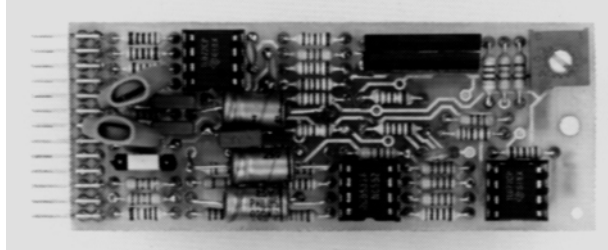


VCA with Electronically Balanced Connections

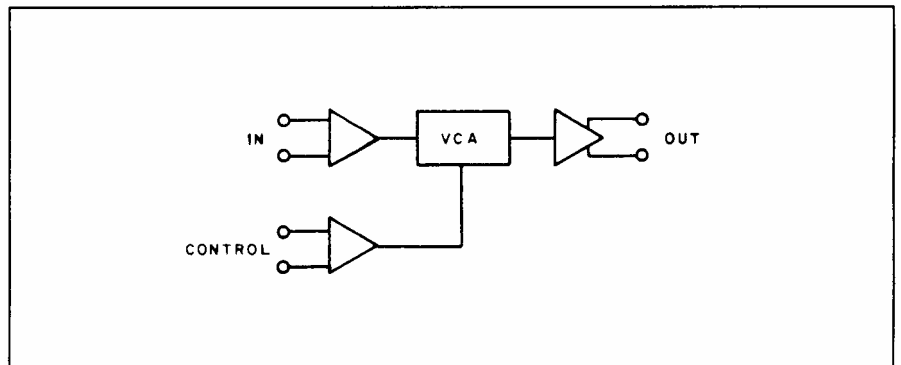
1.914.515

In contrast to the VCA module 1.914.518/528, this assembly features electronically balanced input and output.



It is intended for use in balanced audio systems for a variety of applications, especially when gain is to be controlled from a remote point. It will be useful in audio-video post-production work where suitable DC ramps can control cross-fades, voice-overs, etc. Its high overload margin and its exceptionally low noise and distortion performance make it the perfect choice for high-quality audio applications.

By connecting the gain control terminals of a number of VCAs to a common potentiometer or fader, several audio channels may thus be controlled simultaneously.



Two control inputs provide VCA gain control from two different remote points

Technical Specifications

Input: Impedance **$\geq 10\text{ k}\Omega$** , electronically balanced
Clipping point **+24 dBu**

Output: Electronically balanced
Recommended load **$\geq 2\text{ k}\Omega$**
Maximum level **+24 dBu**
Frequency response **-0.5 dB, 30 Hz...15 kHz**

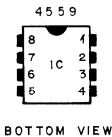
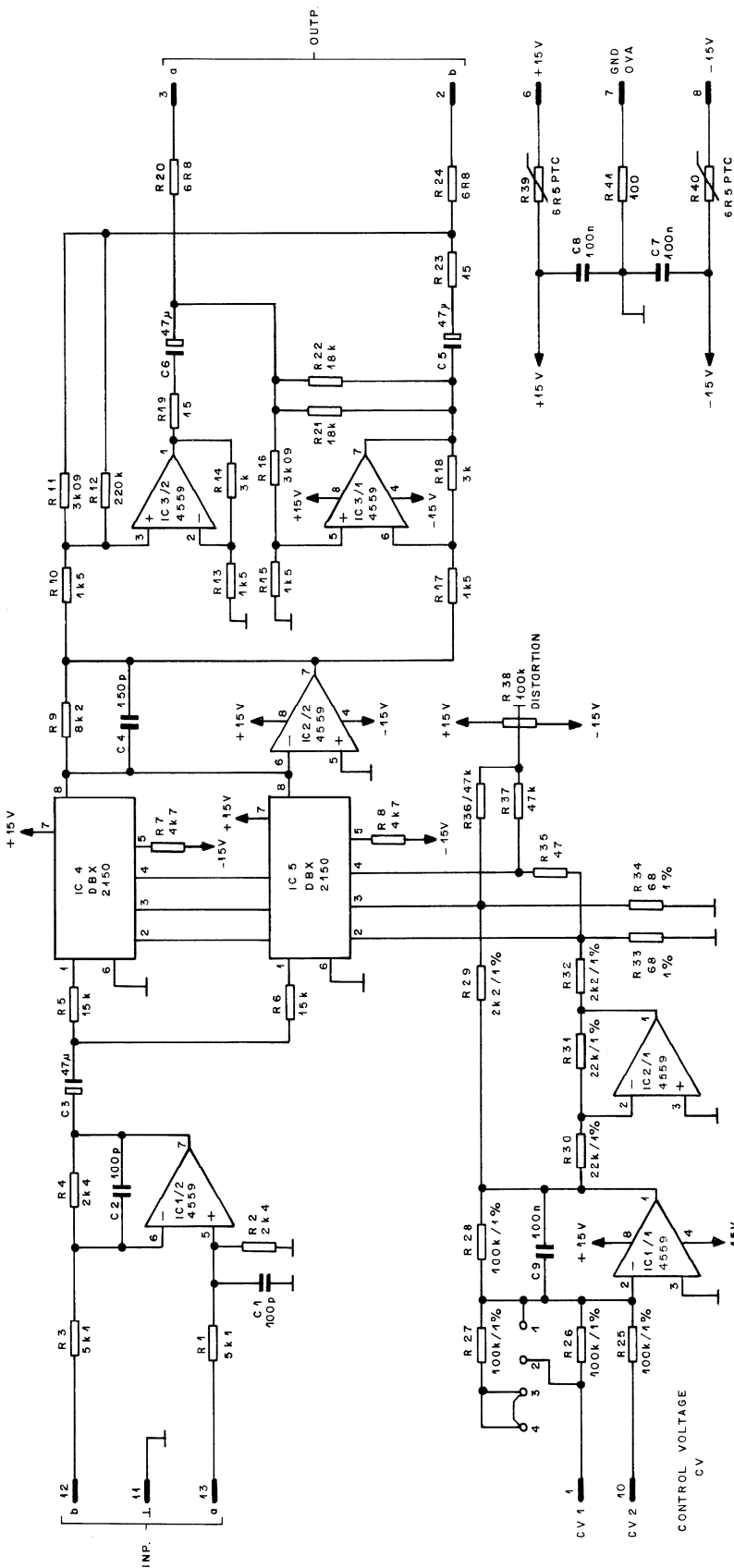
Gain/attenuation range **+40...-100 dB**, with ext. control
Control input: pin1; gain tracking **0 V = unity gain;**
1 dB/ μ A; jumper 1-2
20 dB/V; jumper 2-3
10 dB/V; jumper 3-4
Control input: pin10; gain tracking **10 dB/V**
THD **< 0.1%**
Equivalent input noise **-93 dBu @ unity gain**

Supply: **$\pm 15\text{ V}$ (25 mA)**

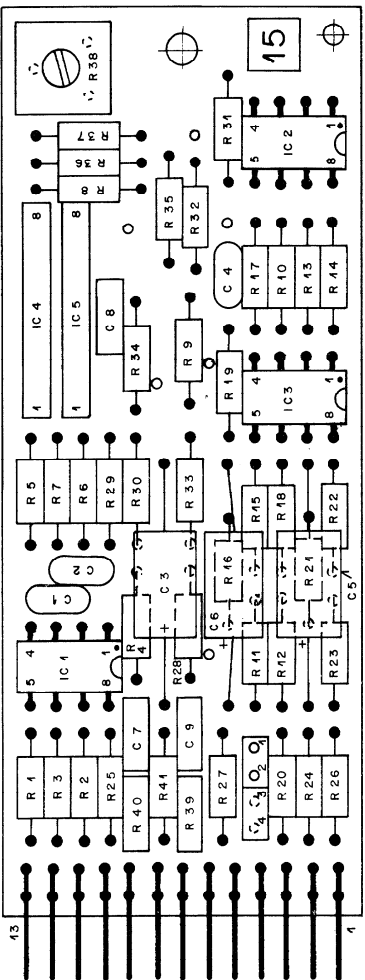
Dimensions: **MS-card, 34 × 85 mm**

Ordering Information: VCA with electronically balanced input and output

1.914.515.xx



BOTTOM VIEW



CIS	PIN	EURO 32 PIN		
INP a	13	1	7	24
INP b	12	2	8	22
+	11	3	9	23
CV 2	10	17	18	18
-15 V	8	14		
OVA	7	15		
+15 V	6	16		
OUT a	3	4	10	24
OUT b	2	5	11	25
CV 1	1	6	13	26

① 17.9.94				
STUDER REGENSDORF ZURICH	BAL. AMP. WITH VCA	1.914.515.00		

MSC VCA

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
----	---------	--------------	------------------	--------------

C.....1	59.34.4101	100 pF		CER	
C.....2	59.34.4101	100 pF		CER	
C.....3	59.25.3470	47 uF		ALU	
C.....4	59.34.4151	150 pF		CER	
C.....5	59.25.3470	47 uF		ALU	
C.....6	59.25.3470	47 uF		ALU	
C.....7	59.06.5104	100 nF		PE	
C.....8	59.06.5104	100 nF		PE	
C.....9	59.06.5104	100 nF		PE	
JS....1	54.01.0020		JUMPER PLUG 4-PIN		
JP....1	54.01.0021		JUMPER JACK		
IC....1	50.09.0107	RC4559	dual op. amp.		Ra,NE
IC....2	50.09.0107	RC4559	dual op. amp.		Ra,NE
IC....3	50.09.0107	RC4559	dual op. amp.		Ra,NE
IC....4	50.11.0140	2150A	VCA		DBX
IC....5	50.11.0140	2150A	VCA		DBX
P.....1	54.01.0273	13 PIN		CIS	
R.....1	57.11.3512	5.1 kOhm	1% 0.25W	MF	
R.....2	57.11.3242	2.4 kOhm	1% 0.25W	MF	
R.....3	57.11.3512	5.1 kOhm	1% 0.25W	MF	
R.....4	57.11.3242	2.4 kOhm	1% 0.25W	MF	
R.....5	57.11.3153	15 kOhm	1% 0.25W	MF	
R.....6	57.11.3153	15 kOhm	1% 0.25W	MF	
R.....7	57.11.4472	4.7 kOhm	5% 0.25W	MF	
R.....8	57.11.4472	4.7 kOhm	5% 0.25W	MF	
R.....9	57.11.3822	8.2 kOhm	1% 0.25W	MF	
R.....10	57.11.3152	1.5 kOhm	1% 0.25W	MF	
R.....11	57.39.3091	3.09kOhm	1% 0.25W	MF	
R.....12	57.11.4224	220 kOhm	2% 0.25W	MF	
R.....13	57.11.3152	1.5 kOhm	1% 0.25W	MF	
R.....14	57.11.3302	3.0 kOhm	1% 0.25W	MF	
R.....15	57.11.3152	1.5 kOhm	1% 0.25W	MF	
R.....16	57.39.3091	3.09kOhm	1% 0.25W	MF	
R.....17	57.11.3152	1.5 kOhm	1% 0.25W	MF	
R.....18	57.11.3302	3.0 kOhm	1% 0.25W	MF	
R.....19	57.11.3150	15 Ohm	1% 0.25W	MF	
R.....20	57.11.3689	6.8 Ohm	1% 0.25W	MF	
R.....21	57.11.3183	18 kOhm	1% 0.25W	MF	
R.....22	57.11.3183	18 kOhm	1% 0.25W	MF	
R.....23	57.11.3150	15 Ohm	1% 0.25W	MF	
R.....24	57.11.3689	6.8 Ohm	2% 0.25W	MF	
R.....25	57.11.3104	100 kOhm	1% 0.25W	MF	
R.....26	57.11.3104	100 kOhm	1% 0.25W	MF	
R.....27	57.11.3104	100 kOhm	1% 0.25W	MF	
R.....28	57.11.3104	100 kOhm	1% 0.25W	MF	
R.....29	57.11.3222	2.2 kOhm	1% 0.25W	MF	
R.....30	57.11.3223	22 kOhm	1% 0.25W	MF	
R.....31	57.11.3223	22 kOhm	1% 0.25W	MF	
R.....32	57.11.3222	2.2 kOhm	1% 0.25W	MF	
R.....33	57.11.3680	68 Ohm	1% 0.25W	MF	
R.....34	57.11.3680	68 Ohm	1% 0.25W	MF	
R.....35	57.11.4470	47 Ohm	2% 0.25W	MF	
R.....36	57.11.4473	47 kOhm	2% 0.25W	MF	
R.....37	57.11.4473	47 kOhm	2% 0.25W	MF	
R.....38	58.01.8104	100 kOhm	10% 0.5 W	PMG trimming resistor	
R.....39	57.92.1271	6.5 Ohm		PTC Philips Nr.2322 662 12711	
01 R.....39	57.92.7013	0.75 Ohm	I-Hold 0.5A	R-PTC	
R.....40	57.92.1271	6.5 Ohm		PTC Philips Nr.2322 662 12711	
01 R.....40	57.92.7013	0.75 Ohm	I-Hold 0.5A	R-PTC	
R.....41	57.11.4101	100 Ohm	2% 0.25W	MF	

(01) 89/11/02 - Improvement of distance PTC - R

CER=Ceramic, PE=Polyester, SAL=Solid Aluminium
MF=Metal Film, PMG=CermetMANUFACTURER: Ex=Exar, NE=NEC, Ph=Philips, Ra=Raytheon,
Sig=Signetics, St=Studer,1.914.515.00 BAL AMP WITH VCA SE 87/07/0100
1.914.515.00 BAL AMP WITH VCA TA 89/11/0201