,7k 2%						
R....4		57.11.4272	2,7k 2%						
R....5		57.11.4332	3,3k 2%						
R....6		57.11.4122	1,2k						
R....7		58.01.7103	10k 10% LIN	PMG					
R....8		57.11.3163	16k						
R....9		57.11.4103	10k						
R....10		57.11.4330	33						
R....11		57.11.4103	10k						
R....12		57.11.4333	33k						
R....13		57.11.4103	10k						
R....14		57.11.4472	4,7k						
R....15		57.11.4684	680k						
R....16		57.11.4332	3,3k 2%						
R....17		57.11.4682	6,8k 2%						
R....18		57.11.4682	6,8k 2%						
R....19		57.11.4103	10k						
R....20		57.11.4330	33						
R....21		57.11.4101	100 2%						
R....22		57.11.4101	100 2%						
R....23		57.11.6106	10M						
R....24		57.11.4223	22k 2%						
R....25		57.11.4223	22k 2%						
R....26		57.11.3512	5,1k 2%						
R....27		57.11.4103	10k 2%						
R....28		57.11.4103	10k 2%						
R....29		57.11.4334	330k						
R....30		58.01.8104	100k 10% LIN	PMG					
R....31		57.11.4223	22k						
R....32		58.01.7103	10k 10% LIN	PMG					
R....33		57.11.4681	680						
② R....34		57.11.4105	1M						
③ R....35		57.11.3363	36k						
R....36		57.11.4124	120k						
R....37		57.11.4334	330k						
R....38		57.11.5225	2,2M						
R....39		57.11.4104	100k						
R....40		57.11.4104	100k						
R....41		57.11.4103	10k						
R....42		57.11.4105	1M						

END

