

PRO AUDIO REVIEW

The Industry's Equipment Authority

REPRINTED FROM MARCH, 2003

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Klark Teknik DN9340 Helix Digital Equalizer

BY WILL JAMES

Is there a better, more reliable EQ than the Klark Teknik DN360 or the DN27? Klark Teknik may have surpassed even its own industry standard graphic EQs with the introduction of the digital function EQ, the DN9340 Helix (\$3,663).

FEATURES

The DN9340 Helix EQ offers complete digital operation of an analog signal, with controls that are succinct. The first thing I noticed about the unit was the clean, clear, color display and arrangement of control knobs and touch pads. Navigation of the Helix is achieved through the touch pads



Fast Facts

Applications:

Live sound, studio, broadcast

Key Features:

31-band graphic EQ; 12-band parametric EQ; dynamics; memory; multiple types of controllable filters; delay

Price:

\$3,663

Contact:

Klark Teknik at 952-887-7444,
www.klarkteknik.com.

initially, by deciding on the type of EQ or filter desired with the touch controls on the left side. Those controls are joined by several display lights that indicate the mode of operation the Helix is currently engaged in. There is also a bypass mode switch. On the right side of the display is the secondary touch pad, allowing for access to the parameters and additional functions, as well as storing and recall of up to 64 favorite EQ settings.

Also incorporated into the touch control section is the Home/SetUp pad, which allows for instant menu access, as well as an escape from Store and Recall functions, in the event you get overwhelmed with the amount of functions at your disposal. Just below the right side touch controls are the three value/option controls that access the actual cut and boost, and frequency selection. Joining these controls on the right side is an attractive arrangement of LED

meter stacks displaying the L/R input levels, the L/R output levels and the high and low-threshold level displays for the dynamic portion of the Helix.

The Helix EQ is able to operate many functions simultaneously. For example, you can set the overall mains system through the use of the 12-band parametric EQ and then engage the 1/3 octave mode during performance for additional assistance and instant course correction. This can be done through the use of either the scroll and adjust knobs, or a sensitive touch pad just below each of 30 ISO standard frequencies on the 1/3 octave display. If that mode of display is not your fancy, you may engage the "Curve" display, which shows the actual shape of the waveform after the EQ is applied. Incidentally, you can scroll through the many functions of the Helix EQ and not affect the sound of the EQ until actually engaging that function.

One very useful function of the DN9340 is the availability of a dynamic EQ that is actually threshold sensitive. As you know, the overall response of any room/system combo will change relative to overall volume. The dynamic function of the Helix allows you to program different curves into the system that correspond to varying volumes, thus allowing for a more even frequency distribution at wide dynamic variances. In addition, the dynamic section allows for constant volume attainment, regardless of cut or boost, at any frequency.

In fact, the Helix EQ can be connected directly to compatible consoles, analyzers and computers through connectors on both front and back panels, assisting in the measurement/control of frequencies. The Helix also provides a simple notch filter, an adjustable high-pass and low-pass filter, with variable slope, and high and low-shelf type filters with variable slope. You can engage up to four filters simultaneously, while also employing all three types of EQ at the same time.

IN USE

Right out of the box, my first comment after plugging in and switching on was, "Holy cow! This thing looks like it is Captain Picard's personal EQ, right off the bridge of the Starship Enterprise." The graphic touch pad on the Helix is surrounded with red LEDs. The graphic display is very legible and well lit, as are the control and value controls.

My first adventure with the Helix EQ was to insert it on the main outputs on one of my Soundcraft Series Five FOH consoles. I was able to easily select frequencies and cut/boost from both the rotary value controls, as well as the graphic EQ touch pad, thus displaying changed frequencies in .1 dB increments on the LCD screen. In that same job (providing audio production for country legends Asleep at the Wheel) I decided to simultaneously employ multiple functions of the Helix. I arrived at a working EQ for the main system via the parametric portion of the Klark Teknik, and then changed the function to the graphic EQ for minor frequen-

cy adjustment. I also engaged the high-pass filter for the three-way speakers (the subs were on an aux send) at 100 Hz, and a slope of 24 dB per octave. The Helix really contoured the system with nice definition, the EQs were exact and smooth and the dynamics section controlled the level precisely.

On several other occasions I used the Helix as a monitor mix EQ for both conventional wedges and in-ear situations. The parametric section really worked well in that application, allowing the mix to be EQed quickly and precisely, in addition to committing the settings to memory. In extremely low light situations like monitor mixing, the DN9340 was illuminated very nicely and never required additional light such as flashlights or power conditioner lights to navigate during the shows.

SUMMARY

The Klark Teknik DN9340 is an outstanding addition to any high-end sound system. The Helix EQ is extremely easy to navigate, though I highly recommend cruising through the owner's manual in order to discover all the functions and variations that are available, such as delay. Use of the Helix does require a good working knowledge of what filters and dynamic control are about, but the unit is also highly usable as an excellent parametric or graphic EQ with basic knowledge. With the DN9340, Klark Teknik scores a rare, but perfect 10.

Will James, owner and chief engineer of Atlantis Audio and Lighting, is a contributor to Pro Audio Review.

Product Points

KLARK TEKNIK DN9340 HELIX DIGITAL EQ

Plus

- + Many features above basic equalization
- + Legible and exact in operation with a Star Trek look
- + That famous Klark Teknik British sound
- + Extremely well built; will survive well on the road

Minus

- None

The Score

Power-packed signal processor that can solve the most difficult sound problems.