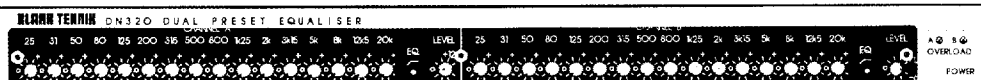


# DN320

## PRESET EQUALISER

The DN320 is a dual channel, 16 band, 2/3 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 Dual Channel 16 Band



The DN320 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 16 fixed frequency filter bands on each channel are positioned at ISO frequencies between 20Hz and 20KHz and offer up to 12dB of cut or boost. Control is via individual rotary potentiometers. A switchable 18dB/octave subsonic filter is also provided on each channel, with a turnover frequency of 30Hz.

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 equalisation bypass switches, rotary input gain controls with a range of -6 to +12dB, and a pair of signal clip indicator LEDs. All front panel controls may be covered by a screw down, recessed security strip after system calibration.

Inputs and outputs are all electronically current and voltage balanced, presented on XLR connectors. The rear panel also features and IEC mains AC inlet socket and a 24 volt DC inlet on twin 4mm "banana" type sockets. The DN320 is also equipped with fail-safe bypass relays, so that, in the event of both AC and DC supplies failing, the inputs are routed directly to the outputs.

### Features

- Dual channel, sixteen band 2/3 octave equaliser offering 12dB of cut or boost via high quality rotary preset controls.
- AC or 24 volt DC operation.
- Electronically balanced inputs and outputs on XLR connectors.
- Switchable subsonic filters.
- Equalisation bypass switches allow easy comparison between direct and equalised signals.
- Renowned Klark Teknik quality and reliability.
- All controls may be covered by tamper proof strip after system calibration.
- Fail-safe bypass relays connect inputs to outputs when all power is removed.
- Sturdy construction in a 1U, 19 inch rack chassis.

**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.  
Tel: (616) 695 4750  
Fax: (616) 695 0470

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

# DN320

## PRESET EQUALISER

### ARCHITECT'S AND ENGINEER'S SPECIFICATION

The equaliser shall be a dual channel 2/3 octave type, providing 12dB of boost or attenuation at 16 ISO centre frequencies from 20Hz 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 tamper strip.

The equaliser shall have switchable 30Hz subsonic filters on each channel, with a roll off of 18dB/octave.

The equaliser shall meet or exceed the following specifications:

**Distortion:** <0.01 % (+4dBu @ 1KHz)  
**Frequency response:**  $\pm 0.5$ dB (20Hz to 20KHz)  
**Input Noise:** <-88dBu(20Hz to 20KHz)  
**Maximum output level into 600 ohms:** +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 equalisation bypass switches and the unit shall return automatically to a bypass mode in the event of total power loss.

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

### RELIABILITY CONTROL

All DN320 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>Inputs</b>	Two
Type	Electronically balanced
Impedance	
Balanced	20Kohms
Unbalanced	10Kohms
Max input level	+20dBm

<b>Outputs</b>	Two
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) $\pm 0.5$ dB
THD+N @ +4dBu	<0.01% @ 1KHz
Equivalent input noise	(20Hz to 20KHz unweighted) <-88dBu
Gain	-6 to +12dB

<b>Filters</b>	
Type	Proprietary "combining"
ISO centre frequencies	16, 20Hz to 20KHz
Frequency tolerance	5%
Maximum Boost/Cut	$\pm 12$ dB
Subsonic filter	18dB/Octave, -3dB at 30Hz

<b>Power requirements</b>	
AC Voltage	115/230V $\pm 12\%$ , 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.*