HARRIS®
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NEO® XHD-3902 — Advanced HDTV Conversion

NEO® XHD-3902

NEO® XHD-3902 Overview
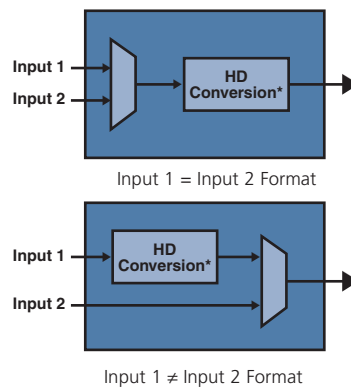
Advanced HDTV Conversion

The NEO® XHD-3902 series is our newest family of advanced, broadcast-quality HDTV conversion products. NEO® XHD-3902 is the ideal solution for up-, down- and cross-conversion in dedicated signal format environments — at a very competitive price.

Encompassing high-definition up-, down- and cross-converter modules that perform many of the key functions of the Harris® X75™HD in a compact, modular design, the NEO® XHD series features embedded and processed audio and video synchronization, closed captioning transcoding and optional discrete AES audio support. Designed for the broadcast television, news, cable and post production markets, the NEO® XHD platform has the extra benefit of enhanced functionality with the addition of any of a comprehensive array of NEO modules, including IconLogo™, NEO SuiteView™, NEO® VR and NEO® Simplicity™ products.
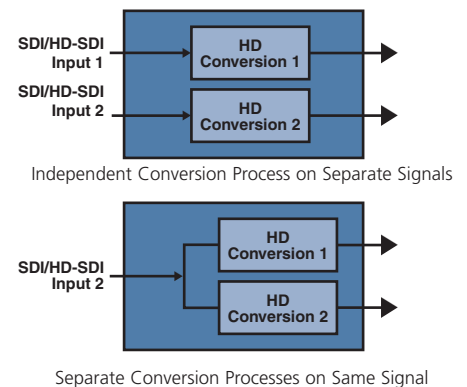
In addition to supporting the open, documented Harris CCS™ Protocol, the NEO® XHD series modules offer optional SNMP support, direct to the frame, with support of both SNMP v1 and SNMP v2c. SNMP support is key for facility-wide monitoring applications and offers an industry-standard interface to address interoperability between multiple vendors.

The NEO® XHD series is a complete HDTV conversion solution. Whether you need to perform upconversion, downconversion, cross-conversion, or require an all-in-one conversion solution, the NEO® XHD platform has the perfect module for every conversion application.
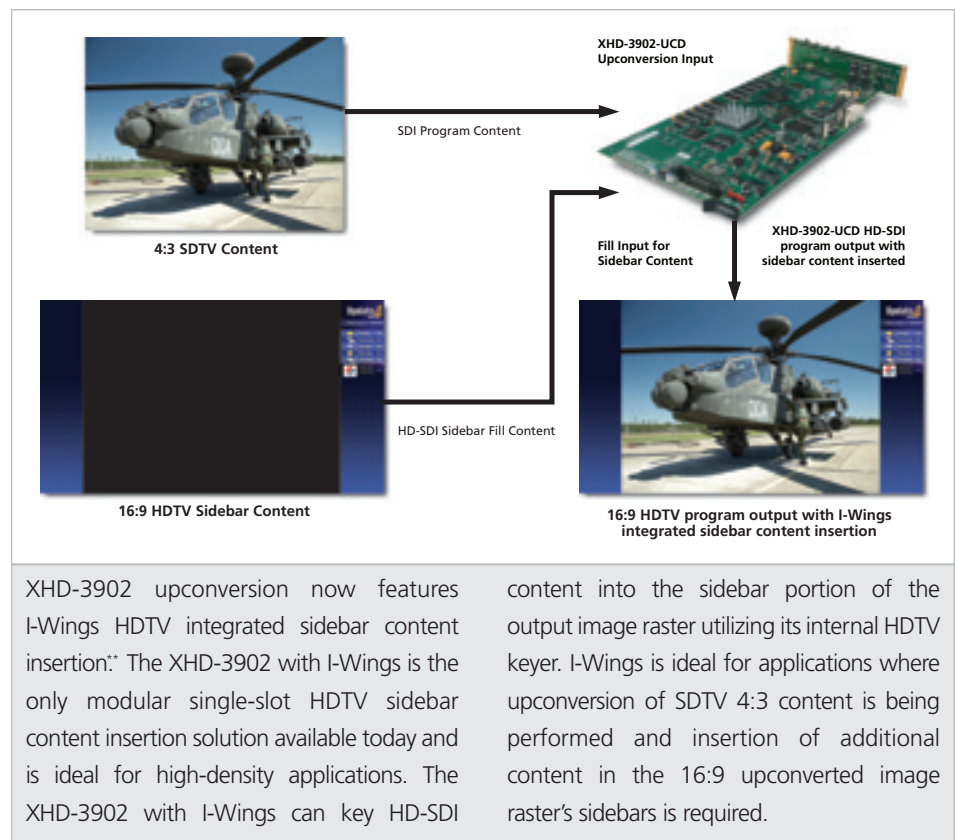
HD Protection Switch for Enhanced Reliability

Input 1 = Input 2 Format

Input 1 ≠ Input 2 Format

XHD-3902-M Operational Modes

Independent Conversion Process on Separate Signals

Separate Conversion Processes on Same Signal

XHD-3902 with I-Wings
Integrated Sidebar Content Insertion

4:3 SDTV Content

16:9 HDTV Sidebar Content

XHD-3902-UCD Upconversion Input

SDI Program Content

Fill Input for Sidebar Content

HD-SDI Sidebar Fill Content

XHD-3902-UCD HD-SDI program output with sidebar content inserted

16:9 HDTV program output with I-Wings integrated sidebar content insertion

XHD-3902 upconversion now features I-Wings HDTV integrated sidebar content insertion.** The XHD-3902 with I-Wings is the only modular single-slot HDTV sidebar content insertion solution available today and is ideal for high-density applications. The XHD-3902 with I-Wings can key HD-SDI content into the sidebar portion of the output image raster utilizing its internal HDTV keyer. I-Wings is ideal for applications where upconversion of SDTV 4:3 content is being performed and insertion of additional content in the 16:9 upconverted image raster's sidebars is required.

* Up-, down- or cross-conversion.   ** Optional.

XHD-3902

Broadcast-Quality Modules

XHD-3902-U/-D/-C/-A
Upconverter, Downconverter, Cross-Converter and SDTV Aspect Ratio Converter Modules

The NEO® XHD-3902 series of upconverters, downconverters and cross-converters is ideal for applications that require broadcast-quality, single-channel, motion-adaptive, HDTV up-, down- and cross-conversion. Each module has the same core feature set, including unique protection switching capability, standard closed-captioning transcoding and transparent handling of up to two groups of embedded audio. Simply choose the module that meets your individual needs.

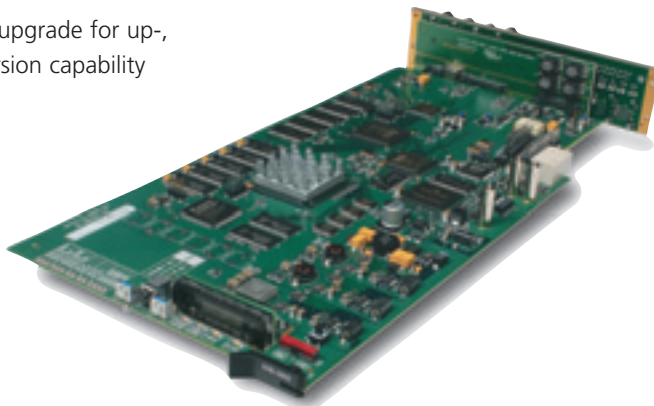### XHD-3902-UCD
Up-, Down-, Cross-Converter

For the ultimate system design flexibility, the NEO® XHD-3902-UCD up/down/cross-converter combines broadcast-quality up-, down- and cross-conversion together in a single module. Ideal for customers needing a flexible HDTV conversion engine versus a dedicated module, the NEO® XHD-3902-UCD up/down/cross-converter allows the user to convert SD today and HD tomorrow — whatever individual needs dictate.

XHD-3902-M/-KF
Multiple-Path HDTV Up-, Down-, Cross-Converter

The NEO® XHD-3902-M multiple-path HDTV up/down/cross-converter is a 100% dual-channel, HD multiple-path converter that provides maximum conversion flexibility and performance. This up/down/ cross-converter can operate in single-input mode, with the same signal fed to two independent up/down/cross-conversion engines; or dual-input mode, with two distinct signals fed to the two independent up/down/cross-conversion engines.

Key Features

- Automatic input format detection
- Supports 720P and 1080i formats
- Dual SDI / HD-SDI inputs
- Transcoding of SDI closed-captioning metadata
- Integrated frame sync/proc, embedded audio sync/proc (two groups) and simple noise reducer/enhancer
- Separate discrete AES inputs (optional)
- User-configurable output image ARC and picture position
- Separate sidebar key channel output (to permit a downstream keyer to insert content into the sidebars)
- Separate paths (internal HD and upconverted SD or internal SD and downconverted HD) for simulcast redundancy
- Optional software field upgrade for up-, down- and cross-conversion capability

- Automatic input format detection
- Single-channel, motion-adaptive HDTV user-selectable up/down/cross-converter
- Supports 720P and 1080i formats
- Dual HD-SDI / SDI inputs
- Separate discrete AES inputs (optional)
- Remapping of SD or HD closed-captioning metadata (linked to conversion process)
- Integrated video proc, audio proc and simple noise reducer/enhancer
- User-configurable output image ARC and picture position
- Separate sidebar key channel output (to permit a downstream keyer to insert content into the sidebars)
- Optional software field upgrade for up-, down- and cross-conversion capability

- Automatic input format detection
- Dual-channel, motion-adaptive HDTV up/down/cross-converter with multiple-path processing
- Single-input mode (dual independent up/down/cross outputs) or dual-input mode
- Supports 720P and 1080i formats
- Remapping of SD or HD closed captioning metadata (linked to conversion process)
- Integrated frame sync/proc, embedded audio sync/proc (two groups) and simple noise reducer/enhancer
- Separate discrete AES inputs (optional)
- User-configurable output image ARC and picture position
- Separate sidebar key channel output (to permit a downstream keyer to insert content into the sidebar) from each independent up/down/cross-converter
- Optional software field upgrade for up-, down- and cross-conversion capability

ONE Company for Workflow Solutions Throughout the Broadcast Chain

Harris is the ONE company delivering interoperable workflow solutions across the entire broadcast delivery chain — providing today's broadcaster with a single, integrated approach to capitalize on the benefits of IT and mobile applications. By providing unparalleled interoperability across our product portfolio, Harris is able to offer customers integrated solutions that improve workflows, save money, enable new revenue streams and provide a migration path to emerging media business models. To meet the evolving needs of broadcast, distribution and entertainment businesses, Harris is the ONE answer for change.

Service And Support

At Harris, we are committed to customer service excellence. It is our goal to provide the highest level of support by applying a simple rule: We take ownership of helping our customers succeed. Our support teams consist of innovative technical experts who support all situations regarding product performance, integration and operational processing. We are adept at providing proven solutions, making workflows better and ensuring reliability of the product and system. At Harris, our experienced and dedicated teams stand ready to help you meet your goals for premium product performance, 100% up-time and reduced maintenance investment.

Warranty

Because we want to assure you that Harris stands beside its products and system solutions, our products carry a standard set of warranty services, which are competitive with — and in some cases outperform — others in the industry.

Service Packages

We offer value-add services that allow you to customize the level of services you need in meeting mission-critical performance levels. Our service package options offer many ways to upgrade your standard warranty by choosing the All-Inclusive OnePak, or by selecting individual services from our extensive portfolio. Our service and support advisors can assist in the selection of the individual services that best suit your requirements.

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