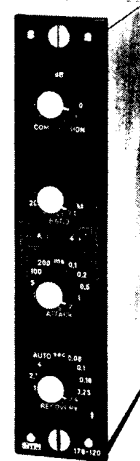


# Compressor Amplifier type 179-120

The Compressor contains a wide range of variable attack and recovery times, including a programme dependent recovery time called AUTO and a switchable recovery delay. In order to operate with long attack times the Compressor is provided with a fast symmetrical Limiter, which because of its logarithmic function adds very little distortion.

A LED on the front panel indicates limiting. The limiter level is switchable normal or high.

The ratio and the amount of compression may be changed independently and still the output remains constant. A 1 mA instrument may be connected to show the actual compression in dB.



## TECHNICAL SPECIFICATIONS

Supply Voltage	24 V dc $\pm 10\%$ Note 1.
Maximum Ripple Voltage	0.1 V pp, 20 Hz to 20 kHz
Current Consumption	approx. 100 mA
Temperature Range	$-20$ to $+60^{\circ}\text{C}$ ( $-4$ to $+140^{\circ}\text{F}$ )
Frequency Range (0.5 dB points)	20 Hz to 20 kHz
Input Filter	see fig. 2
Input Impedance within freq. range	see Input Terminations fig. 3
Output Impedance within freq. range	see Output Terminations fig. 4
Minimum Load Impedance	100 ohms, see fig. 4
Basic Amplification	0 to 15 dB see fig. 1
Compression Range	see fig. 1
Compression Ratio	adjustable 1:1 2:1 3:1 5:1 20:1
Attack Time	adjustable 100 microseconds/20 dB to 200 milliseconds/20 dB (11 steps)
Recovery Time	adjustable 60 milliseconds/20 dB to 4 seconds/20 dB and one "Auto" position (11 steps)
"Auto" dual time constants	200 msec. upon 15 seconds.
Recovery Delay	switchable 0 or 50 milliseconds
Distortion under static conditions	less than 0.5% up to 20 dB gain reduction
Signal to noise ratio at compression threshold	80 dB A—curve typical
Output noise at $R_g=200\Omega$	

NOTE 1. Either polarity of the power supply may be grounded. A build-in active voltage splitter provides an internal common reference (+ 12 V dc). This reference is available at terminals 19 and 7 for the input and output respectively.

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# Compressor Amplifier

type 179-120

compression 15 dB Ratio 2:1

Instrument Output

less than -86 dBu A-curve

0 to 1 mA for 0 to 20 dB compression

Linear dB scale

## Limiter Function

Attack Time

1,5 msec. combined with a full-wave logarithmic circuit which limits peaks shorter than 1,5 msec. to a level max. 3 dB above steady state.

Recovery Time

Following the recovery time set for the compressor

Steady State Limitation:

Threshold "Normal"

+6 dBu output with any of the three output-terminations shown in fig. 4

Steady State Limitation:

Threshold "High"

+19 dB output when using the 0.7 : 1 output transformer fig. 4 C

+16 dBu output when using the direct output or the 1 : 1 output transformer fig. 4 A and B

Limiting Indicator

The GaAs diode lights up during limitation

Standard Colour

Dull black

Connector

Amphenol Tuchel 2700 000

Mechanical Outlines

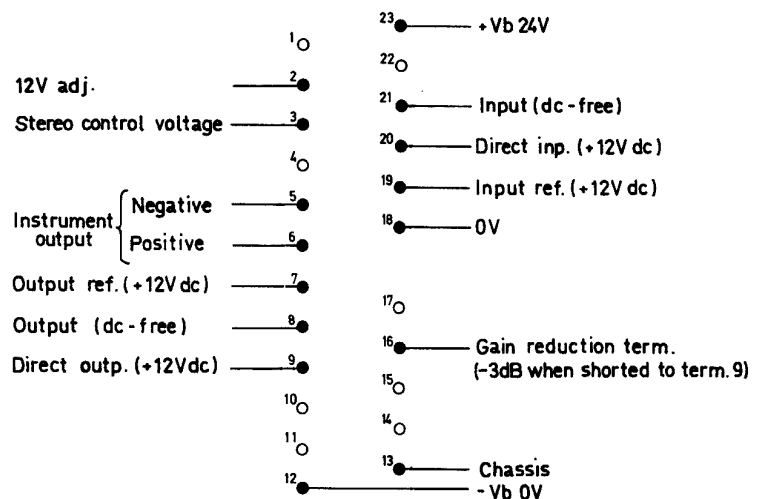
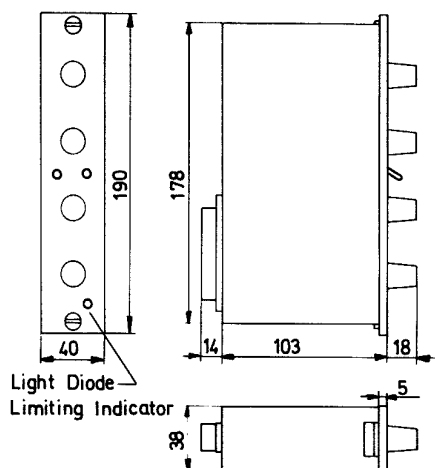
see drawing

Weight

0,900 kg

## Stereo Operation

The control voltages of two units may be linked so as to obtain equal gain reduction in the two stereo channels. The control voltage is accessible at the connector. Gain reduction versus control voltage 5 dB per volt.

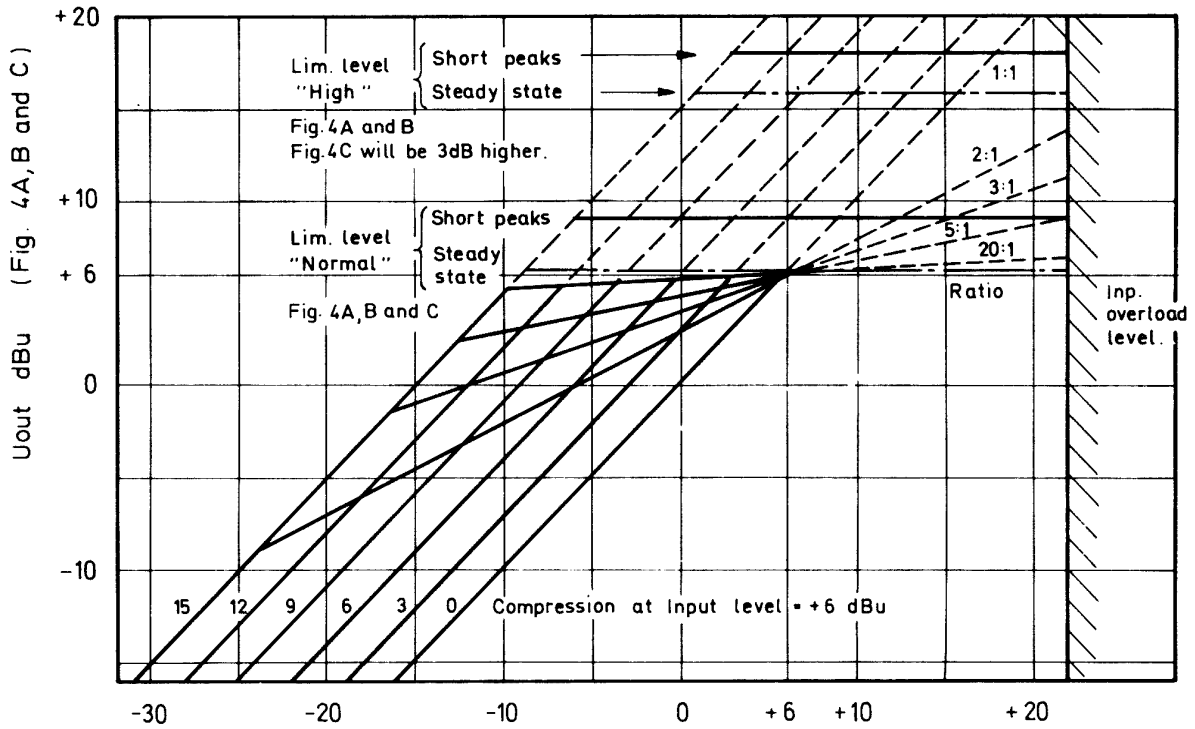


See also fig. 3 and 4

# Compressor Amplifier

type 179-120

Fig. 1 Compression and Limitation Characteristics.



Short peaks < 1,5ms  
Steady state > 3 ms

$U_{in}$  dBu (Fig. 3A, B and C)

Fig. 2 Input Filter. Frequency Response

