

# **Klark Teknik Pocket Guide**

Innovation. Design. Performance.





## Introduction

In 1974, brothers Phil and Terry Clarke founded Klark Teknik Research Ltd. Their pioneering approach to design and development allowed them to introduce some truly groundbreaking designs. One of the world's first digital delay and digital reverb units emanated from their laboratory, and their descendants remain in common usage all over the world to this day.

However it was their concepts for equalisation devices that really changed the world of professional audio resulting in the uniquely capable DN370 and the world famous DN360.

Today Klark Teknik continues to bring innovation in design, engineering and sonic quality in both the analogue and digital realm of signal processing. With the introduction of Show Command, Klark Teknik have an integrated system of hardware, software and Ethernet technology providing full control of loudspeaker system equalisation, management and routing.

Uniquely in its field, Klark Teknik also provides the customer with an opportunity to invest in leading-edge equipment with an extraordinary working lifespan and unrivalled retained value.

# SHOW COMMAND

flexible audio equalisation for every application

## What is Show Command?

Show Command is an integrated system of hardware and software, which provides full control over loudspeaker management and / or in-ear monitors using both wired and wireless Ethernet technology - which also allows easy integration into TCP-IP networks.

## What does it consist of?

Show Command consists of Helix hardware: DN9331 RAPIDE, DN9340E, DN9344E and DN9848E plus Helix software: EQ and System Controller Software, ELGAR Software Shell and a wireless capable PC laptop / tablet.

## How and why should I use it?

Pre show, when the freedom to wander around the venue for sound check is required, the system can be controlled from a Wi-Fi enabled tablet. From the PC tablet all functions of Helix EQ and System Controller can be managed from one software application, ELGAR, in conjunction with Helix EQ and Helix System Controller RCS Add-Ins. All settings for the EQ and System Controller can now be saved and recalled from the ELGAR software. A unique function, available only from Show Command. In other words there is no longer the need to have multiple software packages and unrelated individual hardware to manage the sound system.

During the show the tablet PC can be hardwired into the DN9331 with a CAT5 cable to ensure that there are no communication drop-outs due to outside interference which could occur with wireless communication.

Alternatively, in the absence of a PC the Helix EQ can be controlled using the front panel controls of the Helix DN9340E Dual EQ and the System Controller through the DN9848E front panel.

During the show the graphics can be controlled from the DN9331 RAPIDE Remote Fader with its instant recall via its exclusive Klark Teknik 31 motorised faders, again another unique feature of Show Command. With STS the graphic control of EQ becomes even easier, especially for the monitor engineer when linked to a STS compatible console. The solo button on the console when pressed, brings up the EQ for that input or output onto the RAPIDE and / or the Helix EQ software.

The system flexibility is further increased by having the Helix EQ as a discrete unit allowing for greater patching options. Yet another innovative feature of Show Command.

**Show Command truly allows you to connect, communicate, control and command.**

## HELIX T-DEQ (dynamic EQ)

For everyone who has ever used frequency-conscious compression, T-DEQ is the control tool you've always dreamed of.

T-DEQ allows the relative level of a frequency (or range of frequencies) to be programmed to maintain a constant offset above or below a programmable threshold. Essentially you are saying to the Helix EQ 'I want frequency 'A' to be at level 'B' when the overall level through the unit is 'C'.

The applications for this unique function are limited only by your imagination, but here are some examples:

- Controlling resonant room frequencies
- Horn equalisation
- Frequency-specific limiting for speaker protection
- Limiting a specific source by using it on a channel insert
- Enhancing a specific source by using it on a channel insert
- Overall system limiting where maximum SPLs are enforced
- Feedback control in monitors with greatly improved intelligibility
- Dynamic Expansion (noise reduction)

The system-limiting abilities are of particular interest to installers where Helix EQ can be programmed and then secured by a password, thus satisfying even the most draconian noise level limits. The real beauty of it is that it is completely transparent in operation, with zero audible artefacts, unlike the compression-based function in any other unit. Once you've used it you'll never want to use anything else.



# DN9331 RAPIDE

## graphic controller

Unique, immediate and tactile, the DN9331 Helix RAPIDE offers direct access to all of the graphic equalisation functions of Helix digital equalisers.

Instant recall of fader positions is made possible by the use of 31 console-quality 100 mm long travel high resolution motorised faders. These are custom manufactured to Klark Teknik's exacting standards, featuring long life conductive plastic tracks and driven by fast acting precision servo control circuits. A generously specified power supply ensures high speed of response, and can supply the peak currents required by simultaneous multiple fader movements,

without the lag effects experienced with lower-grade remote fader units.

Integrating a Midas/Klark Teknik STS Solo Tracking System interface, the Helix RAPIDE is ideal for use in stage monitoring systems. When combined with a Midas Heritage, Legend, Siena or XL8 Live Performance System, the solo buttons on each aux send can be used to instantly recall the graphic equaliser settings of the connected channel of Helix digital equalisation. This offers the monitor engineer unparalleled speed of access in situations demanding an immediate response.

A flexible user interface allows custom remote channel assignments across four banks of 32 channel selection buttons. Four freely assignable group buttons and a global 'all channels' button allow relative adjustment of channels, especially important when the priority is to stop on-stage feedback first and determine the source second.

The Helix RAPIDE is the networking centre of the Show Command System. An eight external port Ethernet hub is incorporated into the device, allowing the

connection of Helix digital equalisers and system processors, with wired or wireless connections to laptop or tablet PCs running Elgar, Helix EQ RCS and System Controller RCS.

The Helix RAPIDE is fully backwards-compatible with the original Helix DN9340 and DN9344 digital equalisers which may be interfaced using Ethernet-to-serial converters.

- Direct access to all graphic equalisation functions of Helix digital equalisers
- 31, 100mm high resolution, high-speed motorised faders
- Solo Tracking System in conjunction with a Midas XL8, Heritage, Legend and Siena
- Remote control channel assignments across 4 banks of 32 channel selection buttons
- 4 Group buttons
- 8 Ethernet ports allowing connection to Helix digital equalisers and system processors with wired or wireless connections to a PC running ELGAR, Helix EQ RCS and System Controller RCS
- Backwards compatible to non Ethernet DN9340 and DN9344 using Ethernet to serial converters
- Available as part of the Midas XL8 Live Performance System





# HELIX EQ

DN9340E and DN9344E



## DN9340E

### dual eq

For the uninitiated, the new Helix DN9340E is a dual channel, 2RU, all-digital equalisation unit that simultaneously offers a five-mode 31-band graphic EQ, twelve bands of full parametric EQ, four configurable filters (HPF, LPF, hi shelf, lo shelf and notch) and two bands of true dynamic EQ (T-DEQ) per channel. And it sounds incredible – the most common remark from first-time users is 'it sounds just like a great analogue EQ!'

Front panel control is provided by both a touch strip and rotary controls with a simple and intuitive menu. Full input and output metering is provided plus dedicated meters for the T-DEQ function. Helix can

also be linked to Midas Siena, Legend and Heritage consoles and the XL8 Live Performance System via the Solo Tracking System (STS). This allows any channel of connected Helix EQ to be edited from the control surface of a single Helix DN9340E unit or PC simply by activating the appropriate PFL function on the console (STS only works on the outputs of the Siena).

By linking a DN9331 RAPIDE to the DN9340E it allows the user to have instant control over the Helix 31 band graphic EQ function thanks to the unique 31 Klark Teknik 100mm motorised faders fitted to this unit.



## DN9344E

### quad eq



Helix DN9344E Quad EQ is actually, as the name suggests, TWO complete DN9340E Helix Dual EQ units in just a single rack-space device. It provides four discrete or two pairs of stereo-linked channels of multi-configurable EQ that can be controlled singly or as part of a larger system – up to 64 channels - from a single DN9340E, or via Helix EQ Remote Control Software (RCS). Additionally the 31 band graphic function of the unit can be controlled via the unique DN9331 RAPIDE. It is also fitted with contact closures to allow for memory recall by a mechanical device - perfect for installations.

The principal operational advantage of the Helix DN9344E is that it offers all the functionality of several standalone devices in one package, thus saving massively on both cost and rack-space. For instance, enough EQ for a 24-way monitor mix plus two side fills will fit into just SIX rack-spaces (six DN9344E Quad EQs), at a comparative

cost to the same number of channels of a top-class analogue graphic EQ.

The Helix DN9344E also features AES/EBU digital inputs and outputs as standard, complete with word clock sync inputs. Whilst the internal sample rate of DN9340/44E units remain at 48kHz/44.1kHz, these digital connections are all 96 kHz compatible allowing easy interface with any other digital device featuring the higher sample rate.

The DN9340E and DN9344E units are equipped with dual port Ethernet communications. This is to facilitate much faster communication, response and metering between units than was previously possible with serial comms. The Ethernet ports allow for control of the units from a PC, either via Ethernet or wirelessly with the Helix EQ RCS an ELGAR Add-In.

# Complete Integration

ultimate connectivity



## ELGAR (SOFTWARE SHELL)

Software forms an integral part of Klark Teknik's Show Command with Midas and Klark Teknik's ELGAR at the heart of the software system. ELGAR provides the framework that allows the various software Add-Ins to communicate with the hardware and stores the whole show in a single file. It also provides the facility to off-line edit the show file on your PC laptop.

There are currently two Klark Teknik Add-Ins available which allow the remote control of the DN9848 / Helix DN9848E System Controller and DN9340, DN9344 / Helix DN9340E, DN9344E EQ.

## REMOTE CONTROL SOFTWARE (RCS)

**Helix DN9340E and DN9344E EQ Remote Control Software (RCS) Add-In** allows remote PC access to all the functions of Helix EQ, including overall system store and recall. An extremely intuitive Graphical User Interface (GUI) allows simple navigation between function pages. The system is designed to work with all PCs including the latest hand-held PC tablets for ease of wireless connection and portability.

Real time indication of unit on-line / off-line status is visible on all pages and the individual function pages have familiar and easy to use controls whether using a mouse, keypad or stylus. The make or break of this type of system is always navigation, and this is one of the Helix EQ RCS's real strengths, using our proprietary 'FastNav' page. This is a control panel that is always active, and shows every function of every channel. Thus it is possible to move between, for instance, the graphic EQ for channel 10 and the T-DEQ controls for channel 37 with a single click.

**Helix DN9848E System Controller Remote Control Software (RCS) Add-In** provides on-line remote control and off-line system configuration, either via wired or wireless Ethernet technology. The remote control software allows intuitive control of every function of an individual unit or units, it also (and uniquely) allows inputs and outputs to be assigned to control groups. These groups can then be made to control any parameter of the unit or the system – muting, delay, EQ, dynamics, speaker or room zones, whatever you need. Simple screens with easy-access controls make for quick adjustments and entire system set-ups can then be stored as an ELGAR computer file.

## SOLO TRACKING SYSTEM (STS)

### What is it?

Solo Tracking System, or STS, is an auto solo system only available when linking a Midas STS compatible console to Klark Teknik's Helix EQ system.

parameters within Helix EQ. The ability to EQ a floor monitor while standing at the 'hot spot' means the results are accurate and fewer instances of leaping for the EQ rack during the show.

### What does it do?

Helix EQ can be linked to all Midas consoles in the Heritage, Legend and Siena range and the XL8 Live Performance System via the Solo Tracking System. When a solo key on the console is pressed, the EQ for that input or output (outputs only for Siena) is instantly shown on the Helix DN9340E Dual EQ or a wired / wireless PC, ready for immediate control. Once displayed on your chosen user interface you naturally have complete access to all the Helix EQ functions allocated to that input or output.

The graphic EQ portion of Helix can also be displayed on the DN9331 RAPIDE Graphic Controller. Fantastic for stage monitoring as the Solo button on each aux send can be used to instantly recall the graphic settings of the connected channel of Helix EQ, offering the monitor engineer unparalleled speed of access.

### Connections

A RS-232 connection is supplied on the rear panel of Helix DN9331 and DN9340E acting as the serial data connection to the Midas STS compatible console. Ethernet is used as the control protocol allowing Helix to be integrated into an Ethernet network and up to 64 channels of Helix can be interconnected using standard CAT5 cables.

### Benefits?

When a wireless laptop or tablet PC is integrated into the system, the engineer has the freedom to move around the stage or auditorium making real-time adjustments to the EQ and delay



# DN9848E

## system controller

The digital system controller has been one of the fastest developing areas of signal processing in recent years. This is principally because it allows designers to combine a number of key control functions within a single device, thereby lowering overall costs and adding convenience. Unfortunately, in many cases the relevance of the audio performance of the device has been overshadowed by the 'bells and whistles' functionality of the unit, ultimately somewhat defeating the object of the exercise. With the new Klark Teknik Helix DN9848E System Controller, no compromise has been made in either the feature set or the audio performance.

The Helix DN9848E brings a new level of flexibility to system control whether for live production or installation use. Since there is no preset routing within the device, it can be easily preprogrammed to perform almost any system-control task. Limiters and compressors on all outputs plus compressors on all inputs provide ultimate speaker control and protection, whilst no less than ninety-six bands of fully parametric EQ allow for both room and system equalisation. Best of all, there's enough processing power onboard to allow every function to be available all the time, regardless of what is already in use.

The DN9848E System Controller features AES/EBU digital inputs as standard. Whilst the internal sample rate of the DN9848E unit remains at 48kHz, these digital connections are all 96 kHz compatible allowing easy interface with any other digital device featuring the higher sample rate. The unit now features a dual port Ethernet communications interface. This is to facilitate much faster communication, response and metering when controlling multiple units, than was previously possible with serial comms.

The DN9848E incorporates some customer-requested operational additions. The user-configurability of the unit includes full matrix mixing capability between inputs and outputs, providing an unequalled level of flexibility. Whilst programming, inputs or outputs can now be 'ganged' so that the user can enter program data into one input or output menu and all connected inputs

or outputs will be simultaneously updated. Input and output parameters can also be copied from one to another. The internal memory structure has also been revised such that it is now possible to back up the RAM-based system memories into non-volatile flash memory.

The proprietary ELGAR software coupled with Helix System Controller Remote Control Software (RCS) Add-In allows simple up-and-down-loading of system parameters into the FLASH memory locations, as well as storage and transmission of system information.

Should for example you need a new system configuration to be loaded into a unit on the other side of the world? No problem, simply email the ELGAR file to wherever it needs to go, it can then be uploaded into the unit in seconds.

- 4 input and 8 outputs, 1RU
- 12 delay lines / 16 all-pass filters / 16 hi and lo pass filters
- 4 comps / 8 zero overshoot / 96 bands of PEQ
- Grouping facility allows unique system control
- All facilities available all the time
- Full matrix mixing between inputs and outputs
- Ganging of inputs and outputs
- Input and outputs parameters can be copied between one another
- Flash memory locations
- Dual Ethernet control ports AES/EBU digital inputs
- Totally flexible routing allows DN9848E to run almost any type, configuration or make of system
- It also allows amp racks to be truly multi-functional because they can be reconfigured to any application quickly and with no re-patching
- Full Remote control, wired or wireless, via PC and ELGAR and System Controller Remote Control Software



# DN370

## graphic eq

The Klark Teknik DN370 is the latest evolutionary step in a process of design refinement that goes back over 30 years. With DN370 we've started from the ground up and produced a unit that is totally without compromise, and one that we believe is the finest professional graphic equaliser in the world today. It also perfectly complements the existing Klark Teknik range of equalisers, both analogue and digital.

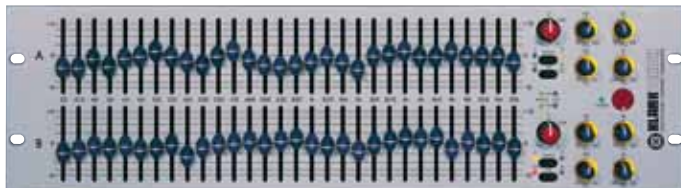
Our aim is simply to provide discerning professional users with the best possible solutions for system control. Our market research shows that the graphic

equaliser is still the most commonly-used EQ device in fixed and mobile live sound applications, as well as many installations, mainly because the physical user interface provides instant access and controllability in even the most demanding environments. To this end we have completely re-evaluated the role of the graphic EQ, focusing exclusively on providing a new feature set that better reflects the needs of modern users.

Like all Klark Teknik units, DN370 is engineered for a lifetime of hard use and carries our 3-year international factory warranty.



- Long-throw 45mm oil-damped faders with dust cover for increased accuracy and resolution
- All-new proportional-Q filters provide optimum control without undesirable audio artifacts
- Gain control with +6dB/-infinity range and centre detent at unity gain. Allows effective muting of channel in emergencies.
- Range switch selects 6dB or 12dB operation for the faders, with LED indication
- Channel bypass switch with LED indication the unit also provides automatic relay bypass in the event of power failure
- Sweepable high-pass filter with 20Hz to 500Hz range sets the lower frequency limit of the system. The control incorporates a push switch to select the filter in and out, with an illuminated ring for at a glance status indication. Invaluable for smooth rejection of unwanted subsonic and low frequencies, particularly relevant with modern, compact wedge monitors.
- Sweepable low-pass filter with 2kHz to 20kHz range sets the upper frequency limit of the system. The control incorporates a push switch to select the filter in and out, with an illuminated ring for at a glance status indication. Provides optimum bandwidth control for vocal monitors and IEM systems.
- Two sweepable notch filters per channel, with overlapping frequency ranges of 20Hz to 2kHz and 200Hz to 20kHz. These allow precise removal of problem frequencies with minimal effect on the rest of the program material, and fast control of between fader frequencies. This gives precise control of room and loudspeaker resonance/feedback nodes with minimum loss of energy even between ISO centres. The controls each incorporate a push switch to select the filter in and out, with an illuminated ring for at a glance status indication.
- Bypass switch with status LEDs for quick comparison of applied EQ
- Power switch, fully recessed in the on position to avoid accidental operation
- Signal present LEDs show the presence of audio signals above 40dBu
- Multi point clip monitoring. Clip warning LEDs illuminate when the level exceeds +20dBu (2dB below the onset of clipping) to assist in optimum system gain setting.
- Electronically balanced inputs and outputs (transformer balancing is available as an option). Connections are provided on both XLRs (pin 2 hot) and Phoenix-type strip connectors for fixed installation.
- IEC mains inlet. The unit automatically adjusts for operation on all voltages from 100 to 240V AC.





# DN360

graphic eq

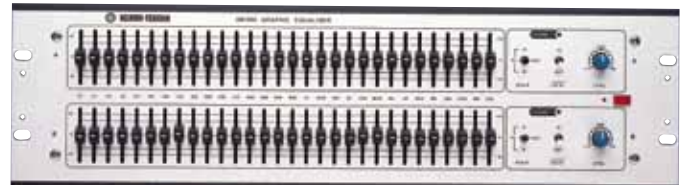
Very occasionally, a design is so correct from the very start that it needs little or no development over many years.

The Klark Teknik DN360 has been in continuous production for over twenty years with only one minor design revision, and is still the most popular analogue graphic equaliser on the planet.

With over 35,000 units shipped worldwide to date, DN360 has achieved ubiquity in pro-audio circles. So why is it so enduringly popular? Like all KT units it is well designed and engineered to very high standards so will handle continuous road use with only minimal service. They are also very consistent, so engineers using units sourced locally all over the world will get the same response every time.

But perhaps most important of all is the way they sound – it's notoriously difficult to describe sound, but talk to anyone that prefers DN360s to any other graphic and they will use words like 'musical', 'smooth' 'responsive' and 'great sounding'. Primarily this is because we use proportional-Q filtering, where the 'Q' value of the frequency increases as the cut or boost increases. This provides a flowing response at low cut / boost values, but also accurate frequency control at higher values.

- 2 x thirty, oil damped 30mm precision faders graphically positioned at 1/3 octave ISO frequencies between 25Hz-20kHz
- Proprietary circuit designs utilising MELT filters giving unbeatable performance
- Comprehensive standard specifications include electronically balanced inputs and LED overload indicators
- Earth lift switch enables signal and chassis grounds to be isolated eliminating ground-loop problems
- Useful low cut 18dB/octave filters preventing subsonic components from overloading speakers or amplifiers
- Equalisation by-pass allowing easy comparison between direct and equalised signals
- Scale switching gives the choice of either high fader resolution (6dB) or normal (12dB)
- Perspex security cover available to order, for use in permanent sound installations where system calibration has taken place



# DN1248 *Plus*

mic splitter

Even in this digital age, we've kept sight of the numerous applications where analogue devices provide the best solution. One such application is providing multiple feeds from a single source, hence the introduction of the DN1248 Plus Active Signal Splitter.



Housed in a roadworthy 3RU chassis with internal power supply, a single DN1248 Plus provides twelve input channels, each feeding four outputs, two of which are electronically balanced and two which are transformer isolated.

Output 4 is located on the rear of the unit, as are duplicates of all the inputs and output 1, so the patching options are extremely flexible. The microphone preamplifier is a Midas Heritage series unit, specially adapted to the task and providing all the great sound and headroom for which Midas preamps are world famous.

Several factory options are available for DN1248 Plus: the 'DP' option, which provides (at very low cost) a second, linked internal PSU to provide auto-backup in the case of PSU failure.

The 'AT' option provides transformer balancing for all 48 outputs, and the 'FM' variant combines both 'DP' and 'AT' advantages. Plus, the whole unit is designed so that a customer can easily retrofit the multipin connector and input / output configuration of their choice.

- New connector configuration allows instant system upgrade with no re-wiring
- Internal dual-redundancy power supply available as a low-cost factory option
- Midas Heritage Series pre-amplifier and unique KT design provides ultimate audio quality
- Three year International factory warranty
- Internal power supply with factory option of backup PSU



# DN530

## creative quad gate

The key to silent gating is the shape of the gain transition curve that is used to ramp up the signal level when the gate opens (attack) and fade it back down when the gate closes (release). The DN530 features a carefully mapped logarithmic attack envelope, to ensure fast, silent gating.



The DN530 Quad Gate also boasts "Transient Accenting", a new creative feature providing an easy way to enhance the attack envelope beyond merely opening the gate. This can provide up to 12dB of additional transient energy. Its primary application is to provide additional impact on drums and percussion instruments, although it can be used to enhance the impact of many instruments, including acoustic stringed instruments such as guitar and piano. Transient Accenting is unique in that it allows the operator precise control

over the amount of enhancement applied to each channel of processing, and can be applied independently of the gating function.

The DN530 brings a creative flare to drum channels with its unique Transient Accenting feature which largely eliminates the need for excessive EQ or compression.

- Quad channel gate
- It features a unique progressively controllable accent level that emphasizes the start of a signal to increase the dynamic power within percussive signals
- Gate attack is exponential which means it can be set extremely fast to reduce signal loss at the start of sounds while remaining sonically transparent – no clicks
- Gate release is reverse exponential so it can be set relatively fast and blend in seamlessly with the natural decay of the material
- Designed from an exemplary technical point of view, features extremely low noise and distortion levels
- The gate features an advanced band pass side chain filter to increase trigger source discrimination
- The gate provides rotary controls for all envelope characteristics and range
- External key inputs and ducking facilities are provided
- The status of bypass, solo and other major switches are boldly presented to avoid mistakes
- Road worthy chassis
- Balanced outputs
- Auto switching power supply
- 1U





# DN540

## creative quad comp

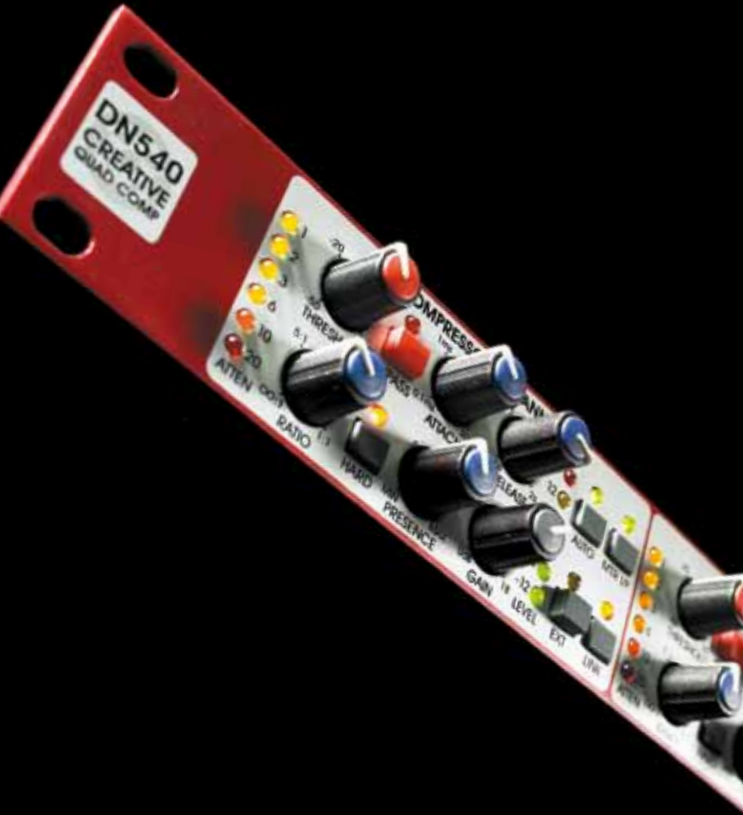
Throughout the history of dynamics processing many different types of compressor have been produced using many different types of gain technology. Each type has a distinctive sound. Users have found many applications which benefit from these often unintentional compression audio artefacts, taking the

use of compressors far beyond simple dynamic range reduction, sometimes even generating the complete reverse; dynamic enhancement.

It is with these creative applications in mind, that the DN540 Quad Compressor features a unique "Harmonic Enhancement" presence control. When this is engaged, the harmonic content of the material is preserved in a more natural and dynamic state, in a spectral area where we are most perceptive to detail. This allows more compression to be applied, providing greater control of programme dynamics, without the source material sounding dull, lacking in detail and unnatural. Dynamically enhanced compression can produce

results that are very similar to multiband compression but with only one additional control required (as opposed to many) it is considerably less time consuming to set up and typically does not require constant tweaking during a performance.

With its unique presence feature the DN540 will be especially useful on vocals to eliminate the "pumping" effects of spill and to add "air" to the sound without introducing noise.



- Quad channel compressor
- Easy to use and requires minimum set up to produce excellent results
- Features a unique and intuitive presence control that improves the high frequency sound quality without increasing noise or squealing (howl-round)
- Features extremely low noise and distortion levels
- Designed from a sonic point of view and can produce extremely transparent compression
- Advanced envelope generator with manual controls that can be easily switched in or out to produce transparency or creative dynamic effects
- The compressors intuitive turn it up, turn it down approach to control knob labeling avoids confusion during fast adjustment
- The status of bypass, solo and other major switches are boldly presented to avoid mistakes
- Linking features true power summing so it always provides true threshold setting for stereo material
- Great sounding compressor as it has been "tuned" by ear
- Road worthy chassis
- Balanced outputs
- Auto switching power supply
- 1U



# DN100

di box

The Klark Teknik DN100 Direct Injection Box is the natural successor to the long-established LBB100.

A ground-up redesign provides an extended dynamic range, lower noise floor and all the world-class audio performance you'd expect from Klark Teknik. DN100 is also designed to handle the rigours of life on the road: a thick aluminium shell protects the electronics, and this in turn is protected by a tough silicone rubber casing, which is replaceable and available as a spare part.

We've also fitted a Kensington security slot in one of the end panels to allow the unit to be made secure using a Kensington MicroSaver security cable.

Attention to detail – it's what makes a good unit into a great one.



# SQUARE ONE

no-compromise sonic quality, essential features

## Square ONE Dynamics

The constantly-changing hardware requirements of technical riders are just one of the many issues audio rental companies and live music venues have to deal with. Having to retain a comprehensive inventory of different devices, as well as reconfiguring outboard processing racks is a costly, time-consuming task, further complicated by the number of hardware options available.

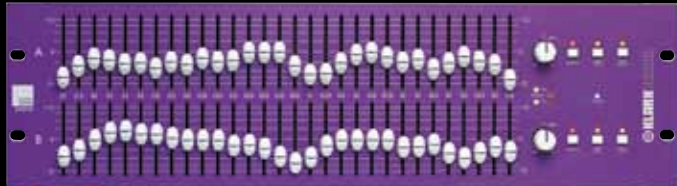
The solution: Klark Teknik Square ONE dynamics. Eight channels of flexible, configurable, high-performance dynamics processing in one 3U package. The right brand, the right combination, the right investment, every time.



## Square ONE Graphic

Klark Teknik has been designing audio equalisers since 1975, and has an impressive back catalogue, which includes the DN27, DN360 and DN370 three of the industry's finest and longest-established designs.

The Square ONE graphic represents 30-years of Klark Teknik's design expertise, offered at a more accessible price point, bringing superb audio performance within reach of the most budget-sensitive applications.





# SQUARE ONE

no-compromise sonic quality, essential features

## Square ONE Splitter

The analogue audio splitter remains the most versatile and cost effective way of distributing audio signals to multiple locations, especially in a world where digital and analogue consoles are paired in Front of House and monitor configurations, and digital consoles employ different audio transport protocols.

The Square ONE Splitter provides a simple solution with a user-friendly, high-performance, Midas XL8 inspired pre-amp design, packaged in a 2U, eight channel format.

To increase versatility and provide additional value, a third set of transformer-isolated independent (fixed gain) outputs are provided plus the Square ONE Splitter's ability to function as a 1-16 media split.

Audio performance, as with all KlarkTeknik's units, are of a superlative standard.





# **KLARK TEKNIK**

**SIGNAL PROCESSING BY DEFINITION**

WALTER NASH ROAD, KIDDERMINSTER, WORCESTERSHIRE. DY11 7HJ. ENGLAND.  
TEL:+44 1562 741515 FAX:+44 1562 745371

[www.klarktechnik.com](http://www.klarktechnik.com)