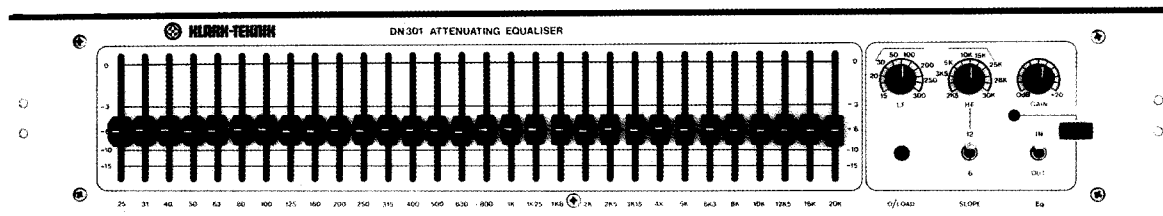


# DN301

ATTENUATING EQUALISER

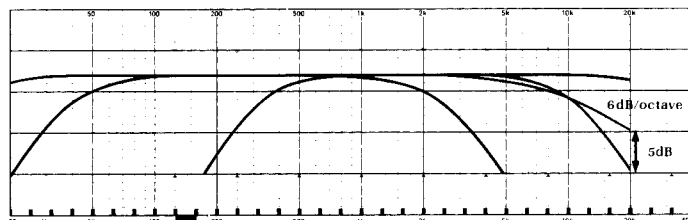
## Single Channel 1/3 Octave Cut-Only Equaliser

The Klark-Teknik model DN301 is a single channel 1/3 octave cut-only equaliser occupying 2U of rack space. The DN301 features 45mm oil damped precision slide controls which are graphically positioned at 30 ISO frequencies between 25Hz and 20kHz and provide 15dB of attenuation at each centre frequency. Two shelving filters are provided, with turnover frequencies adjustable via rotary controls. The active filter sections of the equaliser are thick film engineered proprietary circuits, offering

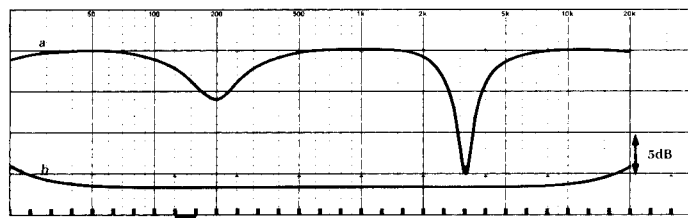


very low noise performance, minimal distortion and high reliability, consistent with the highest specification standards in the industry. Only top quality components are used in the manufacture of this product and every unit is bench tested and aligned before burn-in and a final performance test.

The units have XLR terminated electronically balanced inputs and unbalanced outputs, with optional transformer balancing and security covers available to order.



Response of variable high and low pass filters set at minimum, maximum and intermediate turnover frequencies.



a) Single filter response set for 6dB and 15dB attenuation.  
b) All filters set for equal attenuation. Note the absence of ripple.

### Features

- Thirty 45mm oil damped precision faders graphically positioned at 1/3 octave ISO frequencies between 25Hz-20kHz.
- All new circuit designs utilising "MELT" filters giving unbeatable performance.
- Comprehensive standard specifications include electronically balanced input and LED overload indicator.
- Earth lift switch enables signal and chassis grounds to be isolated eliminating ground loop problems.
- Adjustable high and low cut 12dB/octave shelving filters with selectable 6/12dB per octave high cut slope.
- Equalisation by-pass allowing easy comparison between direct and equalised signals.
- Perspex and brushed aluminium security covers are available to order, for use in permanent sound installations where system calibration has taken place.
- The DN301 is sturdily constructed throughout and complies with standard 19" 2U rack mounting requirements.



Klark Teknik PLC  
Walter Nash Road, Kidderminster,  
Worcestershire DY11 7HJ England.  
Tel: (01562) 741515  
Fax No: (01562) 745371

Mark IV Pro Audio Group  
448 Post Road,  
Buchanan,  
MI 49107,  
USA.  
Tel: (616) 695 4750  
Fax: (616) 695 0470

# DN301

## ATTENUATING EQUALISER

### ARCHITECT'S AND ENGINEER'S SPECIFICATION

The equaliser shall provide 15dB of attenuation and accentuation at 30 1/3 octave ISO centre frequencies from 25Hz-20kHz.

The equaliser shall meet or exceed the following performance specifications:

**Distortion** <0.01% (@ +18dBm (1kHz))  
**Frequency response** ±0.5dB (20Hz-20kHz)  
**Noise** <-94dBm (20Hz-20kHz unweighted)  
**Maximum output level into 600 ohm** +22dBm

The equaliser shall have adjustable low & high cut 12dB/octave slope filters ranging from 15Hz-300Hz & 2.5kHz-30kHz and provide for selectable high cut filter slope 6/12dB.

The equaliser shall have an equalisation section by-pass facility and shall be failsafe, that is the unit shall return automatically to the by-pass condition in the event of power supply interruption.

The equaliser shall use centre detented slide potentiometers arranged to give a graphical display of frequency plotted against level.

A rear panel switch shall be provided to isolate the signal ground connections, quickly and safely, from the chassis ground.

All audio connections shall be via XLR style connectors and a tamperproof front panel cover shall be available to fit the unit. The unit shall be capable of operating from a 110/220v ± 12% 50/60Hz AC power source.

The equaliser shall be the Klark-Teknik Model DN301 and no alternative specification option is available.

<b>Input</b>	<b>One</b>
Type	Balanced (electronically)
Impedance (ohm)	
Balanced	20k
Unbalanced	10k

<b>Output</b>	<b>One</b>
Type	Unbalanced
Min. load impedance	600 ohm
Source impedance	<60 ohm
Max. level	+22dBm

<b>Performance</b>	
Frequency response	
(20Hz-20kHz) Eq out	±0.5dB
Eq in	User defined
Distortion (@ +18dBm)	<0.01% @ 1kHz
Equivalent input noise	
(20Hz-20kHz unweighted)	<-94dBm
Overload indicator	+19dBu
Gain	+20dB

<b>Filters</b>	
Type	MELT**
Centre frequencies	30
ISO	25Hz-20kHz 1/3 octave
Tolerance	±5%
Maximum cut	-15dB
High Pass filter slope	15Hz-300Hz 12dB/octave
Low Pass filter slope	2k 5Hz-30kHz 6/12dB/octave

<b>Power Requirements</b>	
Voltage	110/120/220/240V 50/60Hz
Consumption	<15VA

<b>Weight</b>	
Nett	3.5kg
Shipping	6kg

<b>Dimensions</b>	
Width	482mm (19 inch)
Depth	205mm (8 inch)
Height	89mm (3 1/2 inch)

<b>Terminations</b>	
Input	3 pin XLR
Output	3 pin XLR
Power	3 pin CEE

<b>Options</b>	Security Cover Transformer input*/ output balancing
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\*Input transformer balancing is non retrofittable and has to be specified with order.

\*\*"MELT": Proprietary thick-film circuit.

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

### 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.



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