

# FAROUDJA

## Native Rate Series-DVI

Digital Video Processor



## Optimized for Digital Displays

Digital displays look best when connected to high quality digital signals. Now all information sent to your display can be digital with the new NRS-DVI, the important component for all high quality theaters. The NRS-DVI processor can take any analog source and, using patented award winning technology, convert the video signal to very high performance digital information. The digital signal is sent to the display as a pure digital DVI signal at the display's native resolution. The result is a crystal clear image full of depth and detail while free of motion and video processing artifacts.

For 33 years Faroudja has been the leader in video processing technology. This expertise is applied in the new NRS-DVI with patented technology for deinterlacing, motion tracking, color fidelity and image detail. These circuits are applied to all sources including DVD, Satellite, Cable, VHS and video games. All display technologies benefit from the Faroudja processing; plasma, DLP, LCD, DILA and CRT. Get the most out of your digital display investment with the NRS-DVI.



FAROUDJA  
PICTURE PLUS™

CELEBRATING  
**33** YEARS  
OF VIDEO EXCELLENCE



# Native Rate Series-DVI

## Digital Video Processor

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

### Digital and Analog Connections

The NRS-DVI offers both Digital DVI and analog RGBHV/YPrPb inputs and outputs for installation flexibility and high performance options to improve all of the digital displays available today and in the future.

### Resolution Selection

For the best image possible the digital display must operate at the proper resolution. 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 NRS does not add expensive, and unnecessary, variable rate scaling.

### Image Optimizing

**True Life Bandwidth Expansion™** is a 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 twelve different fine-tune adjustments for horizontal and vertical edge information, greatly increasing the apparent resolution for both the luma and chroma signals.

### Motion

**Patented Directional Correlational 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.

### Additional Features

#### Optimized settings for:

- 480p HDTV big screens
  - 852x480\* plasmas
  - 1366x768 plasmas
  - 1024x768 digital projectors
  - 1920x1080p\*
  - 800x600 digital projectors
  - ALIS plasmas
  - 1280x768 plasmas
  - 1920x540\* HDTV big screens
  - 1280x720 16:9 displays
- \* Rate not available via DVI

### Native Rate Series Plus

- 1360x1024 D-ILA

### Inputs:

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

### Outputs:

- RGB (BNC & D15)
- YPrPb (BNC & D15)
- DVI

### Controls:

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

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

Specifications and features subject to change without notice.



Please visit our website at [www.faroudja.com](http://www.faroudja.com)

750 Palomar Avenue • Sunnyvale • CA 94085 • Phone: (408)735-1492

Fax: (408)735-1571 • Email: [sales@faroudja.com](mailto:sales@faroudja.com)

A division of Genesis Microchip, Inc.