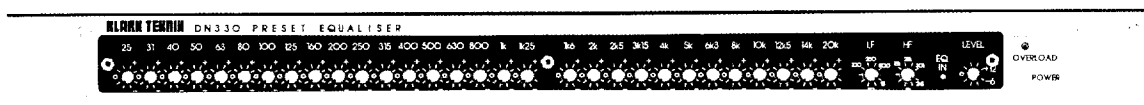


# DN330

## PRESET EQUALISER

The DN330 is a single channel, 30 band, 1/3 Octave preset equaliser in a single 19 inch rack space unit. Based on 20 years of market leading experience in the manufacture of graphic equalisers, it has been designed specifically for installations where the requirement is for units that can be sealed after system set-up, subject only to periodic re-calibration.

## Preset Equaliser Single Channel 30 Band



The DN330 features 24 volt DC operation in addition to 115/230 volt AC. This makes it ideal for emergency evacuation systems and other areas requiring a mains power fail safe facility. On failure of the main AC supply, change over to an external 24 volt DC supply is fast, automatic and seamless.

The 30 fixed frequency filter bands are positioned at ISO frequencies between 25Hz and 20KHz and offer up to 12dB of cut or boost. Sweepable 12dB/Octave high and low pass filters are also provided with turnover frequencies continuously variable from 15Hz to 300Hz and 2K5Hz to 30KHz respectively. Control is via individual rotary potentiometers.

The rotary controls, though recessed and requiring a screwdriver for access, are the same sealed, long life components found on the award winning Midas XL3 mixing console. In fact, all the components, switches, circuit boards and hardware are built and assembled to the same exacting standards as all other Klark Teknik products at the factory in Kidderminster.

Other front panel features include an equalisation bypass switch, rotary input gain control with a range of -6 to +12dB, and a signal clip indicator LED. All front panel controls may be covered by a screw down, recessed security strip after system calibration.

Input and output are both electronically current and voltage balanced, presented on XLR connectors. The rear panel also features an IEC mains AC inlet socket and a 24 volt DC inlet on twin 4mm "banana" type sockets. The DN330 is also equipped with a fail-safe bypass relay, so that, in the event of both AC and DC supplies failing, the input is routed directly to the output.

### Features

- Thirty band 1/3 octave equaliser offering 12dB of cut or boost via high quality rotary preset controls.
- AC or 24 volt DC operation.
- Electronically balanced input and output on XLR connectors.
- Adjustable high and low pass filters.
- Equalisation bypass switch allows easy comparison between direct and equalised signal.
- Renowned Klark Teknik quality and reliability
- All controls may be covered by tamper proof strip after system calibration.
- Fail-safe bypass relay connects input to output when all power is removed.
- Sturdy construction in a 1U, 19 inch rack chassis.

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**KLARK TEKNIK**  
a MARK IV company  
The first name with sound system designers

# DN330

## PRESET EQUALISER

### ARCHITECT'S AND ENGINEER'S SPECIFICATION

The equaliser shall be a single channel 1/3 octave type, providing 12dB of boost or attenuation at 30 ISO centre frequencies from 25Hz to 20KHz in a standard 1U 19 inch rack mount chassis.

Control shall be via rotary preset potentiometers inset into the front panel, so that they may be covered by a flush fitting anti lamper strip.

The equaliser shall have adjustable low and high pass 12dB/octave slope filters ranging from 2K5Hz to 30KHz and 15Hz to 300Hz respectively.

The equaliser shall meet or exceed the following specifications:

**Distortion:** <0.01% (+4dBu@1kHz)  
**Frequency response:**  $\pm 0.5\text{dB}$  (20Hz to 20kHz)  
**Input Noise:** <-86dBu(20Hz to 20kHz)  
**Maximum output level into 600ohms:** +19dBu

The unit shall be capable of operation from a 115/230 volt, 50/60 Hz AC supply or from a 24 volt DC supply. The AC supply shall take priority and in the event of interruption, change over to the DC supply shall be automatic and instantaneous.

There shall be an equalisation bypass switch and the unit shall return automatically to a bypass mode in the event of total power loss.

Input and output shall be electronically balanced. All audio connections shall be via 3-pin XLR type connectors.

### RELIABILITY CONTROL

All DN330 units are given the full backing of Klark Teknik 'Reliability Control', which proves each equaliser against a specification consistent with the highest professional standards. Only top quality components are used throughout, and each unit is bench tested and aligned before a burn-in period and final performance test.

### TECHNICAL SPECIFICATION

<b>Input</b>	One
Type	Electronically balanced
Impedance (ohm)	
Balanced	20Kohms
Unbalanced	10Kohms
Max input level	+20dBm
<b>Output</b>	One
Type	Electronically balanced
Source impedance	50ohms
Min. load impedance	600ohms
Max Level	+20dBu with 2Kohm load
<b>Performance</b>	
Frequency response	(20Hz to 20KHz, EQ Flat) $\pm 0.5\text{dB}$
THD+N @ +4dBm	<0.01% (@1KHz)
Equivalent input noise	<-86dBu
(20Hz to 20KHz unweighted)	
Gain	-6 to +12dB
<b>Filters</b>	
Type	Proprietary "combining"
ISO centre frequencies	30, 25Hz to 20KHz
Frequency tolerance	5%
Maximum Boost/Cut	$\pm 12\text{dB}$
High pass filter	15Hz to 300Hz, 12dB/octave
Low pass filter	2K5Hz to 30KHz 12dB/octave
<b>Power requirements</b>	
AC Voltage	115/230 $\pm 12\%$ , 50/60Hz
Consumption	<15VA
DC Voltage	24V $\pm 12\%$
DC Consumption	200mA (Quiescent)
<b>Weight</b>	
Net	2.5kg
Shipping	4kg
<b>Dimensions</b>	
Width	482mm (19 inches)
Height	45mm (1.75 inches)
Depth	210mm (8.25 inches)
<b>Terminations</b>	
Inputs	3 pin XLR
Outputs	3 pin XLR
AC power	3 pin IEC
DC power	2 x 4mm "Banana" type

*Trade Descriptions Act. Due to the company policy of continuous improvement, Klark Teknik reserve the right to alter these specifications without notice.*



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