## DYNAMIC PROCESSOR

### Quad Compressor/ Limiter

The DN504 provides the user with a uniquely powerful compressor/limiter package, with four channels of full function high quality compression in only one unit of rack space. The inclusion of hard and soft knee plus auto and manual modes gives the DN504 the versatility to tackle a wide range of applications in live sound, recording, broadcast and post production studios.



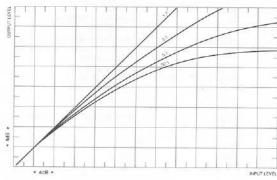
Effect of ratio co on soft knee (40dB)

compression

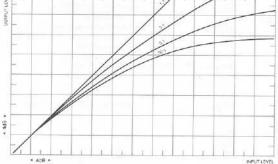
Advanced VCA circuit design offers extremely low noise and distortion performance to the DN504 user.

Only top quality components are used in the manufacture of this product and every unit is bench tested and aligned before burn-in and final performance test.

The unit has XLR terminated electronically balanced inputs and unbalanced outputs, with optional transformer balancing available to order.



Hard and soft knee at 50:1 ratio





#### Features

- Four channels of full function "quick to set" compression in only one unit of rack space.
- Switchable knee function provides for both hard and soft compression styles.
- Auto attack/release mode for inaudible compression and easy set-up.
- Manual attack/release mode for creating compression effects.
- Advanced VCA design for extremely low noise and distortion.
- Separate side chain inputs are provided for each channel.
- Gain reduction and output level metering is provided for each channel.
- Additional features include stereo link function which provides two pairs of stereo channels.
- XLR connectors fitted as standard for main audio terminations, with transformer balancing available as an option.
- The DN504 is sturdily constructed throughout and complies with standard 19" 1U rack mounting requirements.



# DYNAMIC PROCESSOR

### ARCHITECT'S AND ENGINEER'S **SPECIFICATION**

The compressor/limiter shall provide four complete channels of compression. Each channel shall provide for adjustment of Threshold, Ratio, Attack and Release and have push button selection of auto or manual modes and hard or soft knee. An output gain control and level meter shall be provided. Gain reduction meters shall also be provided for each channel.

The compressor/limiter shall meet or exceed the following specifications:

Distortion Frequencyresponse <0.03% @ +4dBm (1kHz) ±0.5dB(20Hz-20kHz)

Noise CompressorAttacktime

<-94dBm (20Hz-20kHz unweighted)  $50\mu S-20mS$ 

Compressor Release time 60mS-2 secs

Maximum output level into  $600\Omega$ 

+21dBm

Push button switches shall be provided to select channel bypass and to link adjacent channels for stereo operation. Side chain inputs shall be provided for each compressor section. Channel inputs and outputs shall be via XLR style connectors, external side chain inputs shall be via 1/4" jack. A tamperproof front panel cover shall be available to fit the unit. The compressor/limiter shall be 19" standard rack mountable and 1U high. The unit shall be capable of operating from a 110/220V 50/60Hz AC power source.

The compressor/limiter shall be the Klark-Teknik Model DN504 and no alternative specification option is available.

### RELIABILITY CONTROL

Even with the advanced electronic engineering incorporated in this product, each unit is given the full backing of Klark-Teknik's "Reliability Control", which proves each product against a specification consistent with highest professional standards. Precision components are used throughout and every unit is bench tested and aligned before a burn-in period and final performance test.

#### TECHNICAL SPECIFICATION

Audio Inputs	Four
Type	Balanced (electronically)
Impedance $(\Omega)$	
Balanced	20k
Unbalanced	10k
Side Chain Inputs	Four
Type	Balanced (electronically)
Impedance(Ω)	
Balanced	20k
Unbalanced	10k
Audio Outputs	Four
Type	Unbalanced
Min. Load impedance	600Ω
Source impedance	$<$ 60 $\Omega$
Max. Level	+21dBm

Performance		
Frequency response (20Hz-20kHz)	±0.5dB	
Distortion (@+4dBm)	<0.03% @ 1kHz	
Equivalent input noise		
(20Hz-20kHz		
unweighted)	<-94dBm	
Channel senaration	>90dB@1kHz	

Threshold	-30dB to +20dB
Ratio	1:1 to 50:1
Knee	Switchable 1dB(hard)/ 40dB(soft)
Envelope	Switchable auto (attack and release controls disabled) or manual

Outputgain	-10dB to +30dB
Release (90% recovery)	60mS to 2secs
Attack (90% capture)	$50\mu S$ to $20mS$
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<b>Power Requirements</b>	
Voltage	110/120/220/240V50/60Hz
Consumption	<30VA
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Nett		4kg
Shipping		6kg
	- 1	

Compressor

482mm (19 inch)
292mm (11½ inch)
44.5mm (1¾ inch)

Terminations	
Audio inputs/outputs	3 pin XLR
Side-chain inputs	Normalled ¼ inch stereo iack
Power	3 pin CEE

Options	Security cover
171	Transformer input*/output balancing

<sup>\*</sup> Input transformer balancing is non retrofittable and has to be specified with order.

Trade Descriptions Act: Due to the company policy of continuing improvement, we secure the right to alter these specifications without prior notice.

