NATIVE RATE SERIES

Digital Video Processor

Preliminary Specifications

Introducing the Native Rate Series

For over 30 years Faroudja has been the reference of excellence for video technology used world wide for large screen Home, Corporate and Staging applications. The benefits of this kind of video processing expertise are now available in a more affordable configuration to match the growing market of mid-priced digital LCD, DLP, D-ILA and plasma displays.

As with our other processors the NR Series takes a no compromise approach to image quality using Faroudja's award-winning patented high performance technology in a new innovative configuration. Each processor is optimized for the display. By combining the most appropriate resolution with signal processing, including Faroudja's patented Bandwidth Expansion™ circuit, the unit will provide the cleanest, sharpest image possible for that display. It offers a simple and effective solution to the complicated challenges of creating high quality video. By combining a NR Series unit with every display, you can be sure the processing will be optimized ensuring excellent images and correct operation.

CELEBRATING
30 YEARS
OF VIDEO EXCELLENCE

FAROUDJA
PICTURE PLUS™

Native Rate Series

Digital Video Processor - Aspect Ratio Controller

There are some very powerful technologies used in the Native Rate Series.

Resolution Selection

For the best image possible the digital display must operate at the proper resolution. In some cases this is the display's native resolution. In others, due to the display's menu structure, an alternative resolution will yield the best results. When a unit in the NR Series is ordered, the display type is specified. The unit is then optimized for that display. This configuration has two benefits; first the display will be sent the signal that provides the highest quality and second, since the scan rate of the display does not change, the NR Series does not add expensive, and unnecessary, variable rate scaling.

Image Optimizing

Bandwidth Expansion™ is a critical patented non-linear detail processing circuit in the NR Series. Bandwidth Expansion technology is implemented after the scaling stage. It is then optimized for the specific rate in the processor, using six different fine-tune adjustments for horizontal and vertical edge information, greatly increasing the apparent resolution without "ringing" artifacts.

Motion

Patented Directional Correlation Deinterlacing (DCDi™) applies new motion adaptive deinterlacing that prevents the introduction of motion artifacts and jagged edges from video signals that originated from video cameras (such as with sporting events, live camera feeds and music videos).

Patented 3/2 pull-down circuit with advanced edit detection is used for video signals that originated from film cameras for exact reconstruction of the original film frame without introducing motion artifacts. The advanced edit detection is critical to track today's videos that typically are filled with fast edits that combine both film and video originated sources.

Color

Faroudja has long been known for offering the best color decoding technology. The NR Series offers patented 10-bit adaptive comb filtering with Cross-Color suppression (rainbow pattern artifact) and a two line Time Base Corrector. Bandwidth Expansion is applied to the color signal for further improvements in color resolution. HDTV YPrPb to RGB transcoding is also included.

Controller

The NR Series offers aspect ratio and image alignment controls ensuring that it will integrate effortlessly with all types of displays.

Additional Features

Optimized settings for:
- 480p HDTV big screens
- 852x480 plasmas
- 1366x768 plasmas
- 1024x768 digital projectors
- 800x600 digital projectors
- 16:9 HD Displays
- ALIS Plasma

Native Rate Series PluS
- 1360x1024 D-ILA

Inputs:
- Composite (BNC),
- S-Video (4-pin),
- Component /RGB(BNC)
- HDTV/Computer Pass(D15M)

Outputs:
- RGB
- YPrPb

Controls:

Brightness, Contrast, Color, Noise Reduction, Detail, Tint, Image Shift, Pattern Generator, RS232, and direct access Infrared

Aspect Ratios:
- 4:3
- Anamorphic,
- Letterbox
- 4x3-wide (a 4:3 image on a wide-angle screen from a 4:3 projector)

Contact Faroudja to find out what setting will optimize your display if it is not listed here.

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PICTURE PLUS™

DCDi™
byFAROUDJA

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