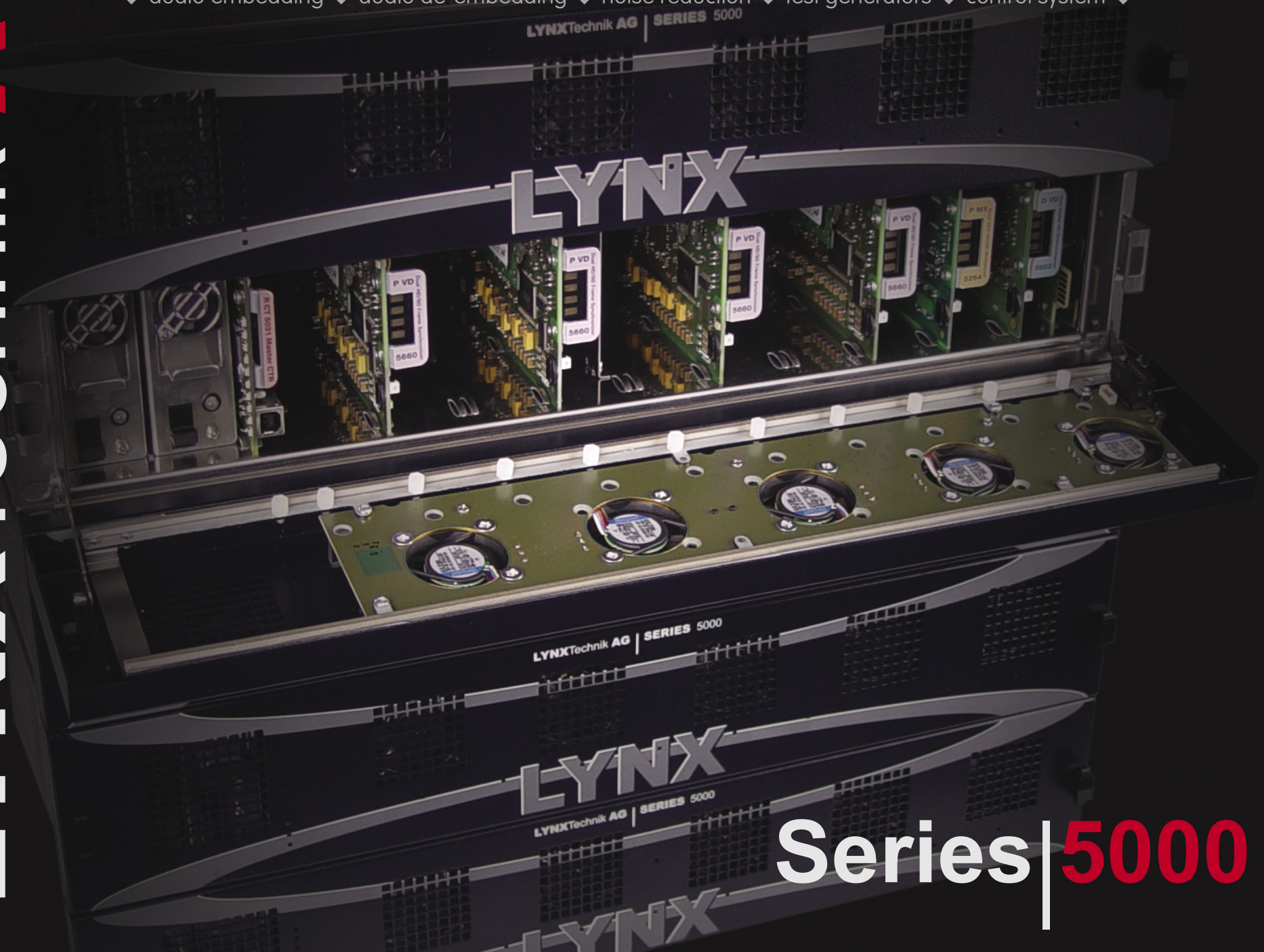
LYNXTechnik AG®

◆ SDTV / HDTV / 3G ◆ CWDM fiber interfacing ◆ up / down / cross conversion ◆ audio processing and sync ◆
◆ aspect ratio conversion ◆ frame synchronization ◆ audio and video distribution ◆ audio and video conversion ◆
◆ audio embedding ◆ audio de-embedding ◆ noise reduction ◆ test generators ◆ control system ◆



Series|5000

Product Locator

Series|5000

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www.lynx-technik.com

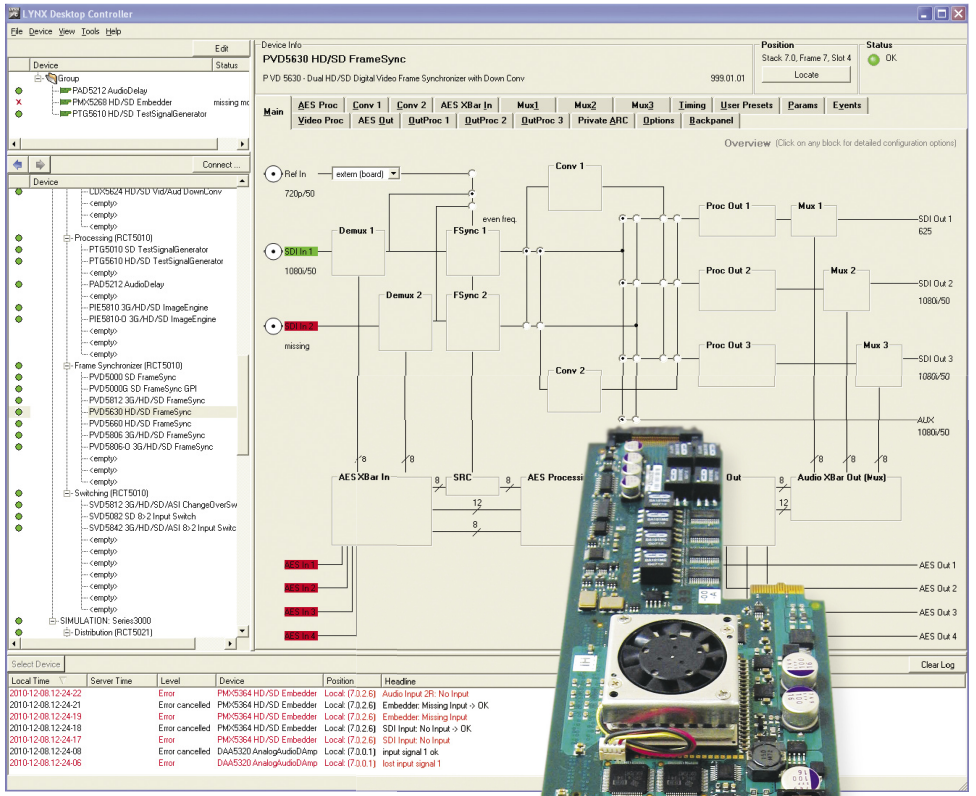
This catalog provides an overview of the Series 5000 product line. Please visit our website for full product specifications and catalog cut sheets.
www.lynx-technik.com

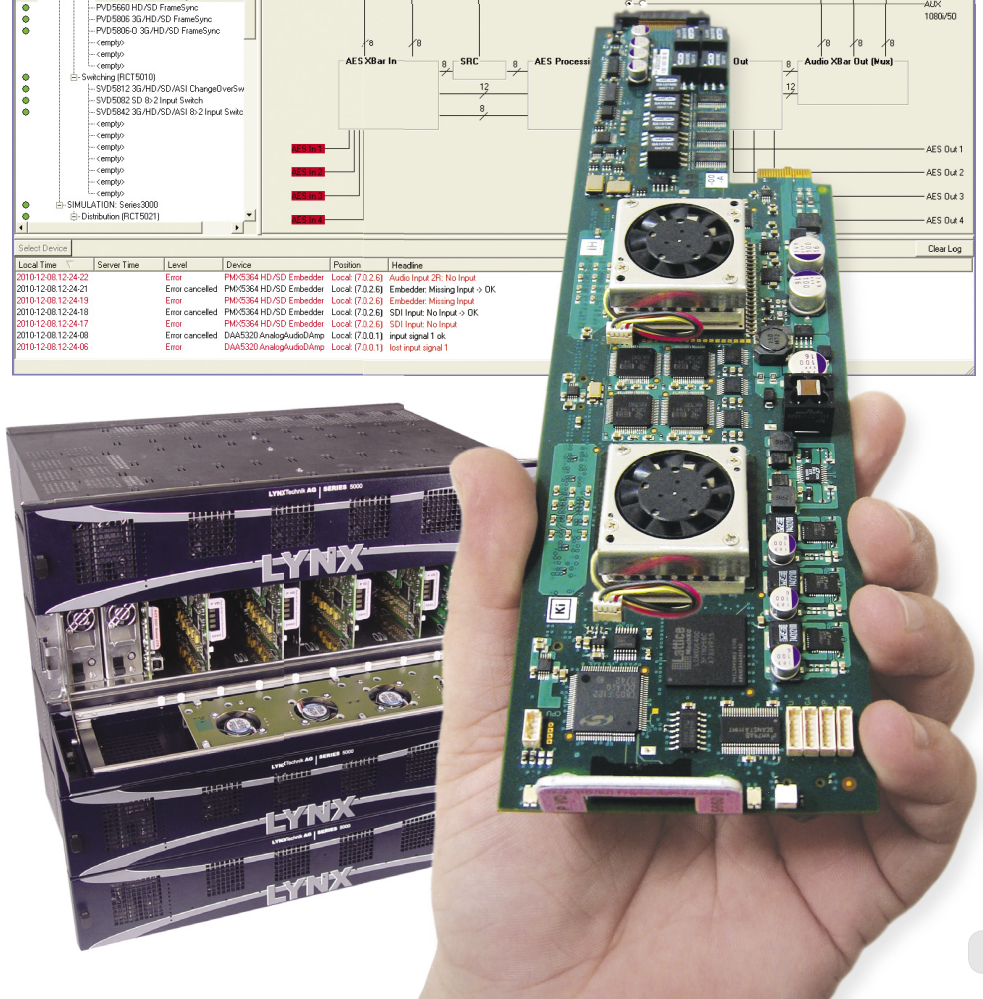
Product Compatibility

To help locate specific products quickly, both the product locator table and the module listings are coded to provide a quick reference to video format and fiber compatibility. Icons are found at the top of each module page.

Compatibility Key		
SDTV	Analog and SDI Video 270Mbit - SDTV	SDTV
1.5G	HDSDI Video 1.5 Gbit	HD 1.5G
HDTV	HDTV Analog Component Video and Sync	HDTV
3G	HDSDI Video 3 Gbit	HD 3G
3G	HDSDI Video 3 Gbit - Optional Upgrade	HD 3G
Fiber	Fiber Optic I/O	FIBER
Fiber	Fiber Optic I/O - Optional Upgrade	FIBER

PRODUCT PAGES





The Company

LYNX Technik AG is an industry leader and technology provider of terminal equipment, or "glue ware" for broadcast and professional audio video use. LYNX Technik is an independent and privately owned company with its research, design and manufacturing located in Weiterstadt, Germany. Sales and support is covered from our headquarters in Germany and the USA.

Our engineering team consists of a multi-talented group of engineers that combine decades of experience from the broadcast and post production industries. We carefully develop our products in close cooperation with leading broadcasters worldwide, who help specify and define features and performance levels that have produced some of the most flexible and powerful solutions available on the market today.

We have designed the Series 5000 product line to offer broadcast professionals an affordable, compact and extremely flexible solution for a variety of audio and video processing tasks. All modules have been designed to meet todays most demanding digital Broadcast requirements and have been configured to meet the 3G, HD, SD, and Fiber Optic demands across a wide spectrum of audio visual applications.

Our centralized control system is one of the value-add components to a LYNX Technik system that really sets us aside from other providers. It is a powerful and intuitive application that provides a unique graphical signal flow representation of each module function and can be expanded from a single rack to an extensive multi-rack system that supports literally hundreds of racks located in various locations.

The Series 5000 product line is designed around size and flexibility. Small and durable 1RU and 2RU rack frames offer a small footprint which accommodate any mixture of modules. Some modules feature add-on option codes, allowing users to add a variety of sophisticated signal processing features merely by entering a license code – no new hardware or re-programming required.

Terminal equipment is all we do, and over the years we have got exceptionally good at it. We offer many unique capabilities and superior performance at affordable prices. We look forward to being your modular equipment supplier of choice.

Winfried Deckelmann
CEO LYNX Technik AG

Introduction

Series 5000 is a modular rack and card based terminal equipment solution. The modules are housed in compact 1RU or 2RU Rack Frames. The rack frames accommodate any mixture of plug in modules.

All Series 5000 Rack Frames and modules are fully compatible with the LYNX centralized control system. We provide a wide array of module choices for video and audio applications including SD/HD/3G and Fiber interfaces.

From a straight forward video distribution amplifier to a sophisticated 3Gbit fiber I/O multi-format frame synchronizer with up/down/cross conversion and 24 channel audio processing - Series 5000 spans the complete spectrum.

There are lots of choices on the market, so why is LYNX different? Simple: Quality, Features, Performance, Reliability. The real difference is in the details, and it's in the details where LYNX products excel.

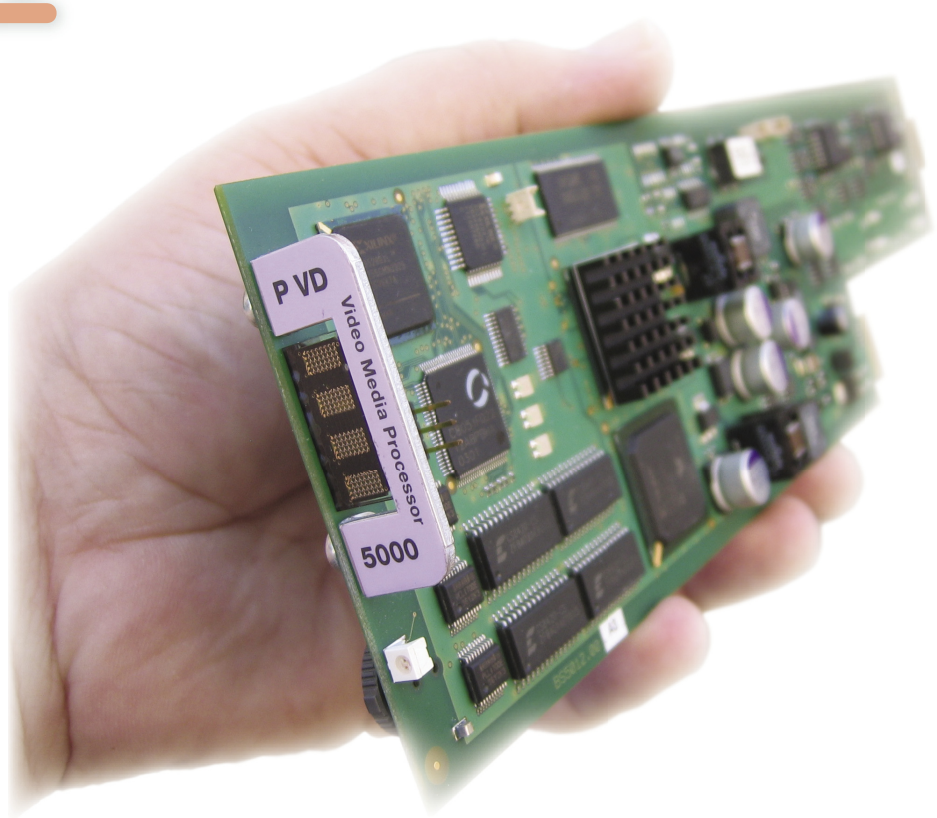
Regardless of the size and complexity of your application, LYNX Technik's Series 5000 will provide you with a signal processing solution that can be scaled to precisely meet your present and future needs.

Technology

Series 5000 Card Modules use the very latest analog and digital signal processing technology. Through the use of programmable FPGA devices we deploy our own proprietary firmware cores to deliver unique, compact and advanced signal processing solutions.

Each module has an integrated controller and onboard flash RAM for storing all module settings.

All modules are fully compatible with the LYNX control system, which provides remote control, status monitoring and error reporting.



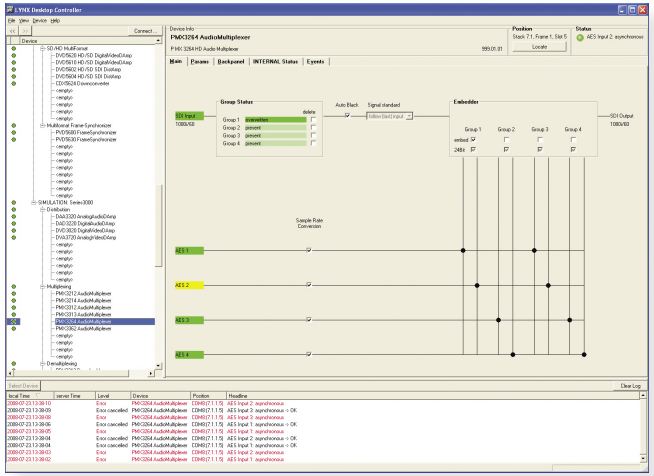
Performance

Series 5000 solutions are relied upon by broadcasters worldwide in the most demanding and mission critical applications, and are considered second to none when it comes to system reliability and dependability.

As part of our extensive test and quality assurance protocols, all modules are fully burned in for over 48 hours in environmental ovens to overcome any infant failures, delivering solid and dependable performance from day one. We never cut corners at LYNX Technik.

In the unlikely event of hardware failure, integrated features such as "HotSync backup" will automatically configure a replacement module with all the required settings in seconds.

Advanced Control



Control System GUI Screen

With the complex signal processing solutions used today a control system is usually mandatory. The LYNX Desktop Controller application provides centralized control and monitoring of all Series 5000 Modules, and is included with any rack controller purchase.

The application uses a Windows based GUI with intuitive on-screen graphical controls customized for each individual module. It also provides alarm indication and error logging. Once a module is connected, device detection is fully automatic and takes mere seconds to present a complete picture of the entire system.

1RU rack frames, 2RU rack frames, multiple PC clients and even network panels can coexist in the same unified control system.

1 RU Control Panel

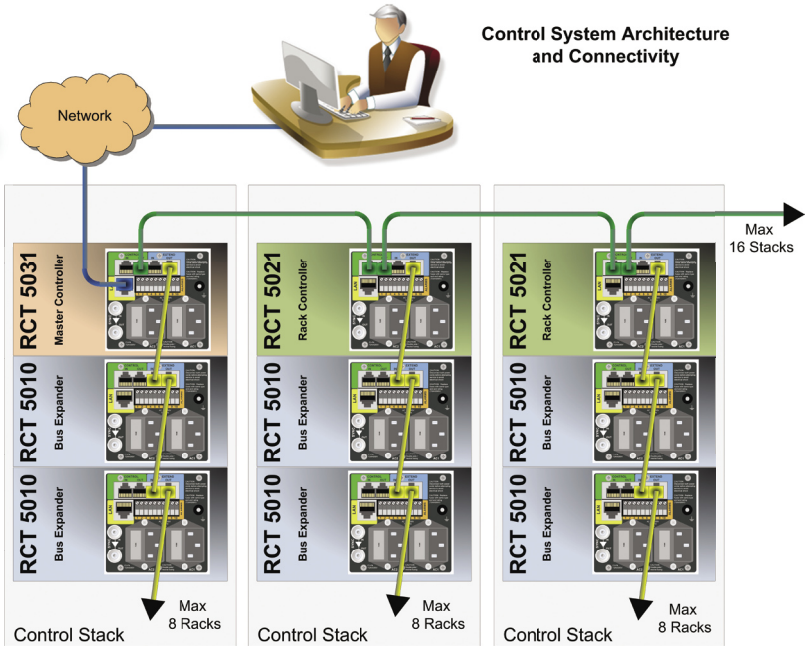
System Expansion

Whether you are starting from a single rack of modules, or a large integrated installation, Series 5000 is easily expanded with minimal effort and cost. Users choose between simple serial control or full network connectivity, or combine both to suit specific needs.

The LYNX Control system expands from a single rack to literally hundreds of racks located in different installations. All system components are unified under central control using the LYNX Desktop Controller application.

The flexible physical interface topology provides a number of choices depending on system requirements, and due to the passive nature of the control system, upgrades and expansion has no impact on the operation of the existing system.

Control System Architecture and Connectivity

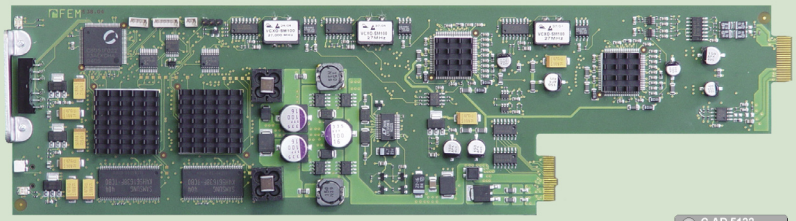


SDTV

VIDEO A/D CONVERSION

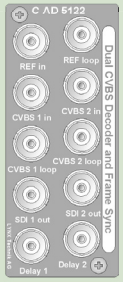
Dual Composite Video to SDI Decoders and Frame Syncs

C AD 5122



Features

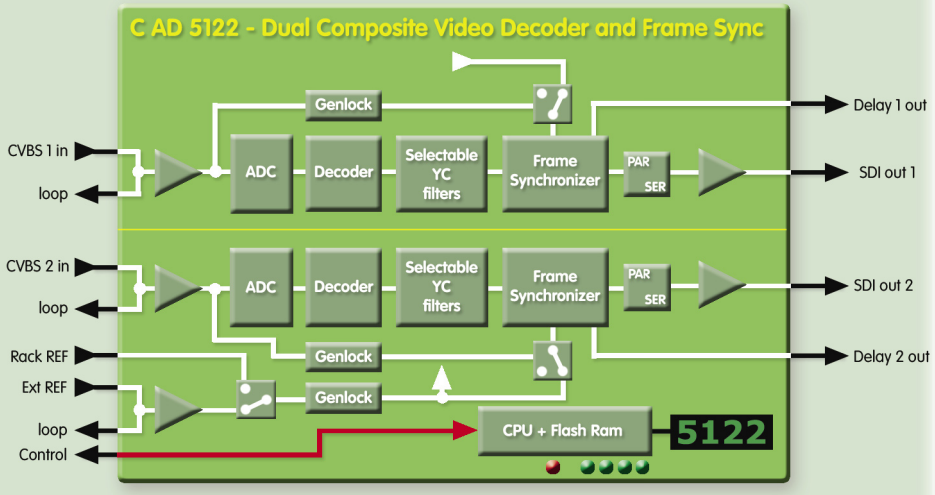
- 2 independent conversion channels
- High quality 12 bit A/D conversion
- Auto-detect PAL / NTSC
- 54 MHz sampling (4 x oversampling)
- Integrated frame synchronizers with frame, line and pixel delay adjustments
- Independent 3.5 line to 6 frame programmable delays in 37ns increments
- Composite video inputs (with passive loop through)
- 1 x 10 bit SDI output (per channel)
- Selectable Luma / Chroma filters
- 5-line adaptive comb filter decoders
- VXCO Genlock
- Adjustable Gain, Sat, Ped and Hue
- CTI mode to improve chroma transitions
- Delay outputs for external audio delay synchronizers (e.g. P AD 5212)
- Integrated alpha-numeric display and menu system for module settings
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting possible when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
5155001260	CAD 5122 - Dual Composite Video Decoders and Frame Synchronizers

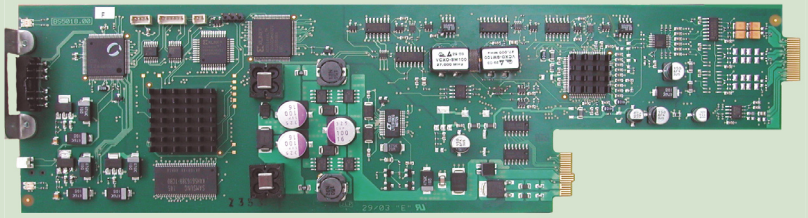


SDTV

VIDEO A/D CONVERSION

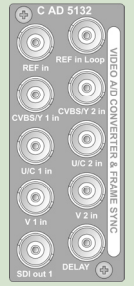
Composite / YUV / YC to SDI Converter and Frame Sync

C AD 5132



Features

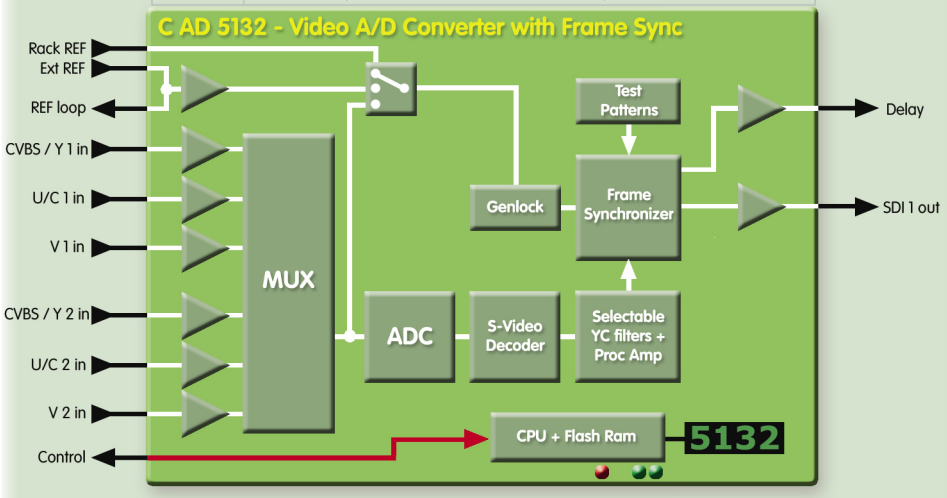
- High quality 12 bit A/D conversion
- 54 MHz sampling (4 x oversampling)
- Auto-detect 525 / 625
- Selectable analog input formats:
  - 2 x YUV Component
  - 2 x CVBS (Composite)
  - 2 x YC (S-VHS)
- 5 line comb filter decoder
- Frame synchronizer / TBC with frame, line and pixel delay adjustments
- 3.5 to 8 frame programmable delay adjustable in 37ns increments
- 1 x 10 bit SDI outputs SMPTE 259M-C
- Delay output to synchronize external audio delay (e.g PAD 5212)
- VXCO Genlock
- Adjustable Gain, Sat, Ped and Hue
- Internal test patterns
- Integrated alpha-numeric display and menu system for module settings
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
5155007270	C AD 5132 - Composite / YUV / YC to SDI Converter and Frame Synchronizer

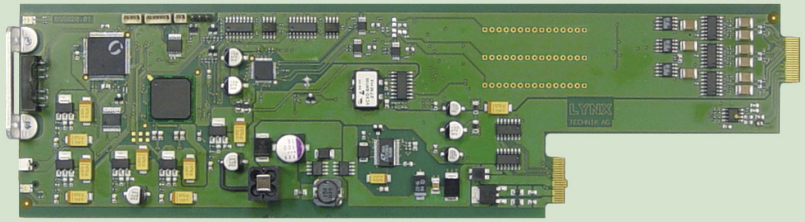


SDTV

VIDEO A/D CONVERSION

Component Video RGB / YUV to SDI Converter

C AD 5135



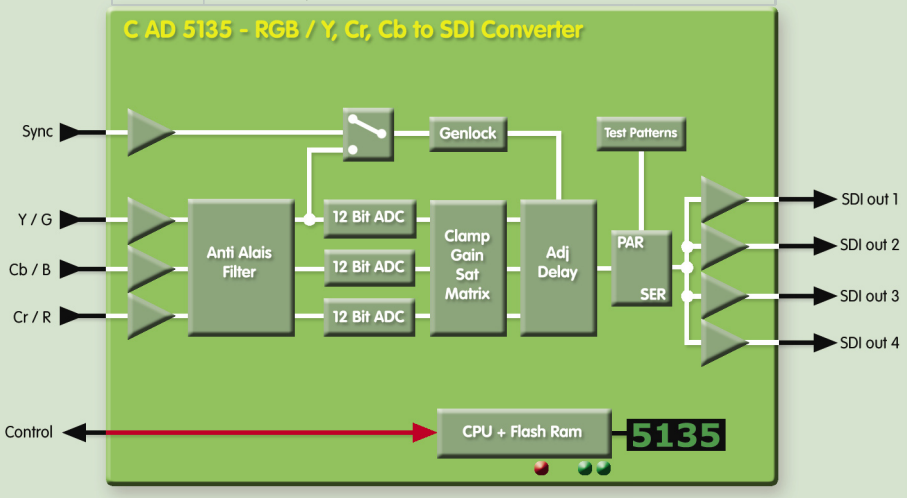
Features

- 12 bit analog to digital conversion
- RGB or Y, Cr, Cb inputs (selectable)
- Differential inputs
- Auto-detect 525 / 625
- 27 MHz sampling (2 x oversampling)
- Low pass video reconstruction filter
- Integrated test signals
- 4 x 10 bit SDI outputs SMPTE 259M-C
- VXCO Genlock
- Adjustable Gain, Sat and Pedestal
- Horizontal video timing adjustment of +/- 127 pixels
- Adjustable delay in pixel and line increments (0.15 to 4 lines)
- Integrated alpha-numeric display and menu system for module settings
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

Connection Panel

Ordering Information

Part #	Description
5155007245	C AD 5135 - Component Video RGB / YUV to SDI Converter

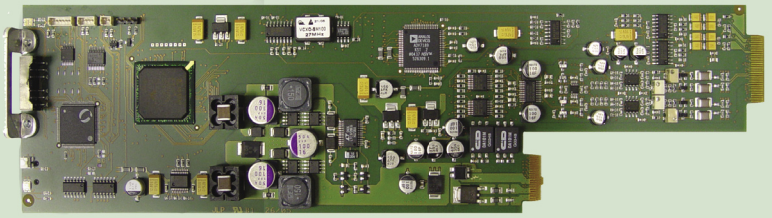


SDTV

VIDEO A/D CONVERSION

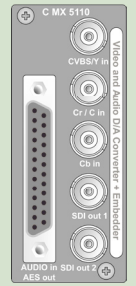
Video A/D Converter and Analog Audio Embedder

C MX 5110



Features

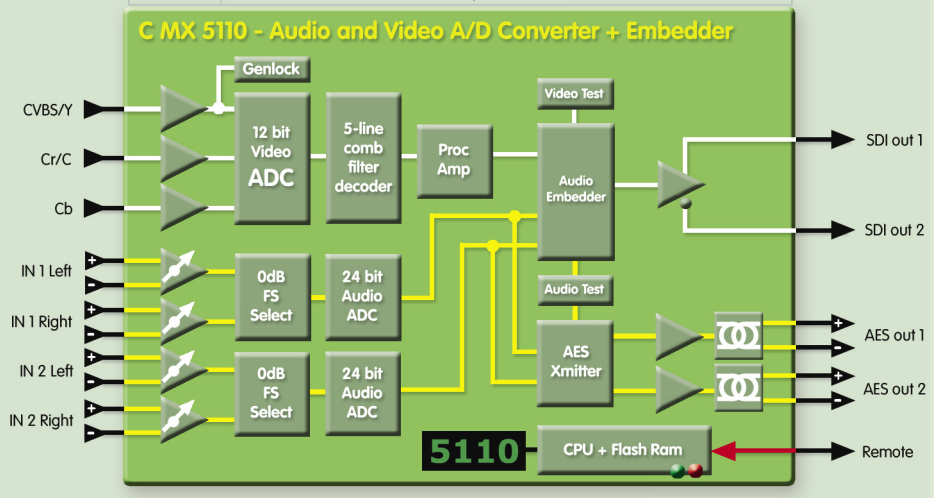
- Selectable analog video inputs (CVBS / Y, Cr, Cb / YC)
- Auto-detect 525 / 625
- 12 bit, 4 x (54MHz) video sampling
- 5-line comb filter decoder
- Selectable Luma / Chroma filters
- Selectable video test patterns
- 2 x analog stereo pair inputs
- 24 bit audio A/D conversion
- Selectable full scale audio range
- Adjustable audio gain
- Test tone generator
- Audio embedder (group selectable 1...4)
- 2 x SDI outputs with embedded audio
- 2 x balanced AES digital outputs
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
5155000010	C MX 5110 - Video A/D Converter and Analog Audio Embedder

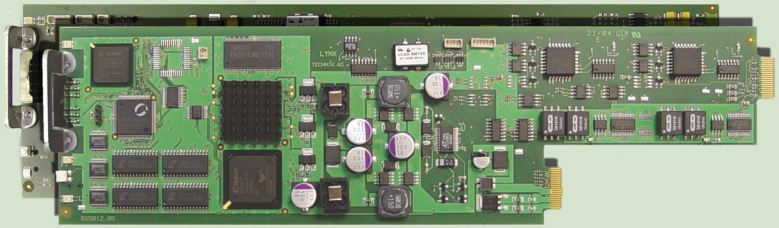


SDTV

VIDEO A/D CONVERSION

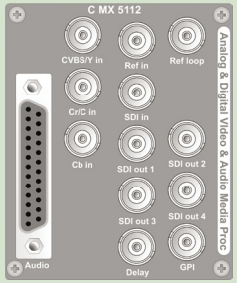
C MX 5112

Analog and Digital Video / Audio Media Processor



Features

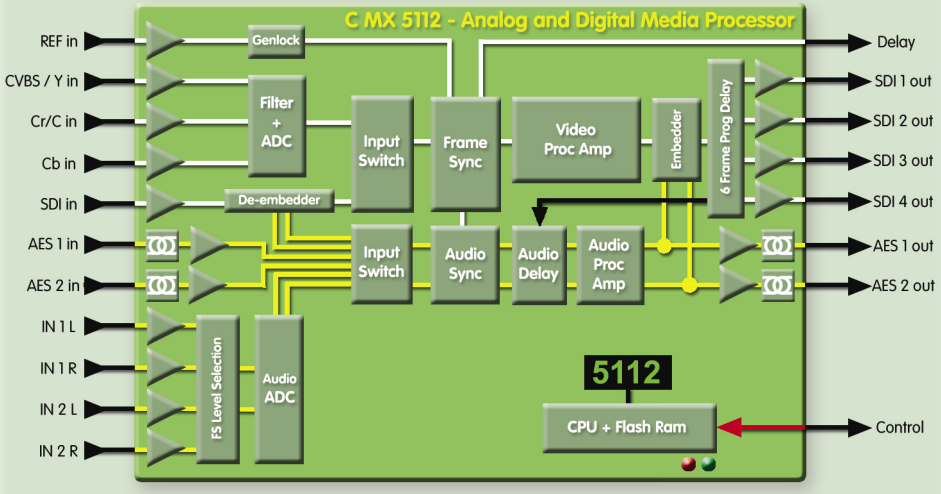
- Dual card combination (double width rear connection plate)
- Composite and component analog video inputs
- SDI input with integrated De-embedder
- 12 bit video A/D conversion with 54 MHz (4X) over sampling
- Auto-detect PAL / NTSC
- Integrated frame / line sync adjustable in frame / line and pixel increments
- 6 frame programmable video / audio delay
- Analog and AES audio inputs (selectable)
- 5 line adaptive comb filter for composite input
- Video Proc. amps with adjustable Gain, Sat, Pedestal and Hue
- 8 channel Audio Proc. with adjustable gain / phase / Invert / swap / delay
- 4 x AES (8 channel) output embedder and 2 x external AES outputs
- 4 x processed SDI outputs with embedded audio
- Auto tracking audio delay
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
4155005112	C MX 5112 - Analog and Digital Video and Audio Media Processor

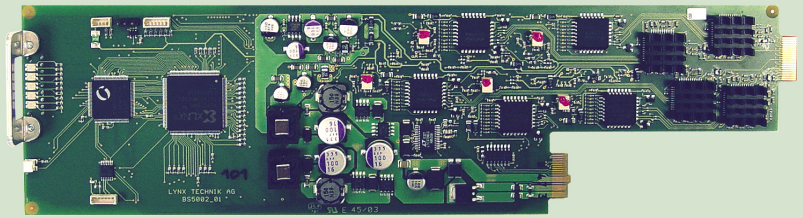


SDTV

VIDEO D/A CONVERSION

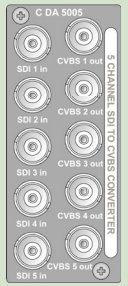
C DA 5005

5 Channel SDI to Composite Video Converter



Features

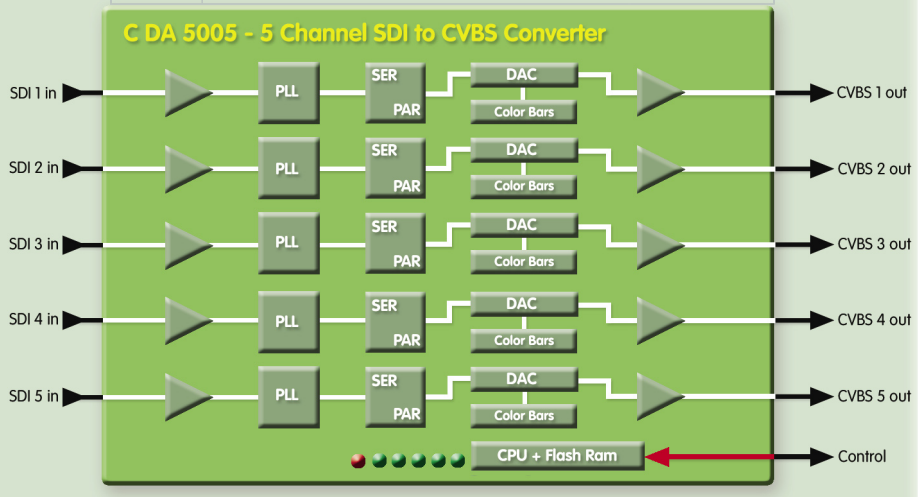
- 5 independent video D/A channels
- Auto-detect 525 / 625 inputs
- NTSC or PAL Composite video outputs
- 2 x oversampling (27MHz)
- 8 bit quantization
- Internal color bars - for each channel
- Configurable multi channel alarm
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155008221	C DA 5005 - 5 Channel SDI to CVBS Converter

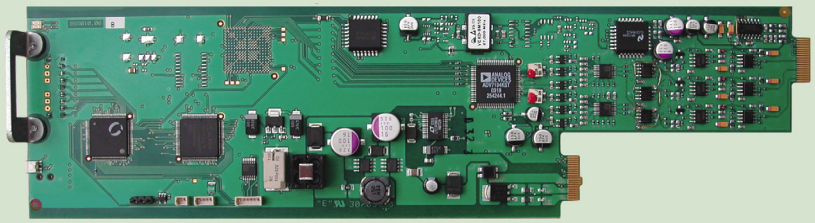


SDTV

VIDEO D/A CONVERSION

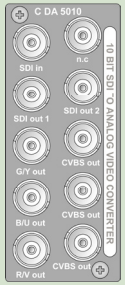
C DA 5010

SDI to Composite / RGB / YUV / YC Video D/A Converter



Features

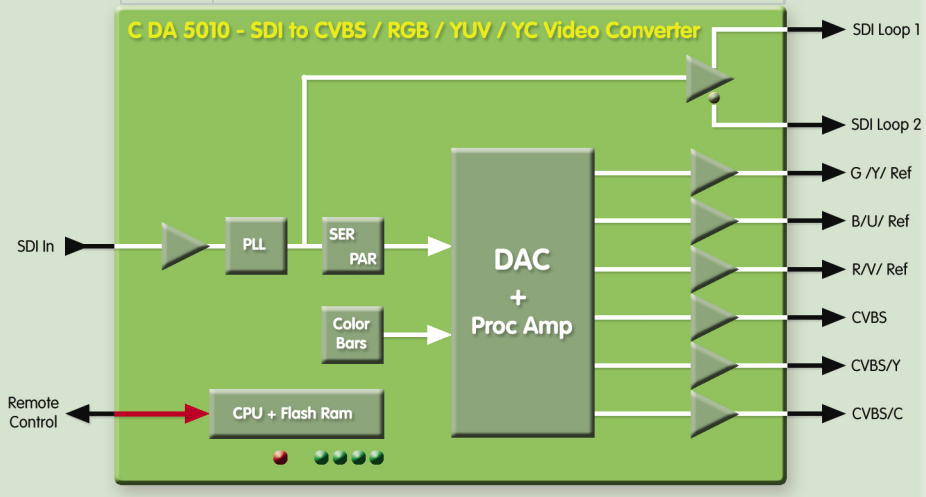
- 10 bit digital to analog conversion
- 4 x oversampling (54 MHz)
- Auto-detect 525 / 625
- Multiple simultaneous analog output configurations:
  - YUV/RGB + 1 x Composite + 1 x YC (S-VHS)
  - YUV/RGB + 3 x Composite
  - 3 x Composite + 3 Reference (black)
- 2 reclocked SDI outputs SMPTE 259M-C
- Internal test patterns
- Adjustable Y level, U level, V level, Overall Gain, Hue, Sharpness and Gamma
- Selectable Luma and Chroma filters (remote only)
- Color Bars (or black) if input is lost
- Vertical blanking (VBI) passed or blanked
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155008220	C DA 5010 - SDI to CVBS / RGB / YUV / YC Video Converter

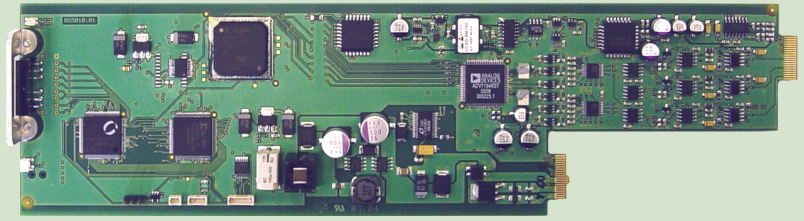


SDTV

VIDEO D/A CONVERSION

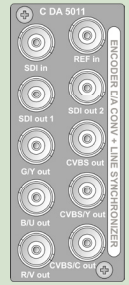
C DA 5011

SDI to Composite / RGB / YUV / YC Converter and Line Sync



Features

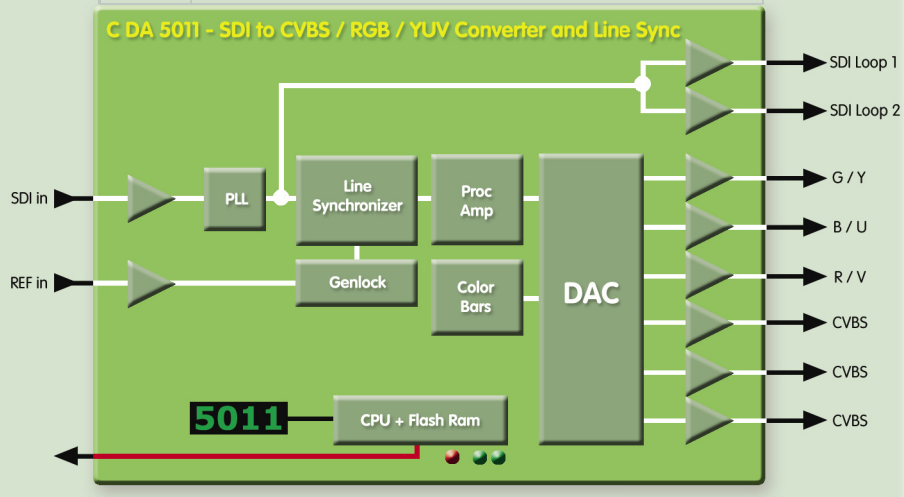
- 10 bit digital to analog conversion
- 4 x oversampling (54 MHz)
- Auto-detect 525 / 625
- Integrated line synchronizer
- 3 lines of programmable delay in lines and sub pixel increments. (0.15ns)
- Multiple simultaneous analog output configurations:
  - YUV/RGB + 1 x Composite + 1 x YC (S-VHS)
  - YUV/RGB + 3 x Composite
  - 3 x Composite + 3 Reference (black)
- 2 x reclocked SDI outputs
- Internal color bars.
- Adjustments for Y level, U level, V level, Overall Gain, Hue, Sharpness and Gamma
- Selectable Luma and Chroma filters
- Color Bars (or black) if input is lost
- Vertical blanking (VBI) passed or blanked
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

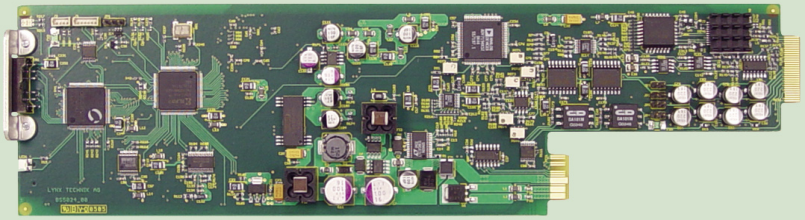
Part #	Description
6155008320	C DA 5011 - SDI to CVBS / RGB / YUV Converter with Line Sync



VIDEO D/A CONVERSION

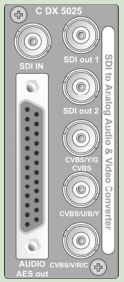
Video D/A Converter and Analog Audio De-embedder

C DX 5025



Features

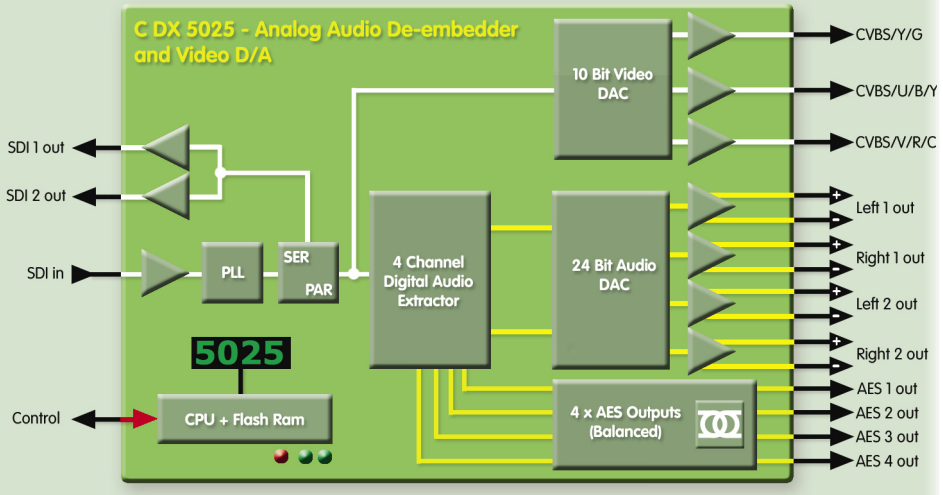
- 1 x SDI in and 2 reclocked SDI outputs
- De-embed one audio group (selectable 1...4)
- Analog audio outputs (1 x stereo pair)
- 4 x balanced AES outputs(xformer coupled)
- 24 bit audio conversion.
- 10 bit (54 MHz) video conversion.
- 525 / 625 modes of operation - Auto detect.
- Selectable Analog Output Modes:
  - 3 x Composite (NTSC or PAL), or
  - 1 x Composite (NTSC or PAL) and 1 x YC, or
  - 1 x YUV component video, or
  - 1 x RGB component video
- Proc amp with adjustable Y gain, UV gain, Black level.
- Selectable video filters.
- Internal color bars.
- Selectable audio full scale ranging
- Adjustable analog audio gain. (-39 to +24dBu)
- Balanced audio outputs
- Proc amp with adjustable Gain, Saturation and Pedestal.
- Remote control and error reporting possible when used with LYNX control system



C DX 5025
Connection Panel

Ordering Information

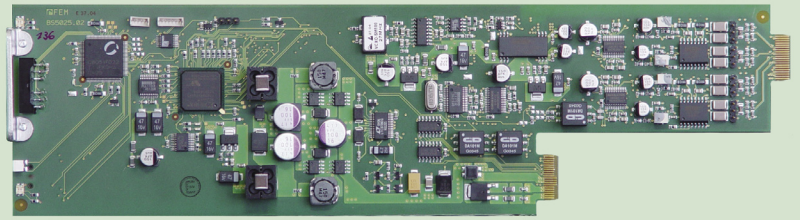
Part #	Description
6155007550	C DX 5025 - Video D/A Converter and Analog Audio De-embedder



AUDIO A/D CONVERSION

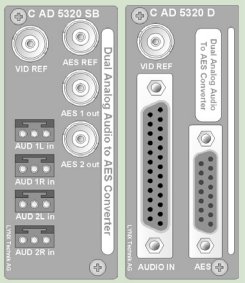
Dual Channel Analog Audio to AES Audio Converter

C AD 5320



Features

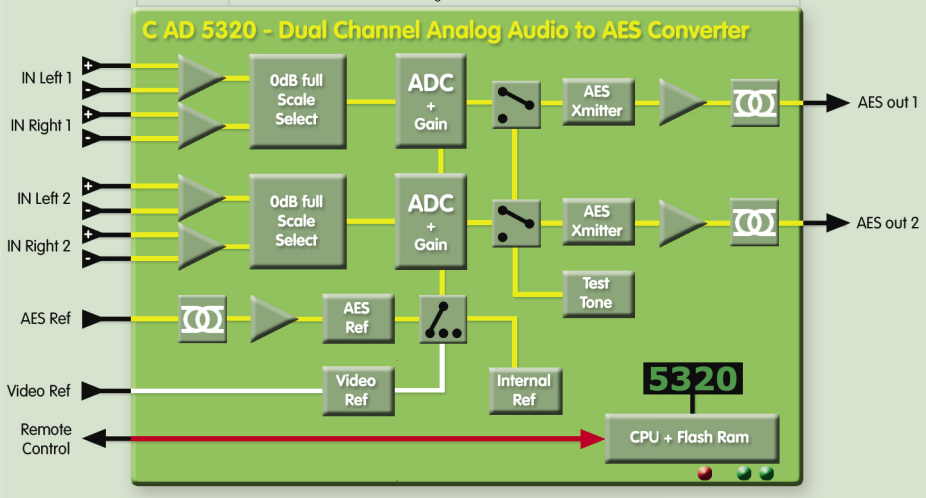
- High quality audio A/D converter
- 2 channels of audio conversion
- Balanced analog audio inputs
- 24 bit conversion
- Selectable sample rates (32 KHz, 44.1 KHz, 48 KHz, 96 KHz)
- Transformer coupled AES outputs
- Adjustable gain +/- 3dB from 0dB full scale setting
- Full scale range presets of 12,15,18,21 and 24dBu
- Integrated test tone generator
- External AES reference, video reference or internal clock
- Input presence detection
- Choice of two backplane versions (balanced or unbalanced AES inputs)
- Microprocessor controlled with internal flash RAM for storing configurations
- Integrated matrix display with menu system for module settings
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



C AD 5320 SB **C AD 5320 D**
Connection Panel Options

Ordering Information

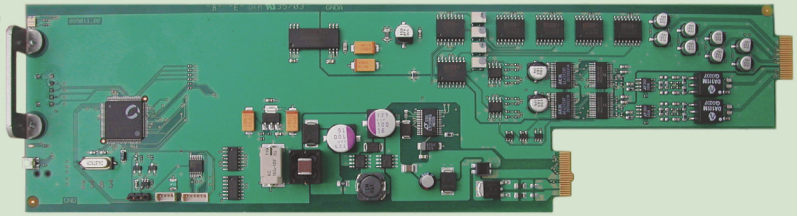
Part #	Description
6155009290	C AD 5320 D - Dual Channel Analog Audio to AES Converter (Sub D Connector - balanced AES3)
6155010271	C AD 5320 SB - Dual Channel Analog Audio to AES Converter (BNC Connector - unbalanced AES3id)



AUDIO D/A CONVERSION

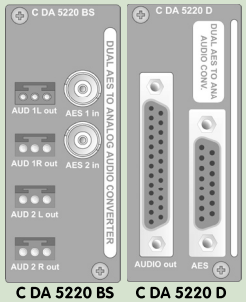
C DA 5220

Dual Channel AES Audio to Analog Audio Converter



Features

- High quality audio D/A converter
- 2 channels of AES audio D/A conversion
- Transformer coupled inputs
- Automatic detection of AES sample rates (32 KHz, 44.1 KHz, 48 KHz and 96 KHz)
- 24 bit conversion
- 4 x analog audio outputs
- Adjustable analog audio gain +/- 3dB from 0dB full scale setting
- Full scale range presets of 12dBu, 15dBu, 18dBu and 24dBu
- Balanced analog audio outputs
- Input presence detection
- Choice of two backplane versions (balanced or unbalanced AES outputs)
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

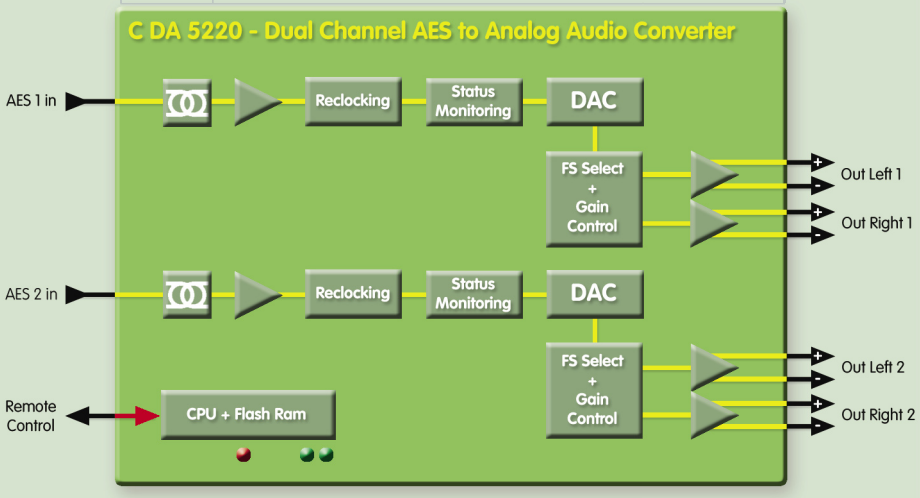


C DA 5220 BS **C DA 5220 D**

Connection Panel Options

Ordering Information

Part #	Description
6155009250	C DA 5220 D - Dual Channel AES to Analog Audio Converter (Sub D Connector - balanced AES3)
6155009240	C DA 5220 BS - Dual Channel AES to Analog Audio Converter (BNC Connector - unbalanced AES3id)

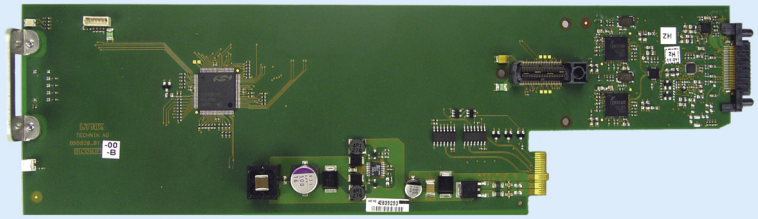


SDTV

DIGITAL VIDEO DISTRIBUTION

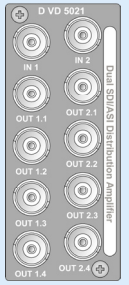
D VD 5021

Dual SDI / ASI Distribution Amplifier



Features

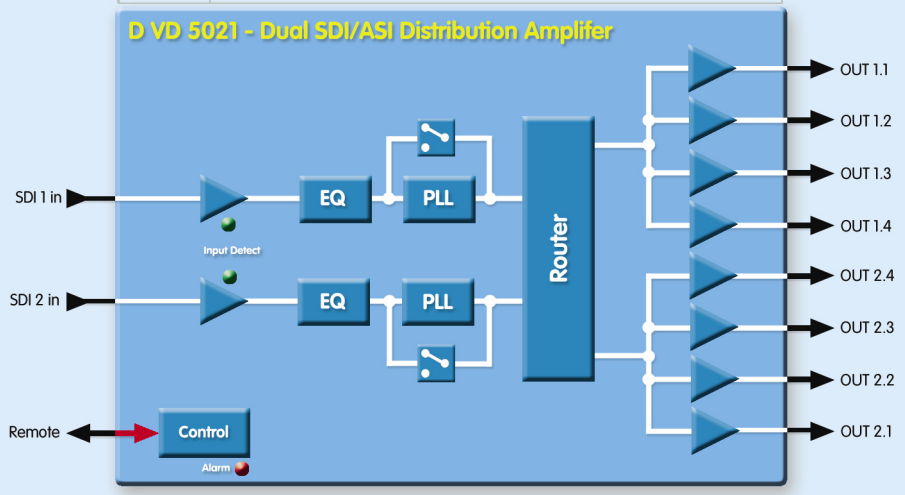
- Suitable for SD-SDI /ASI and SMPTE 310 signals
- Dual mode operation 1>8 or dual 1>4
- 2 x 2 signal router for flexible output configurations
- Each channel can be clocked or non-reclocked
- Auto-detect video bit rates of 143, 177, 270, 360, 540Mbits/s
- Transparently pass data between 10 and 640Mbits/s in non-reclocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Remote control and error reporting possible when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
6155035021	D VD 5021 Dual SDI/ASI Distribution Amplifier

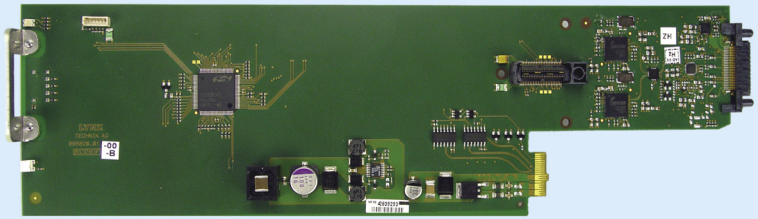


SDTV HD 1.5G HD 3G

DIGITAL VIDEO DISTRIBUTION

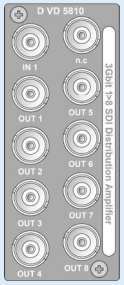
D VD 5810

3G/HD/SD - SDI/ASI Distribution Amplifier



Features

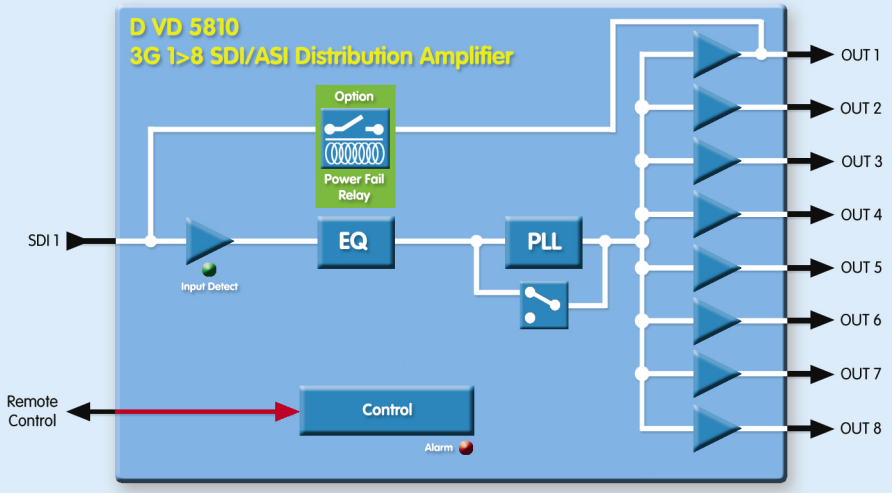
- Supports all SDI video formats
- Supports ASI/DVB and SMPTE 310 streams
- Fixed 1>8 configuration
- Reclocking or non-reclocking mode (selectable)
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3Gbit/s in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Optional power fail relay connecting input to output
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
5155205810	D VD 5810 3G/HD/SD - SDI/ASI Distribution Amplifier
5155105800	**OPTION:** OH-DVD-RL2 - Mechanical Bypass Relay Option

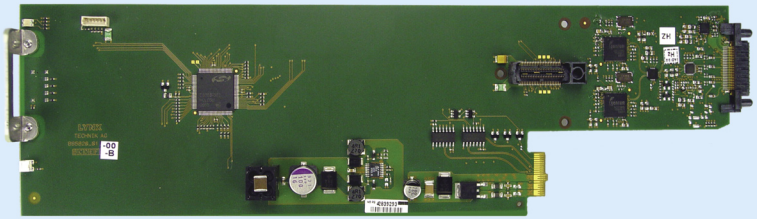


SDTV HD 1.5G HD 3G

DIGITAL VIDEO DISTRIBUTION

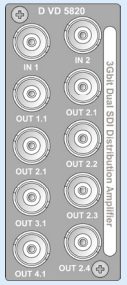
D VD 5820

3G/HD/SD - Dual SDI/ASI Distribution Amplifier



Features

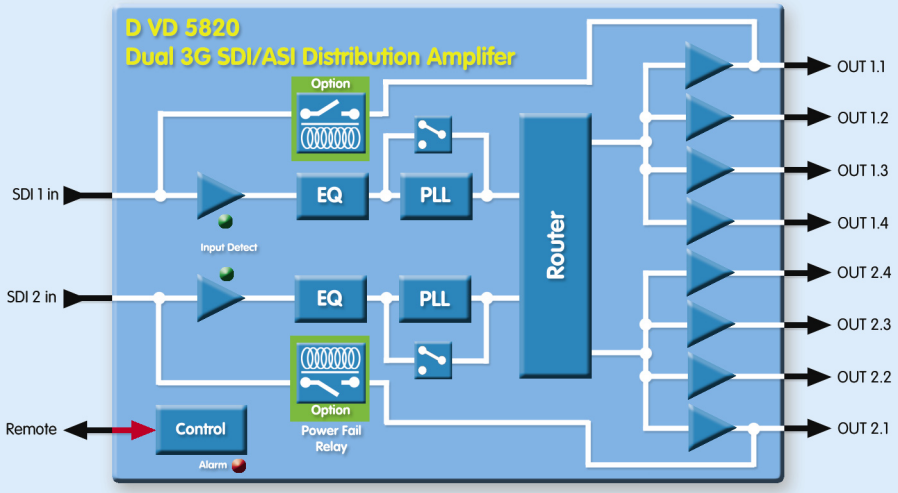
- Supports all SDI video formats
- Supports ASI/DVB and SMPTE 310 streams
- Dual channel 1>4 or flexible 1>8 mapping
- Reclocking or non-reclocking mode (selectable)
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3Gbit/s in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Optional power fail relay connecting input to output
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
5155105820	D VD 5820 3G/HD/SD - Dual SDI/ASI Distribution Amplifier
5155105800	**OPTION:** OH-DVD-RL2 - Mechanical Bypass Relay Option

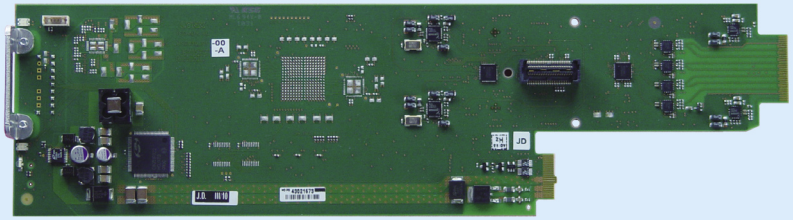


SDTV HD 1.5G HD 3G

DIGITAL VIDEO DISTRIBUTION

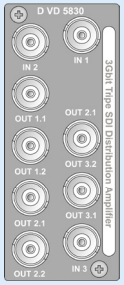
D VD 5830

3G/HD/SD - Triple SDI Distribution Amplifier



Features

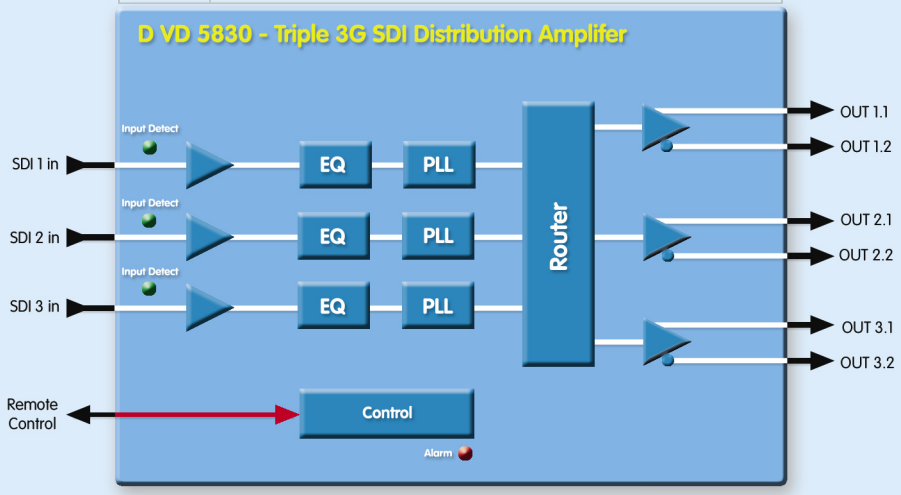
- Supports all SDI video formats
- 3 x SDI inputs and 3 sets of 2 outputs (user mapped)
- Reclocking or non-reclocking mode for each channel
- Auto-detect input video standard.
- Transparently pass data between 143 Mbit/s and 3Gbit/s in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication for each input
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
5155105830	D VD 5830 3G/HD/SD - Triple SDI Distribution Amplifier

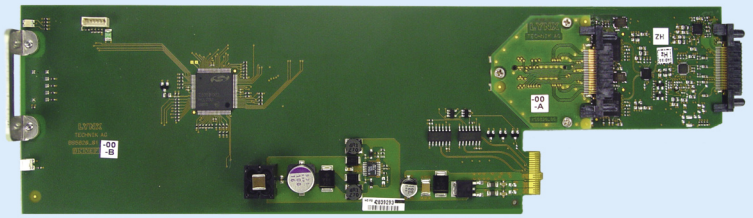


SDTV HD 1.5G HD 3G FIBER

DIGITAL VIDEO DISTRIBUTION

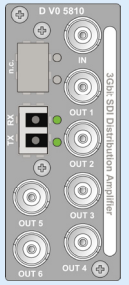
D VO 5810

3G/HD/SD - SDI/ASI Distribution Amplifier (With fiber I/O)



Features

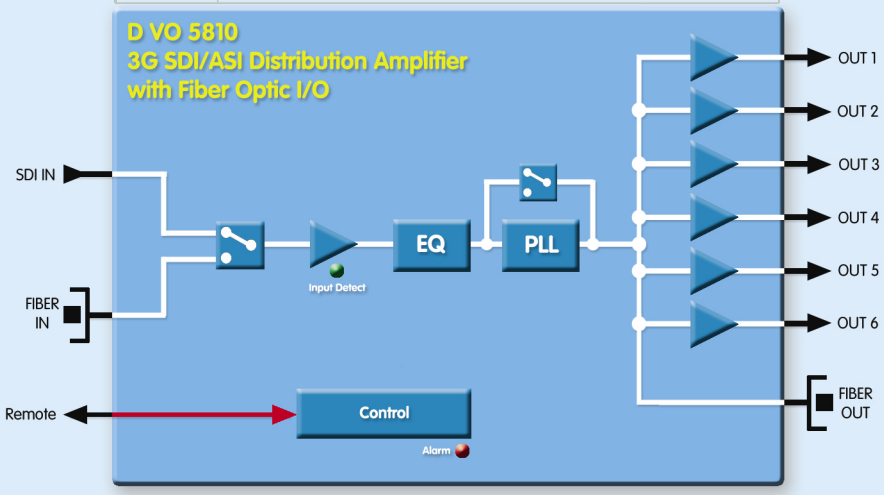
- Supports SDI ASI/DVB and SMPTE 310 up to 3Gbit/s
- Electrical or optical (fiber) SDI inputs (selectable)
- 6 x electrical and 1 x optical SDI outputs
- Reclocking or non-reclocking of input (selectable)
- Auto-detect input video standard.
- CWDM support with 18 selectable optical wavelengths (non CWDM option available)
- Transparently pass data between 15Mbit/s and 3Gbit/s in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- LC fiber connections
- Fiber SFP in backplane - module can be freely removed without disconnecting fiber cables
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information **Mandatory Options** : No Fiber I/O included, please specify one fiber option

Part #	Description
5156205810	D VO 5810 3G/HD/SD - SDI/ASI Distribution Amplifier
OH-TR-1	Optical Transceiver SFP module 1310nm - 10Km **NON CWDM**
OH-TR-4-XXXX	Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)

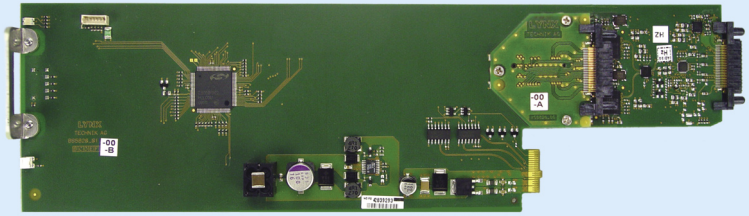


SDTV HD 1.5G HD 3G FIBER

DIGITAL VIDEO DISTRIBUTION

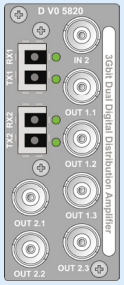
D VO 5820

3G/HD/SD - Dual SDI/ASI Distribution Amplifier (With fiber I/O)



Features

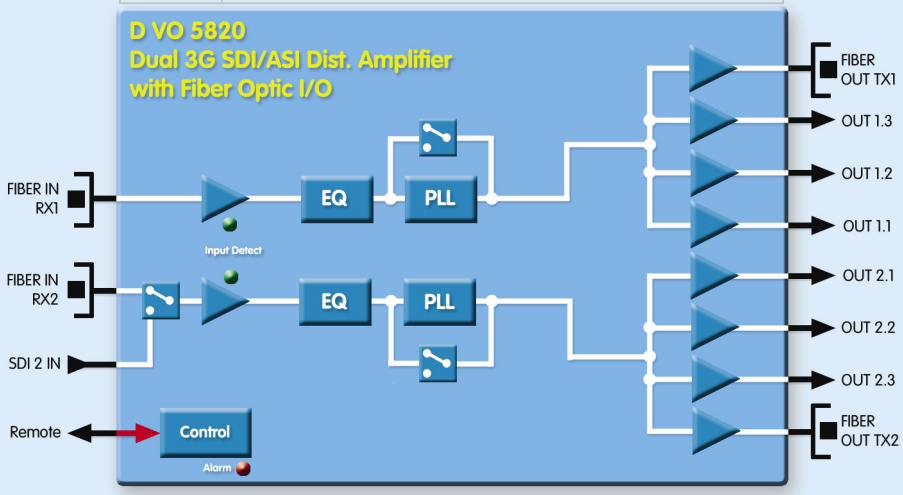
- Supports SDI ASI/DVB and SMPTE 310 up to 3Gbit/s
- Dual channel 1>4
- 2 optical inputs, with selectable electrical input on channel 2
- 3 x electrical and 1 x optical outputs per channel
- CWDM support with 18 selectable optical wavelengths
- Reclocking or non-reclocking mode for each channel
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3Gbit/s in non re-clocked mode.
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication for each channel
- LC fiber connections
- Fiber SFP in backplane - module can be freely removed without disconnecting fiber cables
- Remote control, status monitoring and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information **Mandatory Options** : No Fiber I/O included, please specify one fiber option

Part #	Description
5156205820	D VO 5820 3G/HD/SD - Dual SDI/ASI Distribution Amplifier with Fiber I/O
OH-TR-1	Optical Transceiver SFP module 1310nm - 10Km **NON CWDM**
OH-TR-4-XXXX	Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)

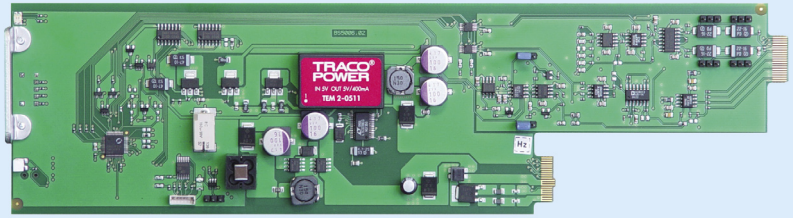


SDTV HDTV

ANALOG VIDEO DISTRIBUTION

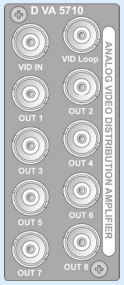
D VA 5710

Fixed 1>8 SD/HDTV Analog Video / Sync Distribution Amp



Features

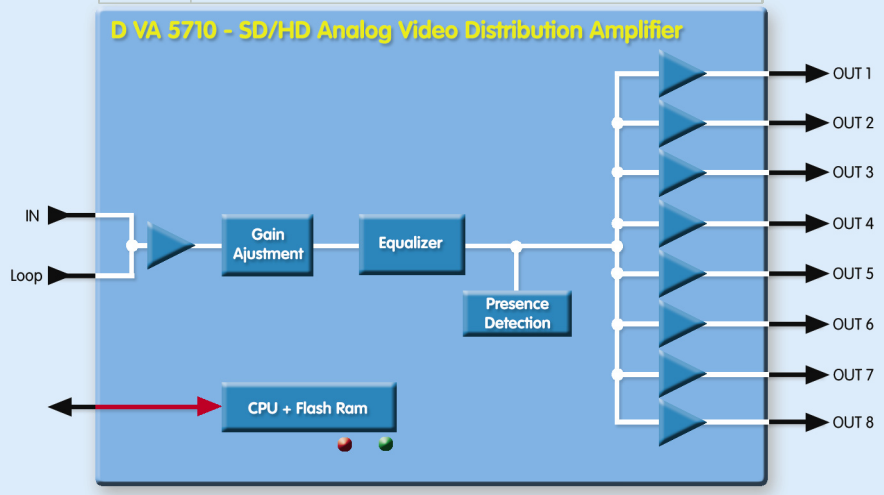
- Fixed 1>8 analog video or sync distribution
- Wide band amplifier for both SD and HD analog video signals
- Passive loop through input
- Signal presence detection
- Adjustable video gain
- Adjustable cable equalization
- Selectable input clamping
- Selectable AC or DC coupled differential inputs
- Can be used as SD bi-level or HD tri-level sync DA
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155005610	D VA 5710 Fixed 1>8 SD/HDTV Analog Video / Sync Distribution Amplifier

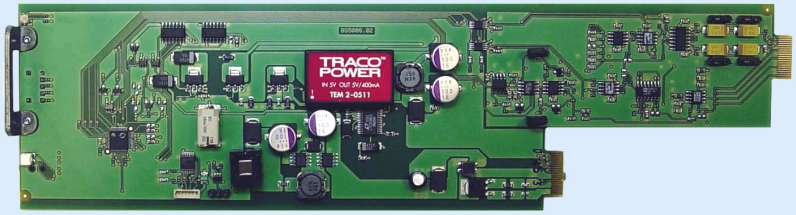


SDTV HDTV

ANALOG VIDEO DISTRIBUTION

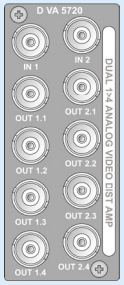
D VA 5720

Dual SD/HDTV Analog Video / Sync Distribution Amplifier



Features

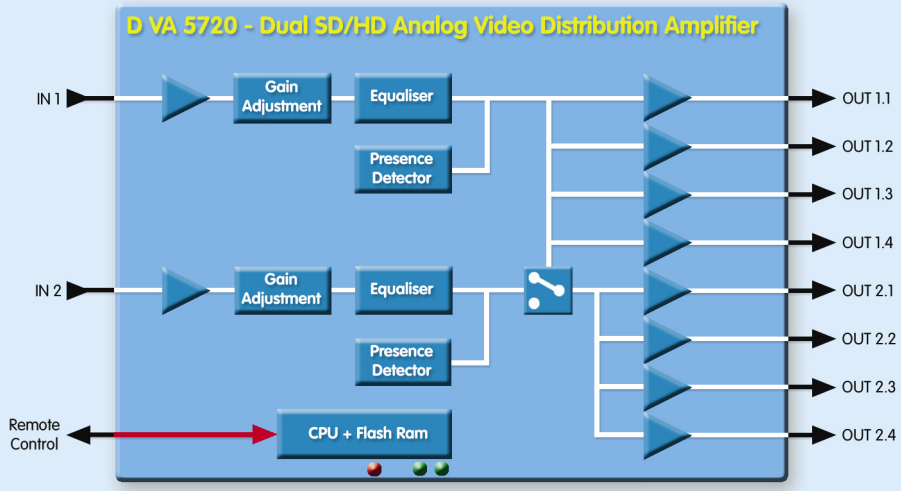
- Dual 1>4 or single 1>8 modes
- Analog video or analog sync distribution
- Wide band amplifier for both SD and HDTV analog video signals
- Signal presence detection
- Adjustable video gain
- Adjustable cable equalization
- Selectable input clamping
- Selectable AC or DC coupled differential inputs
- Can be used as SD bi-level or HDTV tri-level sync DA
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

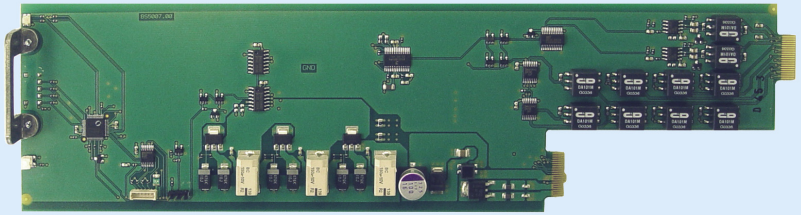
Part #	Description
6155005620	D VA 5720 Dual SD/HDTV Analog Video / Sync Distribution Amplifier



DIGITAL AUDIO DISTRIBUTION

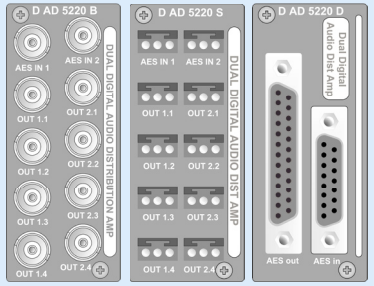
D AD 5220

Dual AES Digital Audio Distribution Amplifier



Features

- Dual 1>4 or single 1>8 modes
- AES digital audio distribution amplifier
- Non-reclocking
- Signal presence detection
- Supports sample rates between 32KHz and 108KHz (Independent for each input channel)
- Fully isolated transformer coupled inputs and outputs.
- Three choices of backpanel (balanced or unbalanced AES)
- Internal flash RAM for storing configurations
- Remote control when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

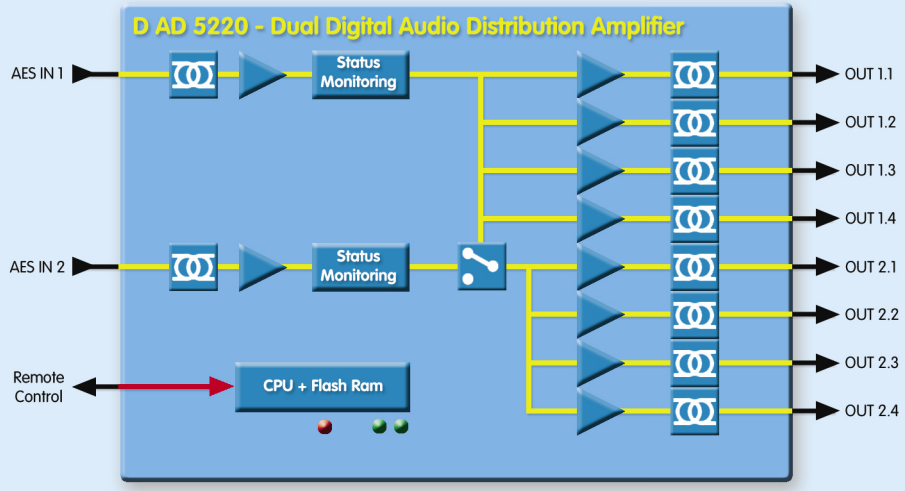


D AD 5220 B **D AD 5220 S** **D AD 5220 D**

Connection Panel Options

Ordering Information

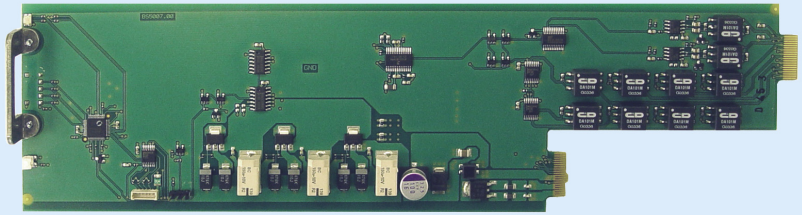
Part #	Description
6155008241	D AD 5220 B Dual AES Audio Distribution Amplifier (BNC Connections for unbalanced AES3id)
6155008240	D AD 5220 D Dual AES Audio Distribution Amplifier (SubD Connections for balanced AES3)
6155008242	D AD 5220 S Dual AES Audio Distribution Amplifier (Weco Single Jack Connections for balanced AES3)



DIGITAL AUDIO DISTRIBUTION

D AD 5220 B2S

Dual AES Audio Distribution Amplifier (with impedance conversion)



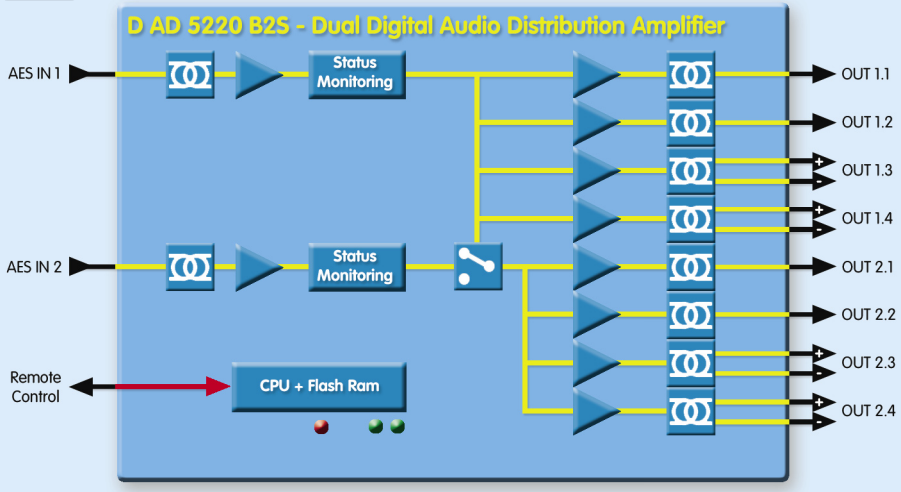
Features

- Dual 1>4 or single 1>8 modes
- Signal presence detection
- Supports sample rates between 32KHz and 108KHz
- Non-reclocking
- Integrated AES3id unbalanced to AES3 balanced conversion
- AES3id unbalanced inputs on BNC connectors
- 2 x AES3 balanced outputs and 2 x AES3id unbalanced outputs per channel
- Fully isolated transformer coupled inputs and outputs
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable

Connection Panel

Ordering Information

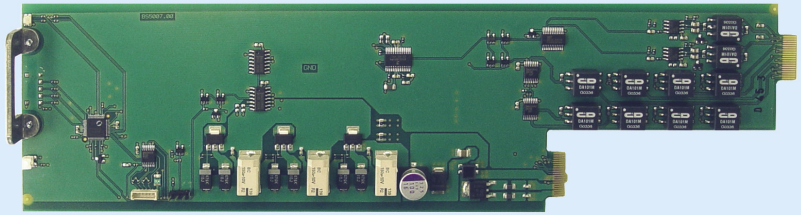
Part #	Description
6155018241	D AD 5220 B2S Dual AES Audio Distribution Amplifier



DIGITAL AUDIO DISTRIBUTION

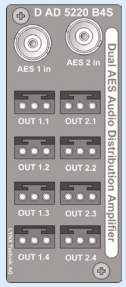
D AD 5220 B4S

Dual AES Audio Distribution Amplifier (with impedance conversion)



Features

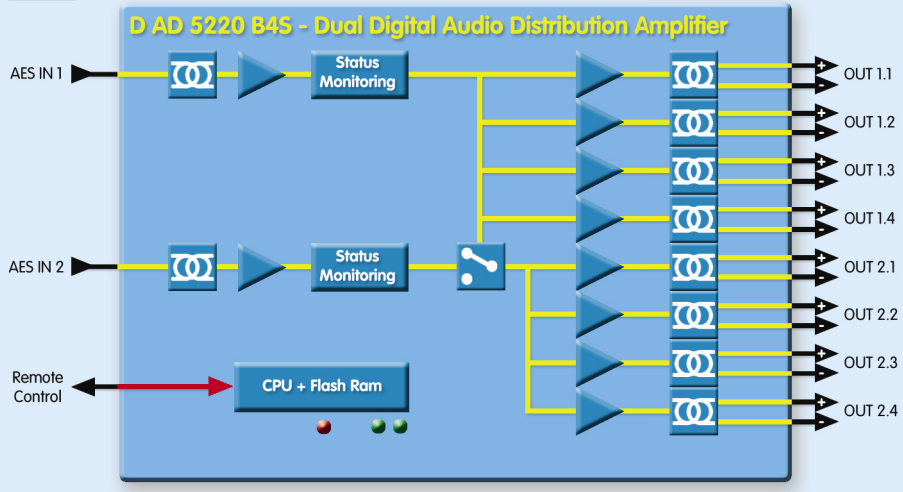
- Dual 1>4 or single 1>8 modes
- Signal presence detection
- Supports sample rates between 32KHz and 108KHz
- Non-reclocking
- Integrated AES3id unbalanced to AES3 balanced conversion
- AES3id unbalanced inputs on BNC connectors
- AES3 balanced outputs on Weco screw jack terminals
- Fully isolated transformer coupled inputs and outputs
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

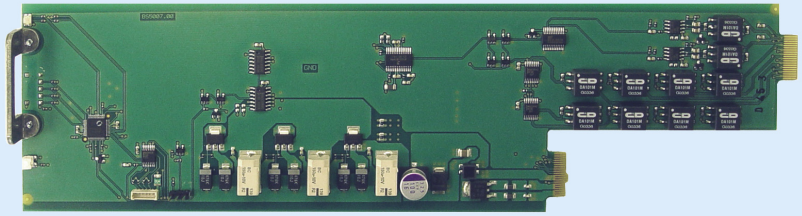
Part #	Description
6155028241	D AD 5220 B4S Dual AES Audio Distribution Amplifier



WORD CLOCK DISTRIBUTION

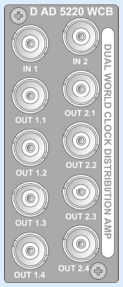
D AD 5220 WCB

Dual Word Clock Distribution Amplifier



Features

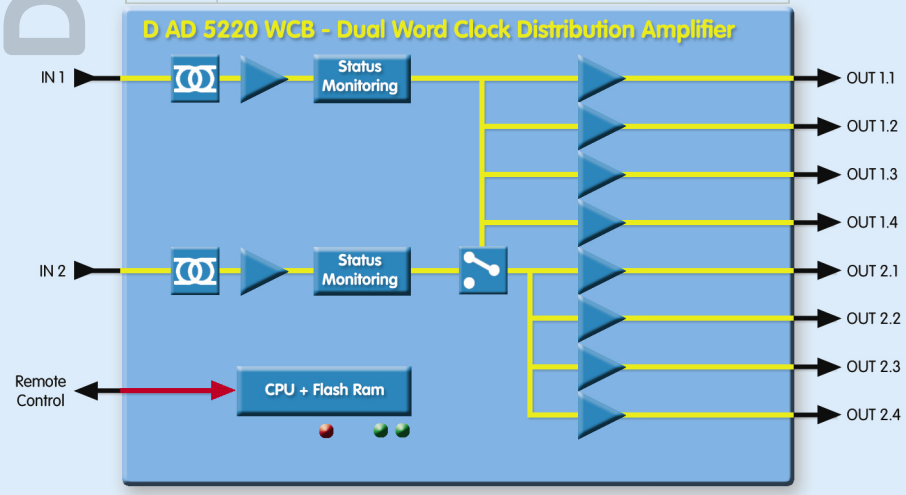
- Word Clock (48KHz) distribution amplifier
- Dual 1>4 or Single 1>8 modes
- Signal presence detection
- Supports clock signals between 32KHz and 108KHz (Independent for each input channel)
- 5v TTL level outputs
- Fully isolated transformer coupled inputs
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

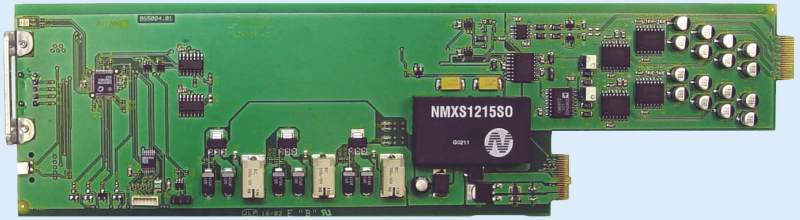
Part #	Description
6155008245	D AD 5220 WCB Dual Word Clock Distribution Amplifier



ANALOG AUDIO DISTRIBUTION

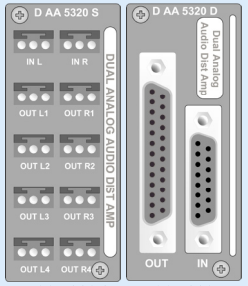
D AA 5320

Dual Analog Audio Distribution Amplifier



Features

- Dual 1>4 (stereo) or single 1>8 (mono) modes
- Balanced analog audio inputs and outputs
- Input presence detection
- Independently adjustable gain for each input channel
- Two backplane options - screw terminal (Weco) or Sub D
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable

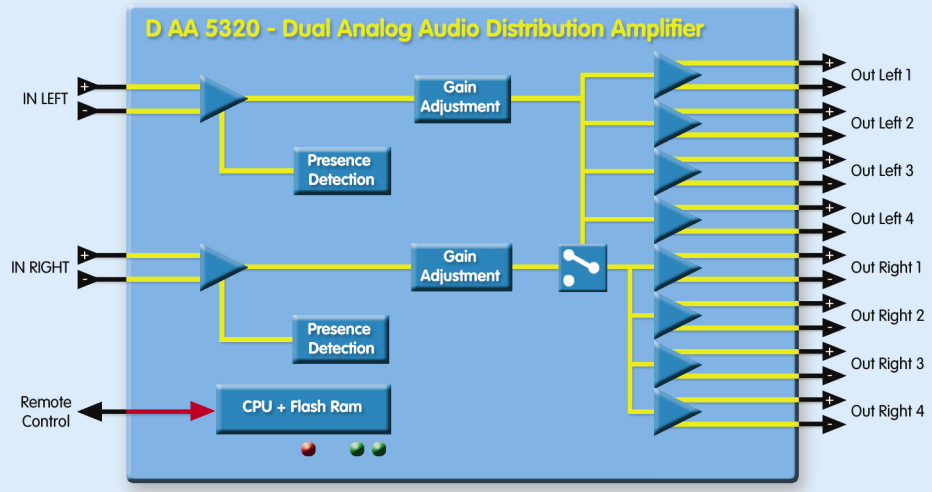


D AA 5320 S **D AA 5320 D**

Connection Panel Options

Ordering Information

Part #	Description
6155008243	D AA 5320 D - Dual Analog Audio Distribution Amplifier (Sub D Connectors)
6155008244	D AA 5320 S - Dual Analog Audio Distribution Amplifier (Weco Single Jack Connectors)



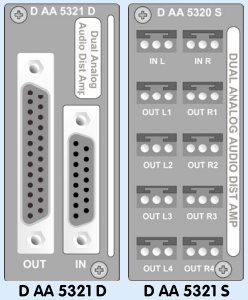
ANALOG AUDIO DISTRIBUTION

D AA 5321

Dual Analog Audio Distribution Amplifier - Fully isolated

Features

- Dual 1>4 (stereo) or single 1>8 (mono) modes
- Balanced analog audio inputs and outputs
- All audio inputs and outputs isolated using high quality audio transformers
- Input presence detection
- Independently adjustable gain for each input channel
- Two backplane options - screw terminal (Weco) or SubD
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

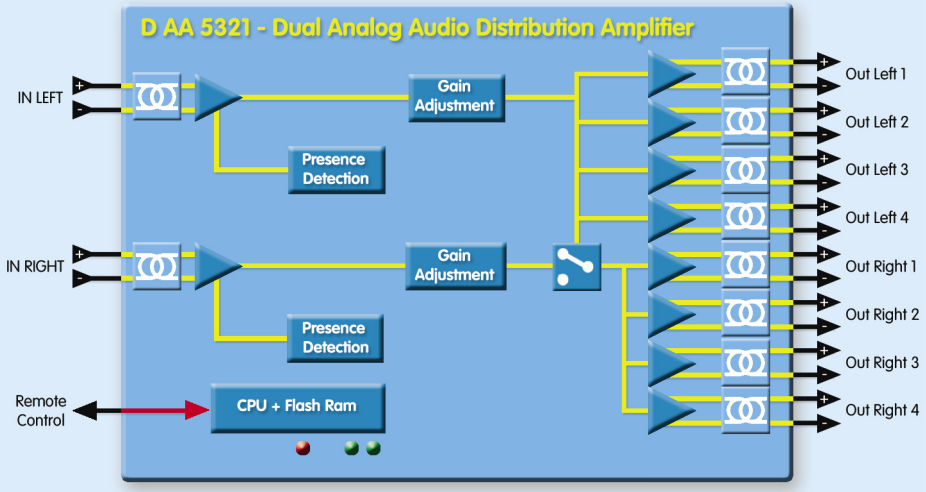


D AA 5321 D **D AA 5321 S**

Connection Panel Options

Ordering Information

Part #	Description
4155005321	D AA 5321 D Dual Analog Audio Distribution Amplifier (SubD connections)
4150005321	D AA 5321 S Dual Analog Audio Distribution Amplifier (Single Jack Weco Connectors)

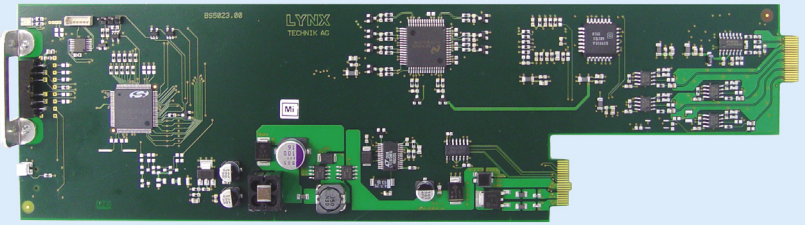


SDTV

DIGITAL VIDEO SWITCHING

S VD 5082

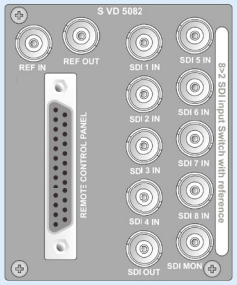
8>2 SDI Router with Reference and Control Panel



Features

- 8 > 2 SD-SDI router
- Clocked or non-reclocked SDI outputs
- Input presence detection for all inputs
- Transparent for DVB-ASI signals
- Auto-detect video bit rates of 143, 177, 270, 360, 540Mbits/s
- Transparently pass data between 10 and 640Mbits/s in non-reclocked mode
- Synchronous "clean" switching (line 6 PAL line 10 NTSC)
- Automatic switching to next available input if input signal is lost (selectable)
- Auto cycle switching between connected inputs (selectable)
- Optional R CP 5082 1 RU control panel.
- Remote control and error reporting when used with LYNX control system

Optional R CP 5082 Control Panel

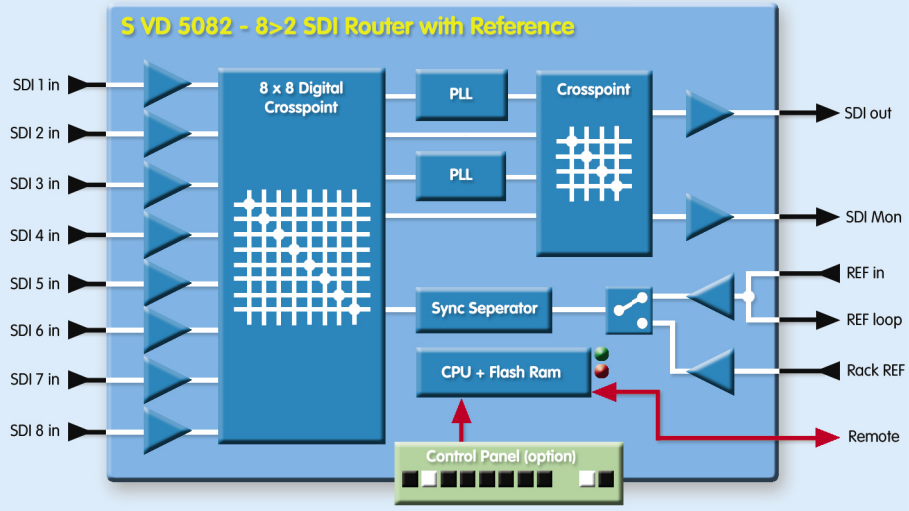


Connection Panel

Note:
This module has a dual width panel and will occupy two rack card slots.

Ordering Information

Part #	Description
5155007800	S VD 5082 8>2 SDI Router with Reference
5155003100	**OPTION:** R CP 5082 1 RU Remote Control Panel

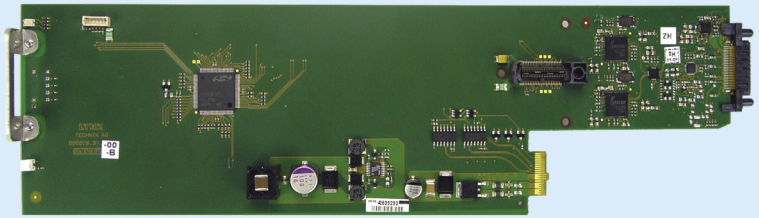


SDTV HD 1.5G HD 3G

DIGITAL VIDEO SWITCHING

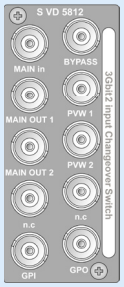
S VD 5812

3G/HD/SD - SDI/ASI 2 Channel Changeover Switch



Features

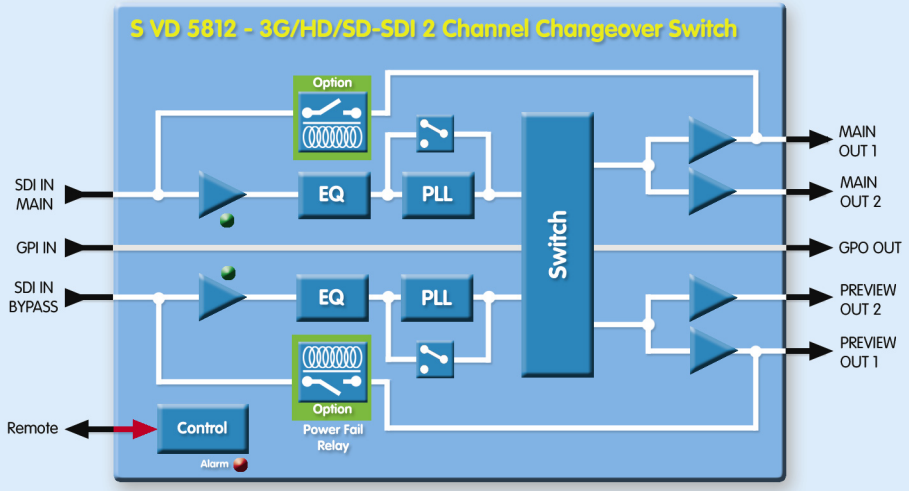
- Supports SDI / DVB-ASI and SMPTE 310 inputs up to 3Gbit/s
- 2 x Inputs and 2 sets of switched outputs
- Inputs can be reclocked or non-reclocked
- Auto-detect input video standard
- Manual switching from external GPI trigger or from control system GUI
- Automatic emergency switching when designated input fails
- Select latch or automatic return when main input returns
- GPO output trigger provided when switch operates
- Pass data between 15Mbit/s and 3Gbit/s in non- reclocked mode.
- Input presence detection with LED indicators
- Optional power fail relay connecting inputs to outputs
- Remote controland error reporting possible when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
5155025812	S VD 5812 3G/HD/SD - SDI/ASI 2 Channel Changeover Switch
5155105800	**OPTION:** OH-DVD-RL2 - Mechanical Bypass Relay Option

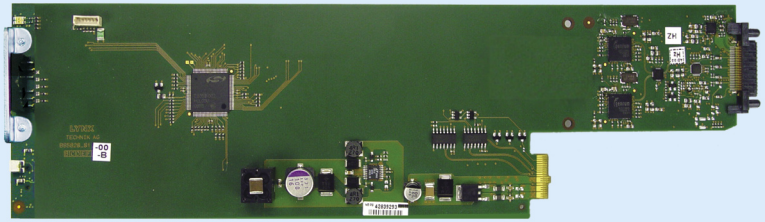


SDTV HD 1.5G HD 3G

DIGITAL VIDEO SWITCHING

S VD 5842

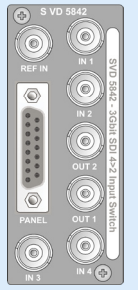
3G/HD/SD - 4>2 SDI Input Switch



Features

- Supports SDI / DVB-ASI and SMPTE 310 inputs up to 3Gbit/s
- 4 x Inputs and 2 sets of switched outputs
- Inputs can be reclocked or non-reclocked
- Auto-detect input video standard
- Manual switching from optional control panel and / or via control system GUI
- Pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode.
- Input presence detection with LED indicators
- Remote control and error reporting possible when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable

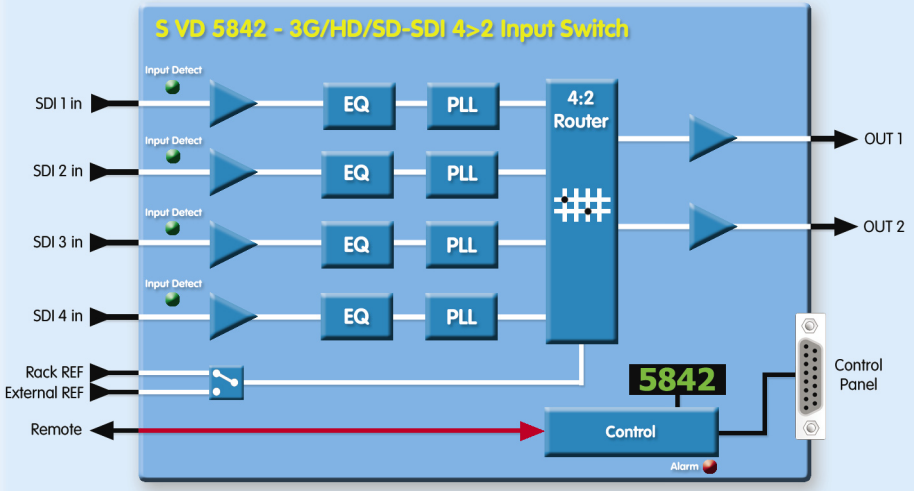
Optional R CP 5842 Control Panel
(Passive control, max distance 50m)



Connection Panel

Ordering Information

Part #	Description
5155025842	S VD 5842 3G/HD/SD - 4>2 SDI input Switch
5155003100	**OPTION:** R CP 5842 1 RU Remote Control Panel

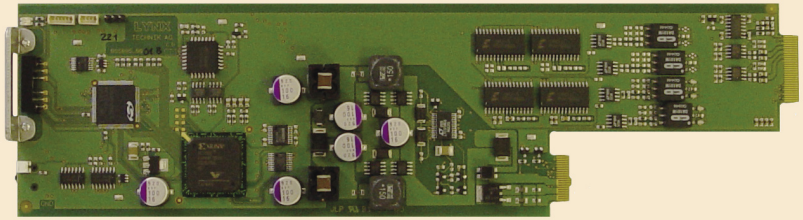


SDTV

AUDIO EMBEDDING

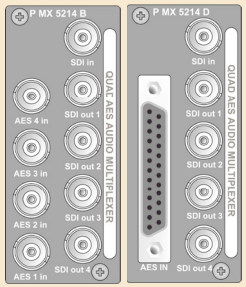
P MX 5214

Quad AES Digital Audio Embedder



Features

- SD-SDI input, auto-detect 525/625
- Embed 4 x AES into two audio groups (1-4 selectable)
- Supports 16:9 and 4:3 formatted video
- 270Mbit or 360Mbit operation
- Supports 8 or 10 bit digital video
- 20 or 24 bit audio
- AES Sample rate converter (with selectable bypass)
- Synchronous or asynchronous audio (32KHz to 48KHz)
- Four SD-SDI outputs with embedded audio
- 8 x 8 Mono crossbar for audio asignment before embedding
- Video to green if input video lost
- No audio insertion if audio lost
- 2 rear panel choices for balanced or unbalanced AES inputs
- Transformer coupled (isolated) audio inputs
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

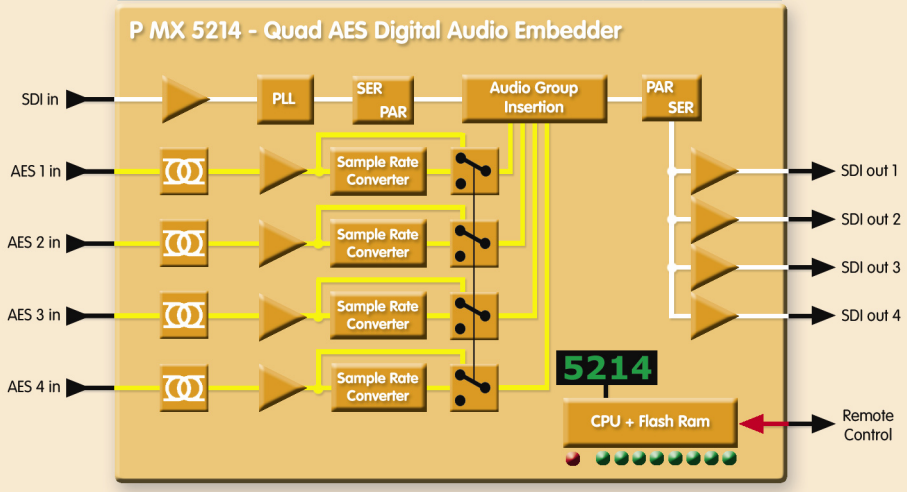


P MX 5214 B **P MX 5214 D**

Connection Panel Options

Ordering Information

Part #	Description
6155009200	P MX 5214 B - Quad AES Audio Embedder (BNC connections for unbalanced AES3id)
6155009300	P MX 5214 D - Quad AES Audio Embedder (SubD connections for balanced AES3)

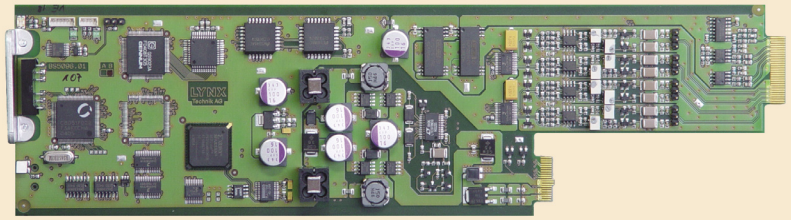


SDTV

AUDIO EMBEDDING

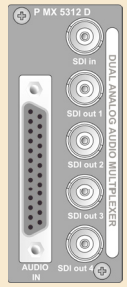
P MX 5312

Dual Analog Audio Embedder



Features

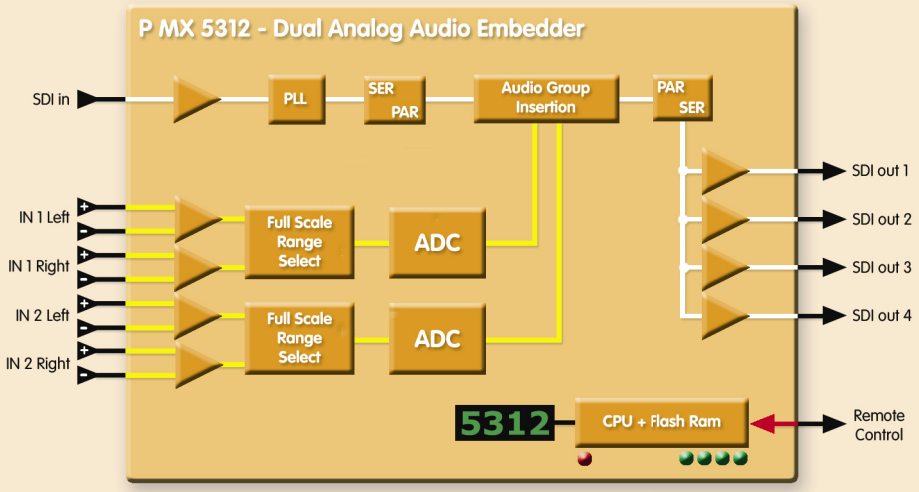
- Audio A/D conversion and embedder
- SD-SDI input
- Four balanced analog audio inputs (2 stereo pair)
- Embed converted audio into one audio group (1..4 selectable)
- Auto-detect 525/625
- Supports 16:9 and 4:3 formatted video
- Auto-detect 270Mbit or 360Mbit SDI inputs
- Support for 8 or 10 bit digital video
- 20 or 24 bit audio conversion (selectable)
- Selectable full scale ranging of 12, 15, 18, 22, 24 dBu for analog input
- High quality balanced audio inputs
- Four SDI outputs with embedded audio
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155009220	P MX 5312 D - Dual Analog Audio Embedder (SubD connection for balanced analog audio)

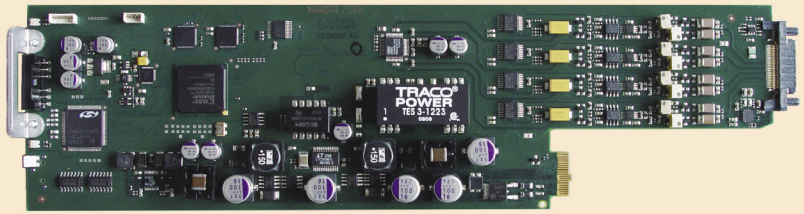


SDTV HD 1.5G

AUDIO EMBEDDING

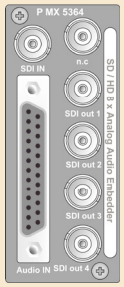
P MX 5364

SD/HD-SDI 8 Channel Analog Audio Embedder



Features

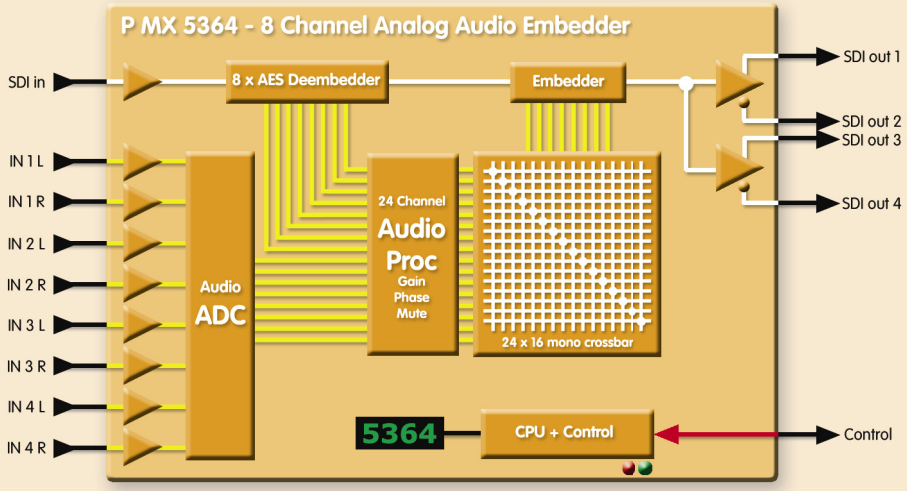
- De-embedder, audio A/D conversion and embedder on single module
- Multi-format SD/HD-SDI operation
- SD/HD SDI input
- Auto-detect input video standard and format
- De-embeds all 16 channels of audio
- 8 x external analog audio inputs
- 4 x SD/HD-SDI video outputs provided
- Integrated 24 channel audio processing stage
- Each audio channel (24) has adjustable gain / phase / mute
- Overload and silence detection for each audio channel
- Full 24 bit audio conversion
- Replace, delete or pass existing embedded audio
- 24 x 16 mono output crossbar for embedded audio assignment
- 16 channel audio embedder, user assigned audio mapping
- Local control via onboard matrix display and menu system
- Full remote control with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155035362	P MX 5364 - SD/HD-SDI 8 Channel Analog Audio Embedder

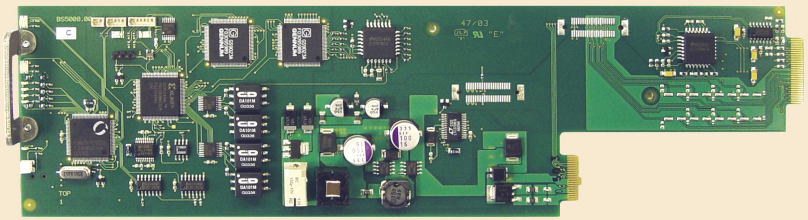


SDTV

AUDIO DE-EMBEDDING

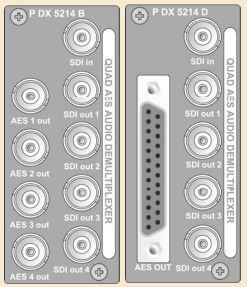
P DX 5214

Quad AES Digital Audio De-embedder



Features

- SD-SDI Input
- De-Embed 4 x AES streams from two audio groups (1-4 selectable)
- Auto-detect 525/625
- Supports 16:9 and 4:3 formatted video
- Auto-detect 270Mbit or 360Mbit
- Support for 8 or 10 bit digital video
- Support for 20 or 24 bit audio
- Four reclocked SD-SDI outputs
- Transformer coupled (isolated) audio outputs
- Two rear panel choices for balanced or unbalanced AES outputs
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable

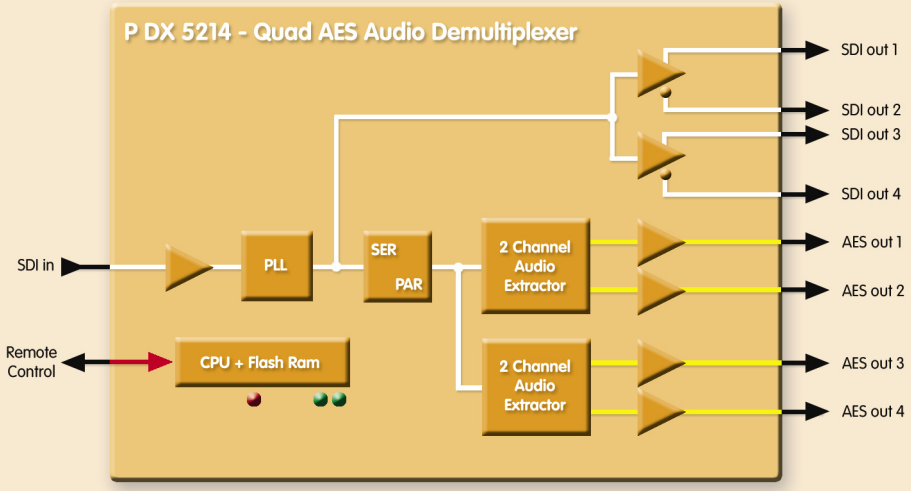


P DX 5214 B **P DX 5214 D**

Connection Panel Options

Ordering Information

Part #	Description
6155008280	P DX 5214 B - Quad AES Audio De-embedder (BNC connections for unbalanced AES3id)
6155008380	P DX 5214 D - Quad AES Audio De-embedder (SubD connections for balanced AES3)

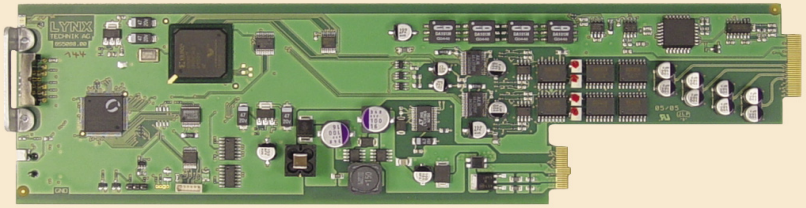


SDTV

AUDIO DE-EMBEDDING

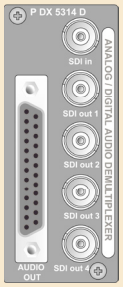
Dual Analog + Quad AES Audio De-embedder

P DX 5314



Features

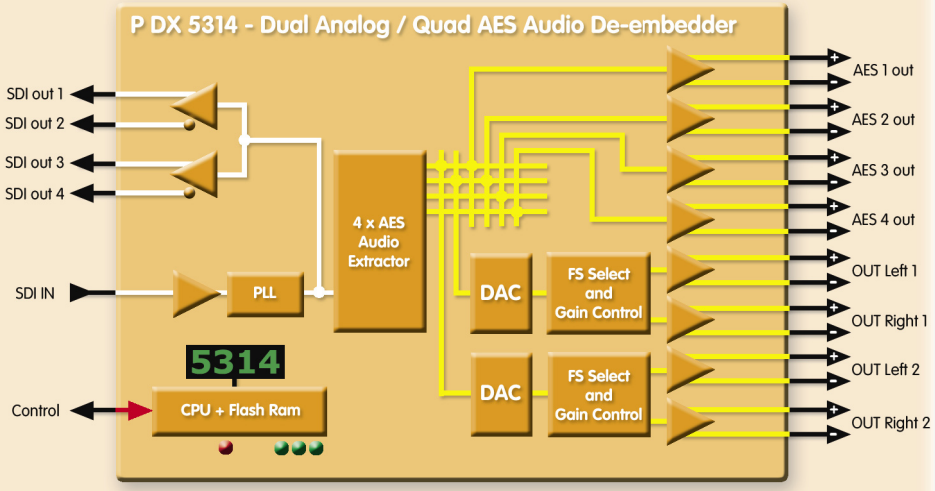
- SD-SDI Input
- De-embedder providing analog and digital (AES) audio outputs
- De-embed 4 x AES from two of four selectable audio groups
- 2 x analog stereo pair outputs + 4 digital AES outputs
- Auto-detect 525/625
- Support for 16:9 and 4:3 formatted video
- Auto-detect 270Mbit or 360Mbit
- Support for 8 or 10 bit digital video
- Selectable full scale ranging 12, 15, 18, 24 dBu for analog output
- High quality balanced audio outputs
- Adjustable audio gain (+/- 3dB from full scale range)
- Output crossbar to reassign analog and digital outputs
- 4 x reclocked SDI outputs
- Integrated alpha-numeric display and menu system for module settings
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
5155009233	P DX 5314 D - Dual Analog + Quad AES Audio De-embedder

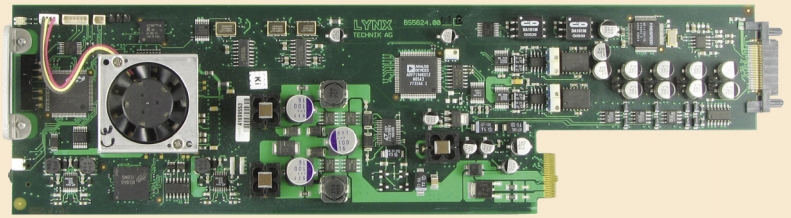


SDTV HD 1.5G

AUDIO DE-EMBEDDING

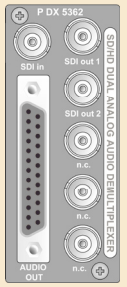
SD/HD-SDI Dual AES and Analog Audio De-embedder

P DX 5362



Features

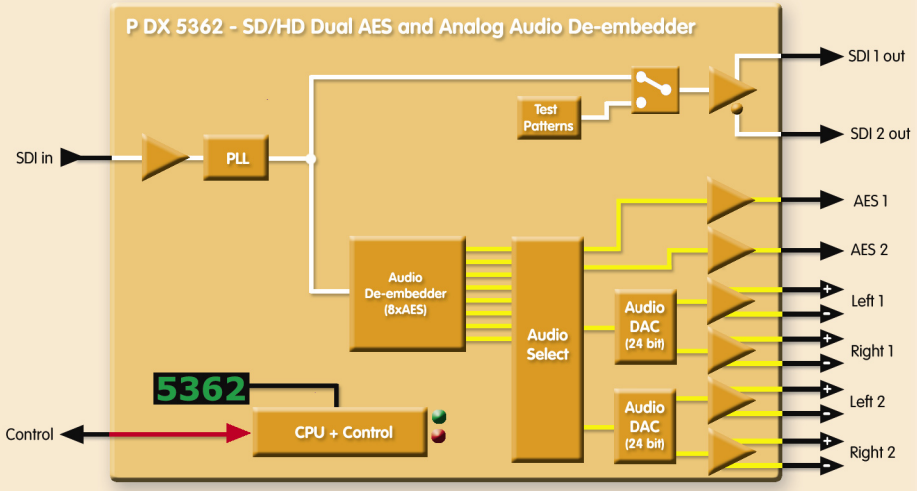
- SD/HD-SDI Input
- Multi-format SD/HD-SDI operation
- Auto-detect input video standard and format
- De-embeds all audio (8 x AES) into 8 x 4 AES output crossbar
- 2 x Analog stereo pair outputs
- 2 x balanced AES3 outputs
- Analog full scale preset selection 12, 15, 18, 20, 22, 24 dBu
- Individual (mono) adjustments for L and R analog gain
- Selectable left and right channel swap
- Selectable mute for each mono channel
- Selectable de-emphasis for each mono channel
- Integrated alpha-numeric display and menu system for module settings
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot swappable



Connection Panel

Ordering Information

Part #	Description
6155015268	P DX 5362 D - SD/HD-SDI 2 x AES and Analog Audio De-embedder

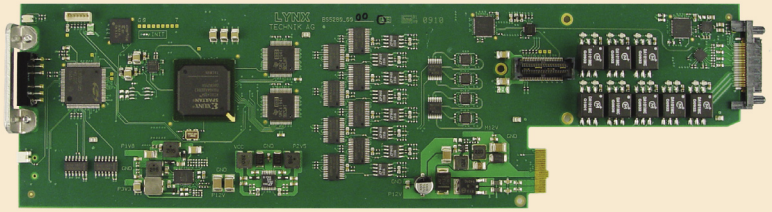


SDTV HD 1.5G HD 3G

AUDIO EMBEDDING / DE-EMBEDDING

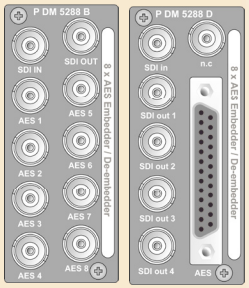
P DM 5288

3G/HD/SD - 16 Channel Audio Embedder / De-embedder



Features

- Supports SDI formats up to 3Gbit
- Configure audio I/O for embedding or de-embedding
- 32 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown. Also provides overload and silence detection
- 32 x 32 mono output crossbar for embedder and audio I/O channel assignment
- Selectable "Auto Black Function" with no input video the module will embed audio in a black video signal
- 8 selectable sample rate converters (SRC)
- DolbyE Transparent (no audio processing functions with DolbyE)
- Two backplane options; unbalanced or balanced AES
- Transformer coupled (isolated) audio inputs and outputs
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable

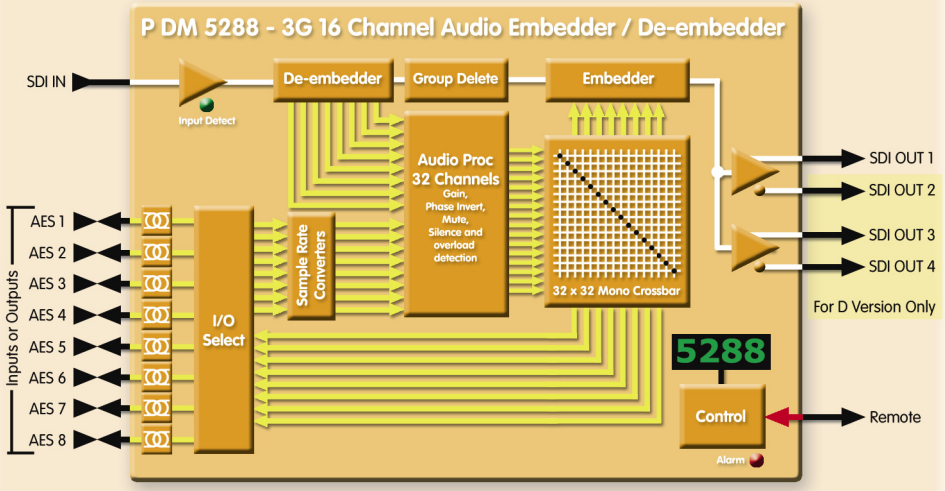


P DM 5288 B **P DM 5288 D**

Connection Panel Options

Ordering Information

Part #	Description
6155015288	P DM 5288 B - 3G/HD/SD - 16 Channel Audio Embedder / De-embedder (BNC unbalanced AES)
6155005288	P DM 5288 D - 3G/HD/SD - 16 Channel Audio Embedder / De-embedder (SubD - balanced AES)

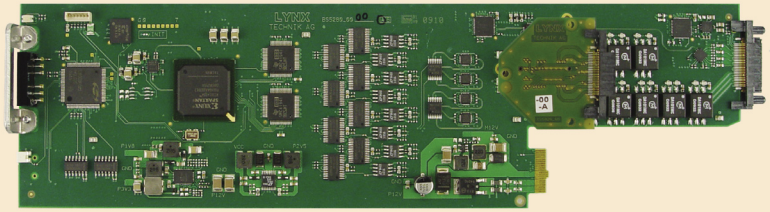


SDTV HD 1.5G HD 3G FIBER

AUDIO EMBEDDING / DE-EMBEDDING

P DM 5288 O

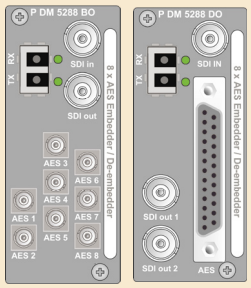
3G/HD/SD - 16 Channel Audio Embedder / De-embedder



Features

- Supports SDI formats up to 3Gbit
- Optical or electrical SDI input, optical and electrical SDI outputs
- Configure audio I/O for embedding or de-embedding
- 32 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown
- 32 x 32 mono output crossbar for embedder I/O channel assignment.
- Selectable "Auto Black Function" with no input video the module will embed audio in a black video signal
- 8 selectable sample rate converters (SRC)
- DolbyE Transparent (no audio processing functions with DolbyE)
- Two backplane options; unbalanced or balanced AES
- Transformer coupled (isolated) audio inputs and outputs
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable

Note: The BO panel uses mini BNC connectors for AES audio I/O

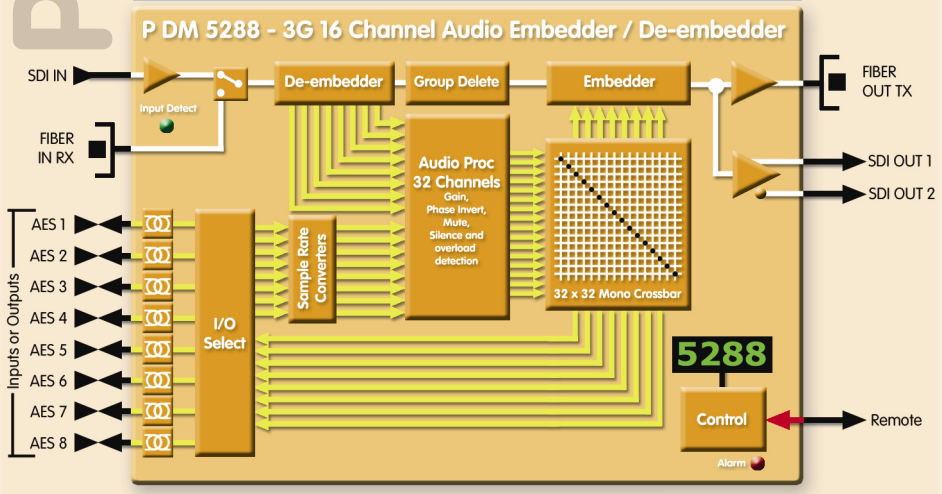


P DM 5288 BO **P DM 5288 DO**

Connection Panel Options

Ordering Information **Mandatory Options** : No Fiber I/O included, please specify one fiber option

Part #	Description
6155035288	P DM 5288 BO - 3G/HD/SD - 16 Channel Audio Embedder / De-embedder (BNC unbalanced AES)
6155025288	P DM 5288 DO - 3G/HD/SD - 16 Channel Audio Embedder / De-embedder (SubD - balanced AES)
OH-TR-1	Optical Transceiver SFP module 1310nm - 10Km **NON CWDM**
OH-TR-4-XXXX	Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)

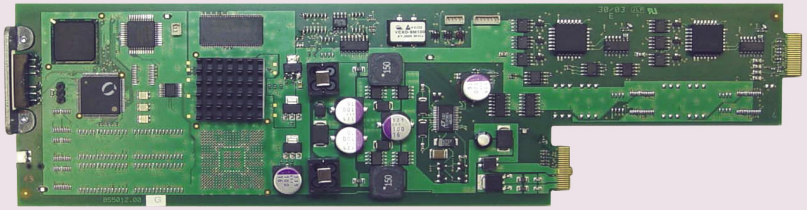


SDTV

FRAME SYNCHRONIZATION

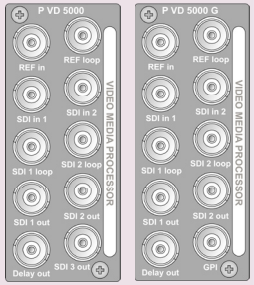
P VD 5000

Video Frame Synchronizer



Features

- SD-SDI video frame synchronizer
- 2 x 10 bit SDI inputs with seamless input switching
- GPI input for input switching or Freeze (G version)
- Dual mode operation; Frame or Line synchronizer
- Auto-detect 525/625
- Up to 6 frames of programmable delay in Frame Sync mode
- Up to 7 frames of programmable delay in Line Sync mode
- Delay adjustments provided for pixel, line and frame delay (37ns steps)
- Adjustable video Gain, Sat, Hue and Pedestal
- 3 x 10 bit SDI outputs (2 on G version)
- Delay output for synchronization of external devices. (e.g. P AD 5212)
- Optional mechanical bypass relay (input to output)
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable

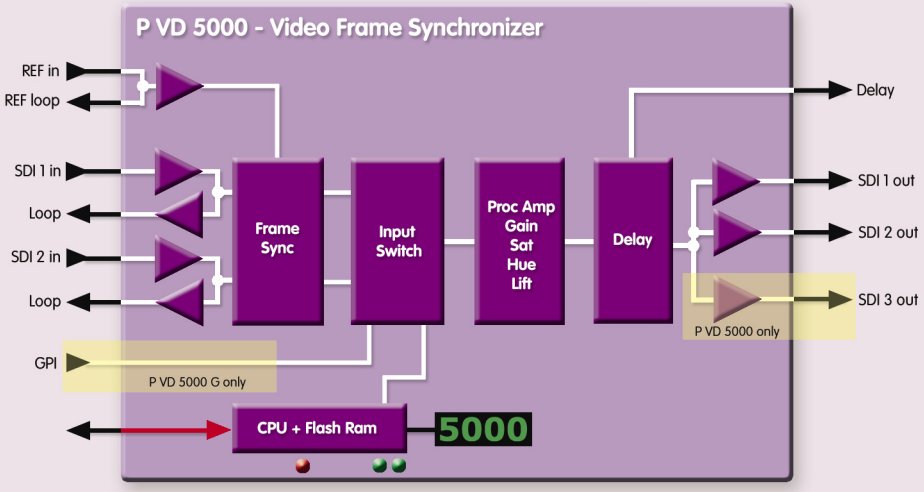


P VD 5000 P VD 5000 G

Connection Panel Options

Ordering Information

Part #	Description
6155008267	P VD 5000 - Video Frame Synchronizer
6155008266	P VD 5000 G - Video Frame Synchronizer with GPI input
6155007765	**OPTION :** P VD RL1 - Emergency Bypass Relay

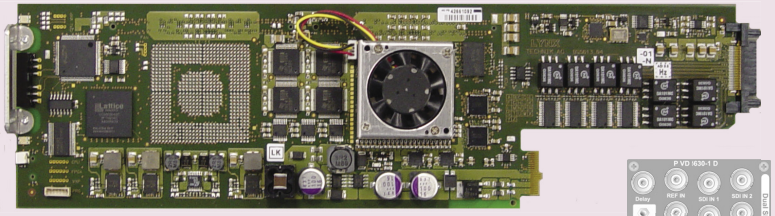


SDTV HD 1.5G

FRAME SYNCHRONIZATION

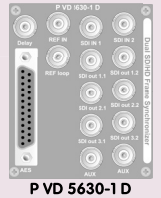
P VD 5630-1

HD/SD - Dual SDI Frame Sync with Full Audio Processing



Features

- Multi-format operation - with support for SDI video up to 1.5Gbit
- Single input with optional second input providing seamless input switching
- 3 user mapped output channels
- 3 output processing amplfiers with adjustable gain, saturation, hue and pedestal
- Each channel has a 3 frame programmable video delay
- Analog tri-level or bi-level (black) reference sync (auto-detect) cross lock compatible
- Integrated SDTV ARC (Aspect Ratio Converter)
- Integrated test pattern generator for each output channel.
- All audio (16 channels) is de-embedded from each SDI input
- Audio processing includes gain / swap / mute and invert
- Each output channel has its own 16 channel embedder
- DolbyE transparency
- Optional firmware upgrade adds 2 Channels of integrated down conversion
- Integrated color space conversion and adjustable aperture correctors
- Remote control and status monitoring provided via the LYNX control system
- Full SNMP support when used with master controller option



P VD 5630-1 D

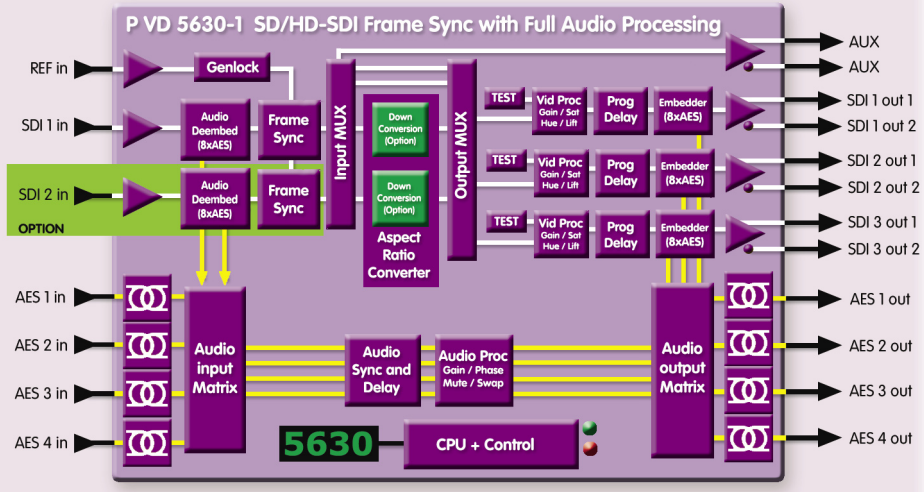
P VD 5630-1 B

Connection Panel Options

Note: These are double width connection panels. and will occupy two rack slots.

Ordering Information

Part #	Description
5155035630	P VD 5630-1 B - SD/HD Dual Frame Sync with Full Audio Support (BNC-unbalanced AES3id)
5155605630	P VD 5630-1 D - SD/HD Dual Frame Sync with Full Audio Support (SubD-unbalanced AES3)
1000000027	**OPTION :** OC-5630-SCND - Second Input Option
1000000026	**OPTION :** OC-5630-DOWN - One channel of down conversion (2 possible)

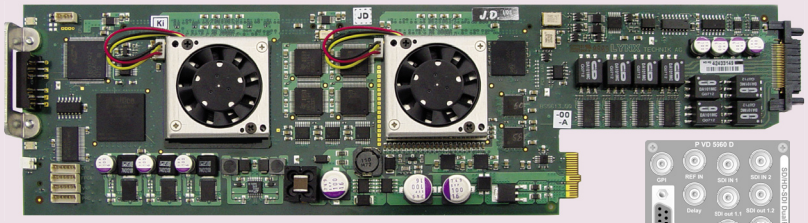


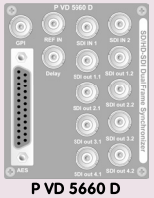
SDTV HD 1.5G

FRAME SYNCHRONIZATION

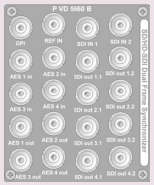
P VD 5660

SD/HD-SDI Dual Frame Sync with Full Audio Support





P VD 5660 D



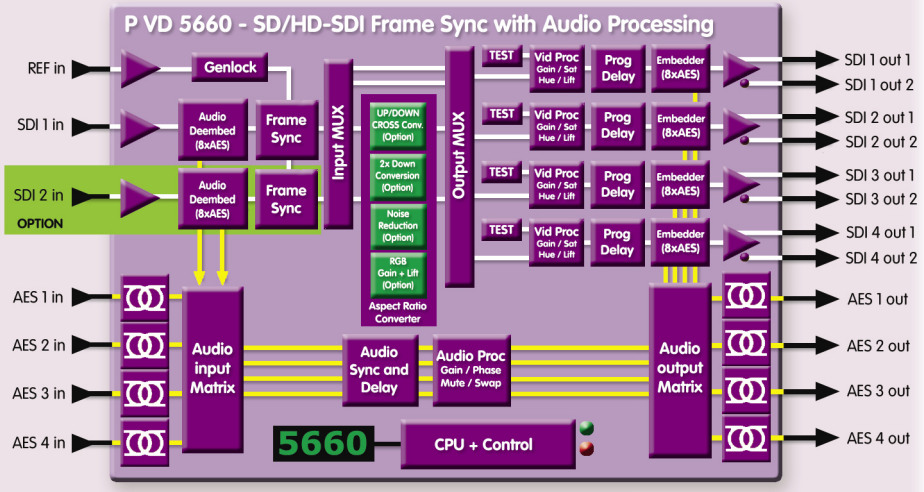
P VD 5660 B

Features

- Multi-format operation - with support for SDI video up to 1.5Gbit
- Multiple Firmware Options: Second Input, high quality UP/DOWN/CROSS conversion, 2 x basic down converters, RGB color corrector and noise reduction plug in
- 4 user mapped SDI output channels
- 4 output processing amplifiers with adjustable gain, saturation, hue and pedestal
- Each output channel has a 3 frame programmable video delay
- Analog tri-level or bi-level (black) reference sync (auto-detect) cross lock compatible
- Integrated test pattern generator for each output channel
- All 16 audio channels are de-embedded from each SDI input
- Audio processing includes gain / swap / mute and invert (24 channels)
- Each output channel has its own 16 channel embedder. (user mapped)
- 4x DolbyE Synchronizers (maintaining Guard Band)

Ordering Information

Part #	Description
5155025660	P VD 5660 B SD/HD Frame Sync. with full Audio Support (BNC connections for unbalanced AES3id)
5155015660	P VD 5660 D SD/HD Frame Sync. with full Audio Support (BNC connections for unbalanced AES3id)
1000000011	**OPTION :** OC-5660-DWN. Integrated Down Conversion (licence code to activate)
1000000017	**OPTION :** OC-5660-UPXD. High Quality Integrated Up/Down/Cross Conv. (Licence code to activate)
1000000010	**OPTION** : OC-5660-SCND. Second Input (licence code to activate)
1000000012	**OPTION** : OC-5660-NR. Noise Reduction, Recursive / block / Mosquito (licence code to activate)
1000000057	**OPTION** : OC-5660-COCO. RGB Gain and Lift controls (licence code to activate)

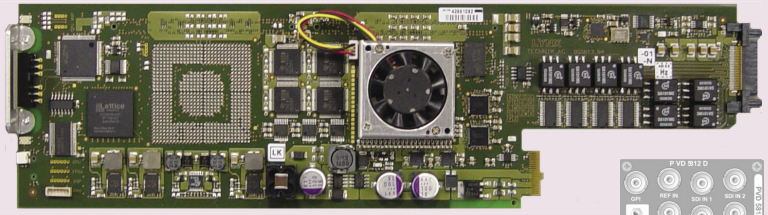


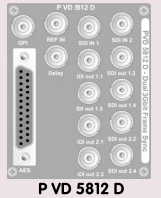
SDTV HD 1.5G HD 3G

FRAME SYNCHRONIZATION

P VD 5812

3G/HD/SD - Dual SDI Frame Sync with Audio Processing





P VD 5812 D

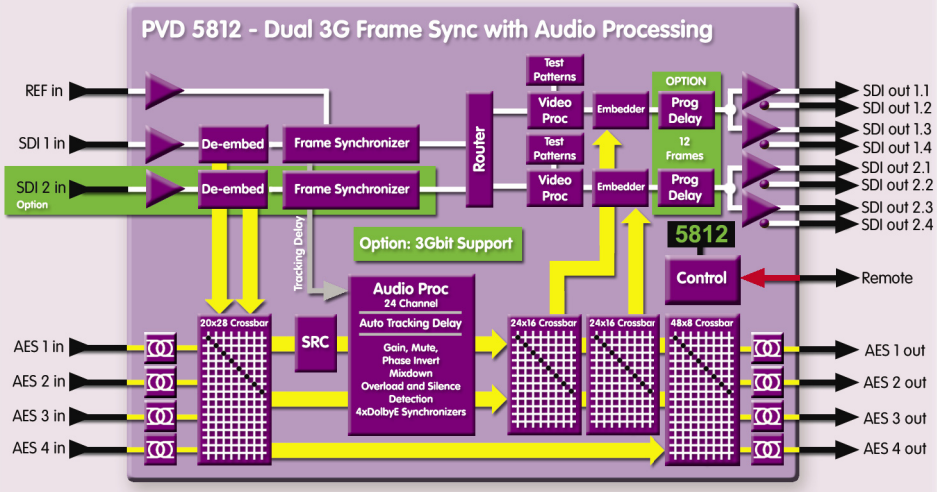
P VD 5812 B
Connection Panel Options

Features

- Supports SDI video signals up to 1.5Gbit. (3Gbit upgrade with licence code)
- One SDI input with 2 independent output channels. (Optional second input)
- Two output video processing amps with adj. gain, saturation, hue and pedestal
- 3 frame programabble video delay, with optional expansion to 12 frames
- Analog tri-level or bi-level (black) reference sync (auto-detect) - cross lock compatible
- Integrated test pattern generator for each output channel
- All audio (16 channels) is de-embedded from the SDI inputs
- 20x28 AES audio input crossbar
- 4 x external AES inputs and outputs (tansformer isolated)
- 24 channel audio processing stage includes gain / mute and invert plus stereo mixdown with overload and silence detection
- Each SDI output channel has its own 16 channel embedder
- 4 x DolbyE synchronizers to maintain guard band alignment
- Remote control and status monitoring provided via the LYNX control system

Ordering Information

Part #	Description
6155015288	P VD 5812 B - 3G/SD/HD Dual Frame Sync with Full Audio Support (BNC-unbalanced AES3id)
6155015812	P VD 5812 D - 3G/SD/HD Dual Frame Sync with Full Audio Support (SubD-unbalanced AES3)
1300000026	**OPTION :** OC-5812-3G - 3G Upgrade
1300000033	**OPTION :** OC-5812-VDLY - 12 Frame Programmable Delay
1300000022	**OPTION :** OC-5812-SCND - Second Input Option

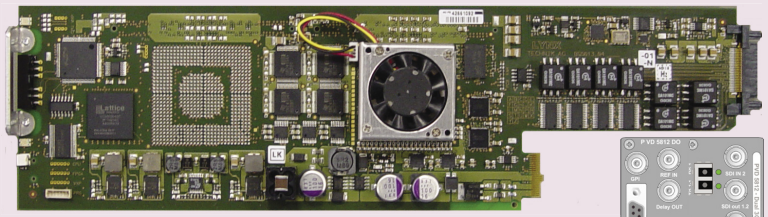


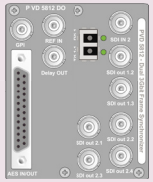
SDTV HD 1.5G HD 3G FIBER

FRAME SYNCHRONIZATION

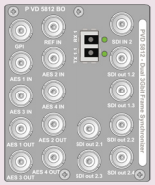
P VD 5812 O

3G/HD/SD - Dual SDI Frame Sync with Audio Processing





P VD 5812 D/O



P VD 5812 B/O

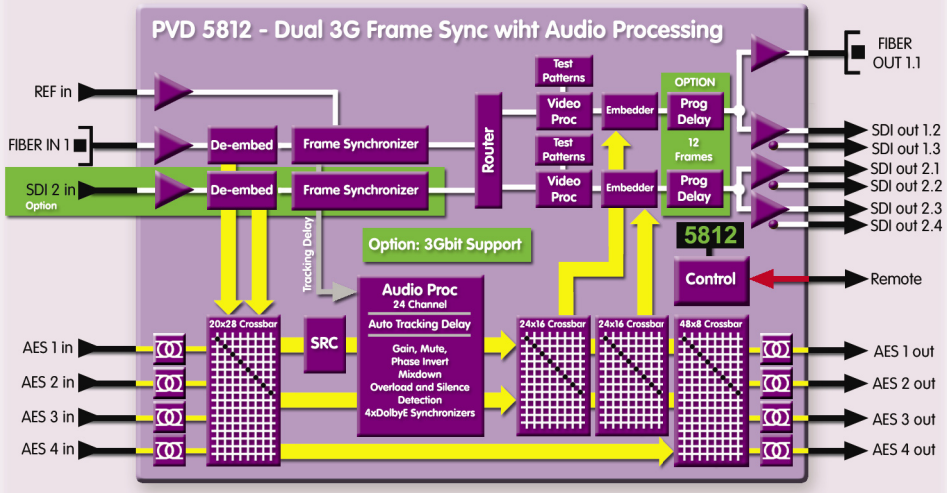
Features

- Supports SDI video signals up to 1.5Gbit. (3Gbit upgrade with licence code)
- One Fiber input with Fiber and electrical output channels
- Optional second SDI electrical input
- Two output video proc amps with adjustable gain, saturation, hue and pedestal
- 3 frame programmable video delay, with optional expansion to 12 frames
- Analog tri-level or bi-level (black) reference sync (auto-detect) - cross lock compatible
- All audio (16) de-embedded from the SDI inputs, 20x28 AES audio input crossbar
- 4 x external AES inputs and outputs (tansformer isolated)
- 24 channel audio processing stage includes gain / mute and invert
- Each SDI output channel has its own 16 channel embedder
- 4 x DolbyE synchronizers to maintain guard band alignment
- Remote control and status monitoring provided via the LYNX control system

Ordering Information

Mandatory Options : Please specify one fiber option

Part #	Description
6155025812	P VD 5812 BO - 3G/SD/HD Dual Frame Sync with Full Audio Support (BNC-unbalanced AES3id)
6155035812	P VD 5812 DO - 3G/SD/HD Dual Frame Sync with Full Audio Support (SubD-unbalanced AES3)
OH-TR-1	Optical Transceiver SFP module 1310nm - 10Km **NON CWDM**
OH-TR-4-XXXX	Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)
1300000026	**OPTION :** OC-5812-3G - 3G Upgrade
1300000033	**OPTION :** OC-5812-VDLY - 12 Frame Programmable Delay
1300000022	**OPTION :** OC-5812-SCND - Second Input Option

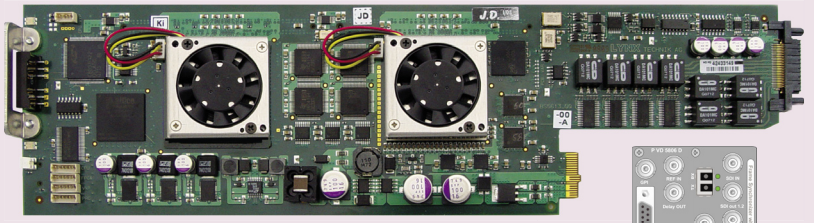


SDTV HD 1.5G HD 3G FIBER

FRAME SYNCHRONIZATION

P VD 5806

3G/HD/SD - SDI Frame Sync with Audio Processing



P VD 5806 D

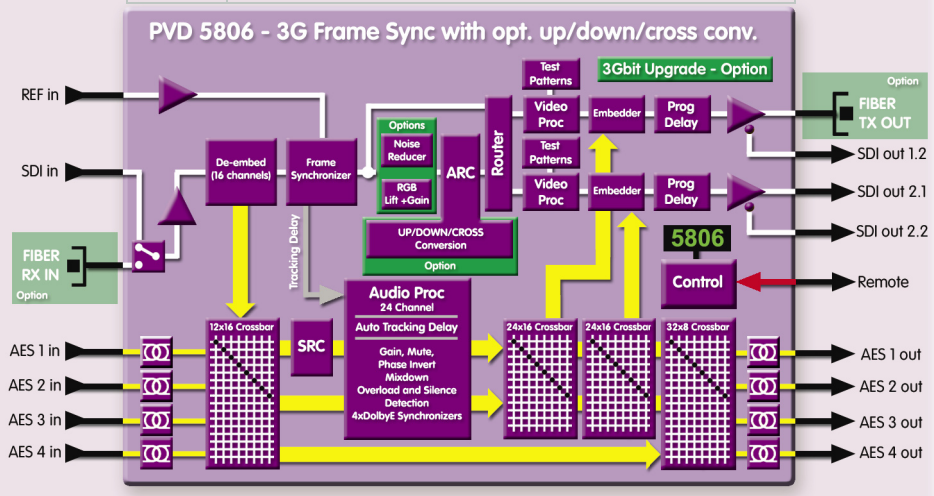
P VD 5806 B

Features

- Supports SDI video signals up to 1.5Gbit. (3Gbit upgrade with licence code).
- One SDI (electrical) input with optional Fiber I/O
- Optional Up/Down/Cross conversion and Noise Reduction
- Two output video processing amps with adj. gain, saturation, hue and pedestal.
- 3 frame programmable video delay.
- Analog tri-level or bi-level (black) reference sync (auto-detect) cross lock compatible.
- All audio (16) de-embedded from the SDI input, 12x16 AES audio input crossbar.
- 4 x external AES inputs and outputs (tansformer isolated).
- 24 channel audio processing stage includes gain / mute and invert
- Each SDI output channel has its own 16 channel embedder.
- 4 x DolbyE synchronizers to maintain guard band alignment.

Ordering Information

Part #	Description
5155005860	P VD 5806 B - 3G/SD/HD Frame Sync with Full Audio Support (BNC-unbalanced AES3id)
5155015860	P VD 5806 D - 3G/SD/HD Frame Sync with Full Audio Support (SubD-unbalanced AES3)
OH-TR-1	**OPTION:** Optical Transceiver SFP module 1310nm - 10Km **NON CWDM**
OH-TR-4-XXXX	**OPTION:** Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)
1300000025	**OPTION :** OC-5806-3G - 3G Upgrade
1300000017	**OPTION :** OC-5806-UPXD - High Quality Up/Down/Cross Conversion
1300000036	**OPTION :** OC-5806-NR - Noise Reduction
1300000059	**OPTION :** OC-5806-COCO - RGB Gain and Lift Controls

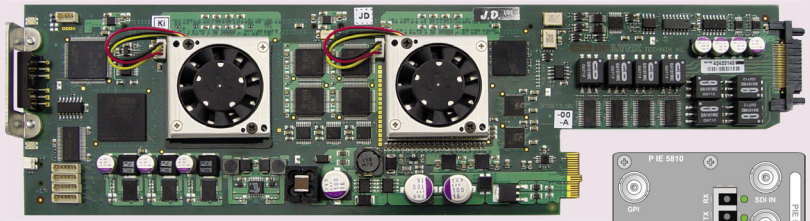


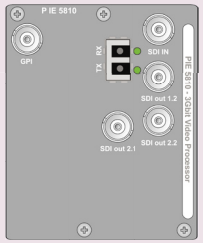
SDTV HD 1.5G HD 3G FIBER

IMAGE PROCESSING

P IE 5810

3G/HD/SD - Flexible Image Processing Platform





P IE 5810
Connection Panel
Note: This is a double width connection panel and will occupy two rack slots

Features

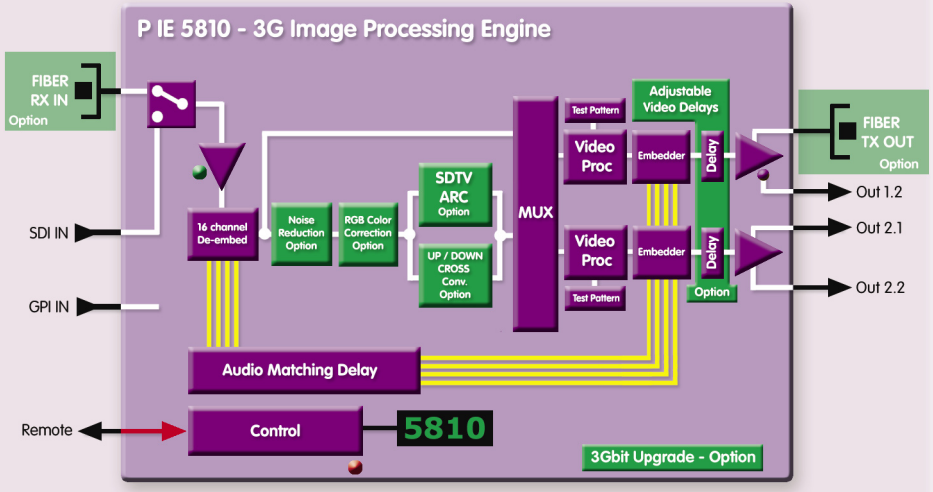
This module is a general purpose video processing engine that can be custom configured using firmware options. Pick and mix the signal processing functions required to suite your specific application.

Use only one firmware option or use them all concurrently. Options are simple to install at any time - simply purchase a license code to activate. Available options are shown below:

Ordering Information

Mandatory Options : Please specify at least one firmware option

Part #	Description
5155525810	P IE 5810 - HD/SD Image Processing Engine
1000000028	**OPTION:** OC-5810-ARC - High Quality SDTV Aspect Ratio Converter
1000000031	**OPTION:** OC-5810-UPXD - Up / Down / Cross Converter
1000000029	**OPTION:** OC-5810-NR - Noise Reduction
1300000032	**OPTION:** OC-5810-VDLY - 12 Frame Programmable Video Delay for Each Output Channel
1000000030	**OPTION:** OC-5810-COCO - RGB Gain and Lift Controls
1000000027	**OPTION:** OC-5810-3G - 3Gbit Upgrade
OH-TR-1	**OPTION:** Fiber Transceiver SFP module 1310nm (non CWDM)
OH-TR-4-XXXX	**OPTION:** Optical Transceiver SFP Module - 40Km **CWDM** (Select wavelength from Table A, Page 32)

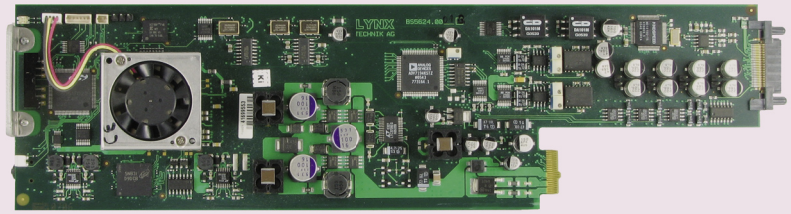


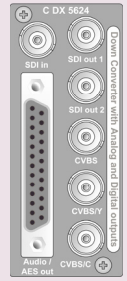
SDTV HD 1.5G

DOWN CONVERSION

C DX 5624

Down Converter with Analog Video and Audio Outputs





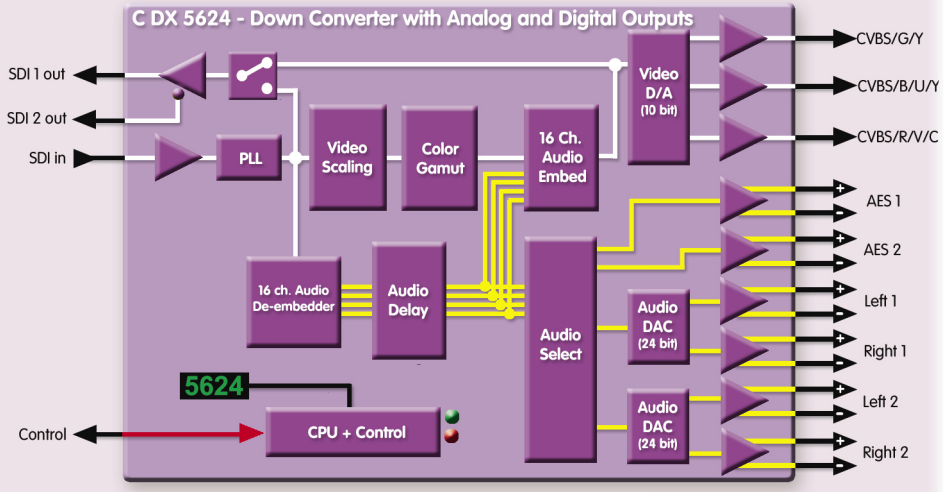
Connection Panel

Features

- HD-SDI inputs up to 1.5Gbit
- Automatic HD input standard detection
- 10 bit signal processing throughout
- 10 bit video D/A conversion with 54MHz sampling
- Video processing amp with adjustable Gain, Saturation, Hue and Lift controls
- Composite and YC or YUV or RGB analog video outputs
- 2 x SDTV SDI outputs (or additional HD-SDI outputs)
- 709 to 601 color space conversion
- Selectable 4:3 output modes: Letterbox, Center cut, Stretch to fill
- Integrated de-embedder and embedder (16 channel)
- Audio delayed to match processing delay
- 2 x stereo pair balanced analog audio outputs
- Selectable analog Full Scale level and adjustable gain
- 2 x digital AES3 balanced outputs
- Built in matrix display with menu system for local control
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable

Ordering Information

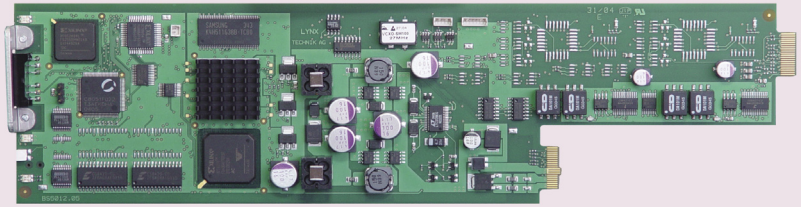
Part #	Description
5155005624	C DX 5624 Down Converter with Analog and Digital Outputs



AUDIO DELAY

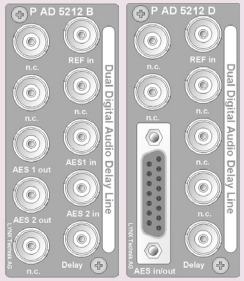
P AD 5212

Dual AES Digital Audio Delay



Features

- Up to 10 Seconds of programmable audio delay
- 2 independent audio delay channels
- Channel coupling or independent delay for each AES channel
- Sample rate converter with bypass
- Support for 32Hz, 44.1Hz, 48KHz, 96KHz sample rates
- Selectable 20 or 24 bit operation
- Delay adjustable in millisecond and second increments
- Lock to external video reference / rack video reference or internal clock
- Auto tracking mode to external delay pulse (e.g. from P VD 5000)
- Each AES input can be independently assigned to any output
- Channel mute and left and right channel swap
- Transformer coupled AES inputs and outputs
- Remote control and error reporting when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot swappable

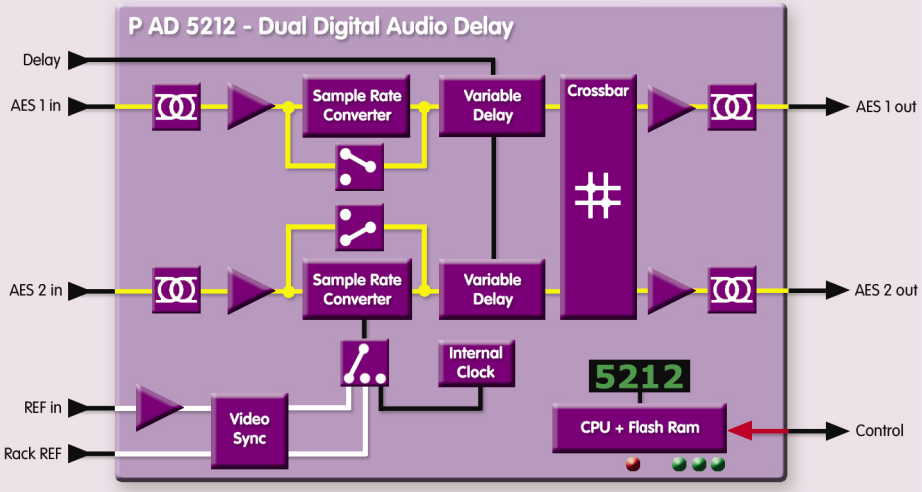


P AD 5212 B **P AD 5212 D**

Connection Panel Options

Ordering Information

Part #	Description
5155007790	P AD 5212 B - Dual AES Audio Delay Line (BNC for unbalanced AES3id)
5155007770	P AD 5212 D - Dual AES Audio Delay Line (SubD for balanced AES3))

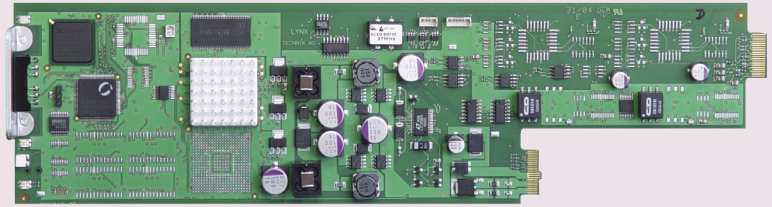


SDTV

TEST SIGNAL GENERATOR

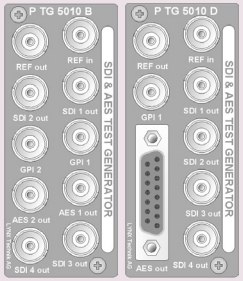
P TG 5010

SDI Video and AES Audio Test Generator



Features

- SD-SDI video and AES audio test generator
- 4:3 and 16:9 modes of operation
- 4 independent SDI outputs (each can have its own pattern)
- Large library of standard static video test patterns (bars/sweeps/ramps ect)
- Dynamic patterns including circular Zoneplate
- Dynamic IRT audio synchronization test pattern
- 4 channel audio test generator combined into 2 x AES streams
- 20 or 24 bit 48KHz digital audio
- Adjustable audio test tone frequency (20 to 20KHz in 1 Hz steps)
- Adjustable audio gain (0 to -60dB) for each channel
- Selectable momentary pause (silence) for left channel
- 2 external AES outputs, transformer coupled
- Audio embedded into all four video outputs
- Character generator overlay, with 8 characters (max) for each output
- Genlock with one frame of adjustable timing in pixels and lines
- Hot swappable

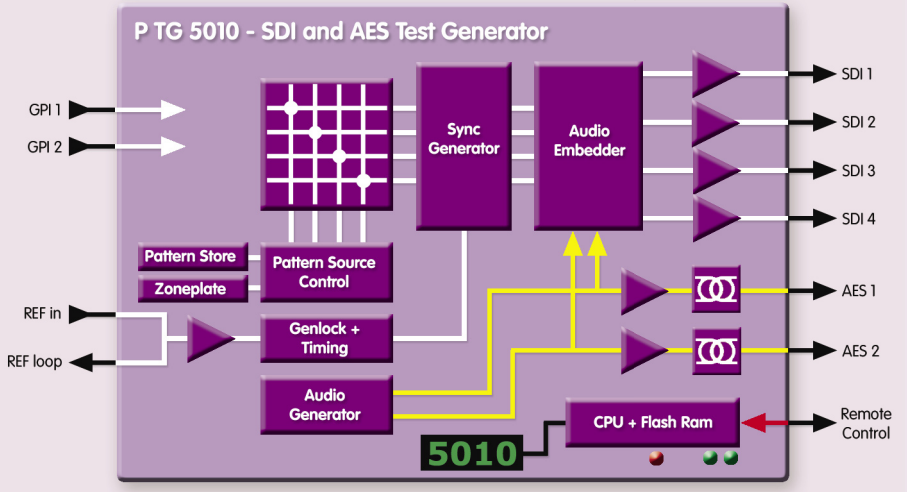


P TG 5010 B **P TG 5010 D**

Connection Panel Options

Ordering Information

Part #	Description
5155007300	P TG 5010 B SDI and AES Test Generator (BNC for unbalanced AES3id)
5155007320	P TG 5010 D SDI and AES Test Generator (SubD for balanced AES3)

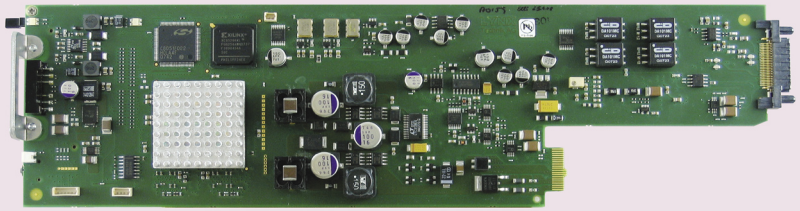


SDTV HD 1.5G

TEST SIGNAL GENERATORS

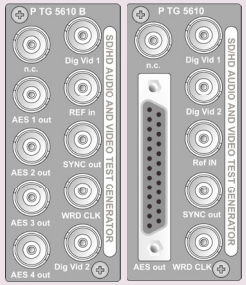
P TG 5610

SD/HD-SDI Video and AES Audio Test Generator



Features

- Multi-format operation up to 1.5Gbit
- Two independent SDI outputs (can have different patterns)
- Large library of static and dynamic patterns
- Load additional patterns using the compact flash slot
- CF Card supplied with hundreds of extra patterns
- 4 x External AES outputs with 16 channel embedder for each SDI output
- 8 channel user programmable audio generator
- Multi-format and cross lock compatible genlock input
- One frame of adjustable output timing for video and sync outputs
- Includes EBU A/V sync pattern for transmission alive and audio lip sync tests
- Real time Zoneplate generator for chrominance and luminace
- User adjustable H and V Zoneplate center frequency
- Multi-format analog sync output (bi-level or tri-level)
- Use as standalone sync generator or genlock to station sync
- All AES outputs are transformer coupled (isolated)
- 48KHz Word Clock output
- Remote control and error reporting when used with LYNX control system
- Hot swappable

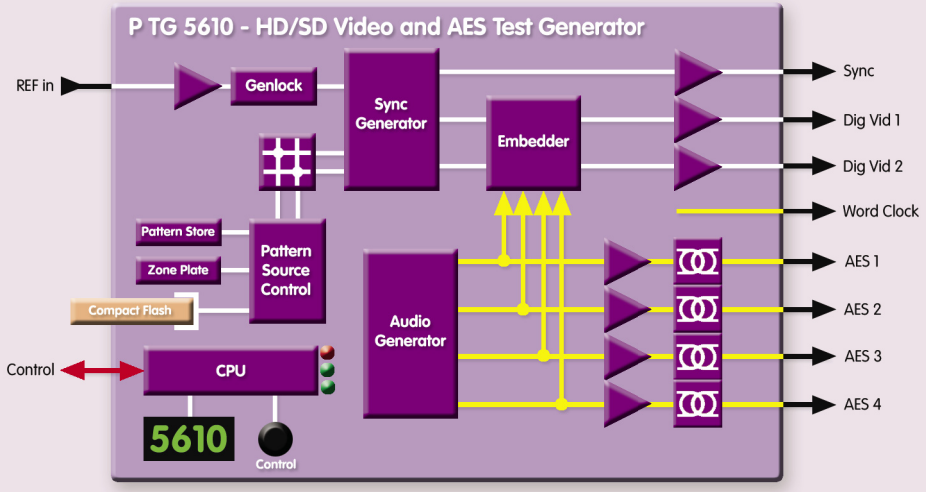


P TG 5610 B P TG 5610 D

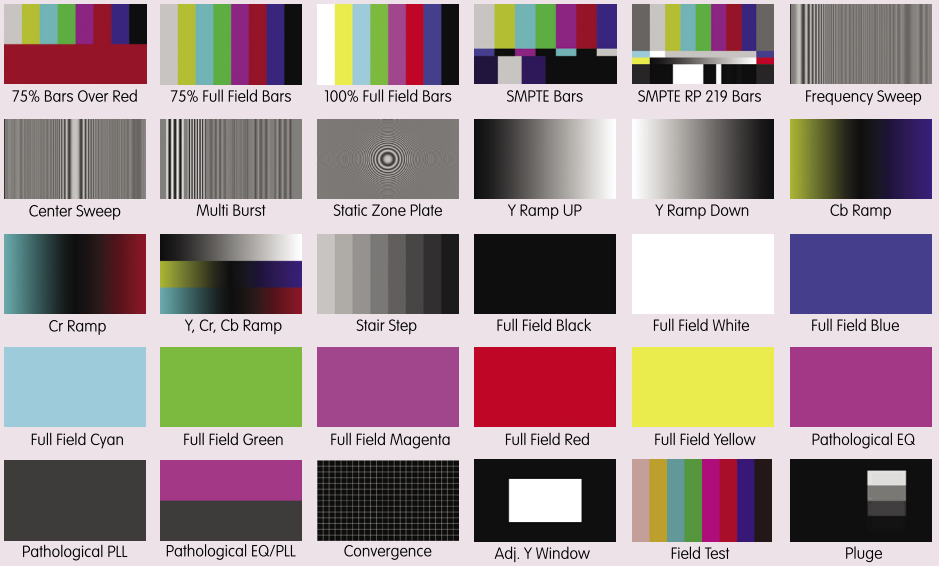
Connection Panel Options

Ordering Information

Part #	Description
5155006100	P TG 5610 B - SD/HD SDI Video and AES Audio Test Generator (BNC for unbalanced AES3id)
5155006110	P TG 5610 D - SD/HD SDI Video and AES Audio Test Generator (SubD for balanced AES3)



Static Test Patterns

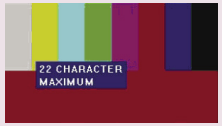


Dynamic Test Patterns

Design and Load Your Own Patterns

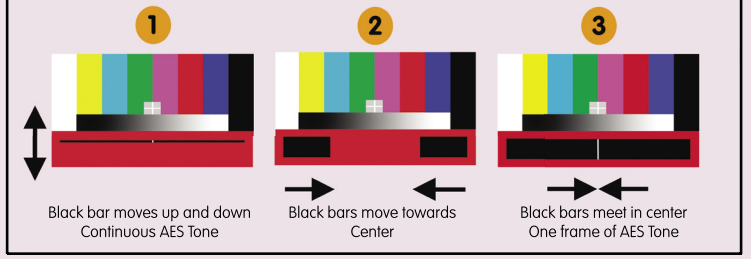
With the compact flash slot enabled it is possible to load any standard DPX file into the module for use as a custom test pattern, or download additional test patterns from the LYNX Technik website.

Character Overlay



- User defined text (22 characters)
- User defined font color
- User defined background color
- User defined screen position
- Independent for each output

EBU Audio Sync Test Pattern

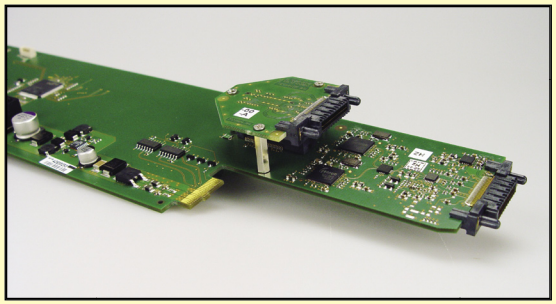


FIBER OPTIC CONNECTIVITY

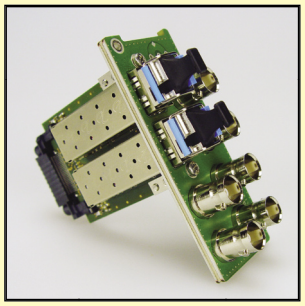
Fiber Implementation

A host of Series 5000 modules now provide Fiber Optic I/O capability. While Fiber I/O is not unique for terminal equipment, the LYNX Technik implementation is well engineered compared to alternate methods offered by other manufacturers. LYNX Technik uses small SFP sub modules for Fiber I/O. These offer the convenience of being modular themselves; which makes adding Fiber capability or changing system configurations (wavelengths) easy and greatly simplifies maintenance tasks.

SFP Fiber Sub Module



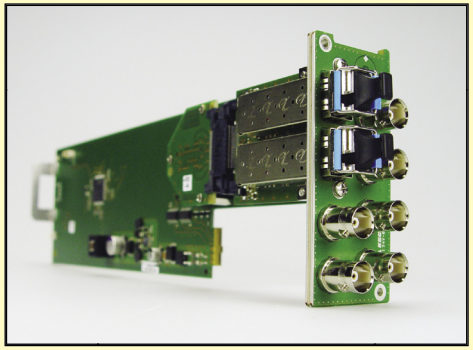
Fiber Backplane Sockets on Module



Backplane with integrated fiber

We have integrated the Fiber I/O into the backplane assembly, which means the module can be removed from the rack for service without disconnecting the Fiber cables from the module. Alternate solutions have the fiber I/O fixed to the module itself and fed through a hole in the rear of the rack. Removing the module pulls the delicate fiber cables into the rack which can result in damage to the fiber link. There is also no need to have cable "fiber loops" gathered on top of the modules.

LYNX Technik offers a full range of SFP fiber sub modules, which are user-selectable. These range from basic low cost non CWDM fixed wavelength transmitters for simple point to point applications to a full range of CWDM transmitters with 18 selectable wavelengths for multiplexed applications. We also provide two compact 9 channel CWDM optical multiplexers, to build a fully integrated fiber connectivity solution with up to 18 SD/HD/3G SDI signals combined in a single bi-directional fiber connection.



Module and Backplane Connected

CWDM

LYNX Technik offers comprehensive support for CWDM (Coarse Wavelength Division Multiplexing) with 18 selectable laser wavelengths as specified by ITU-T G692.2. CWDM is a process used to optically multiplex signals into a single fiber link. With the selection of different wavelength fiber transmitters and the use of our OCM passive optical multiplexers it is easy to configure a bidirectional CWDM fiber transmission system. The OCM passive multiplexers also fit into the Series 5000 rack frames providing a small footprint single and unified system solution.

Non CWDM

CWDM Fiber modules are precision devices and therefore cost more. For simple applications that only require a single point to point fiber connection a "non CWDM" fiber module is a more cost effective solution. The non CWDM modules are fixed wavelength (1310nm) LYNX Technik provides 18 x CWDM selections and a "non CWDM" option for all fiber equipped modules.

Fiber Option Selection Tables

Module information pages throughout this catalog refer to the fiber option tables below. Some modules have the fiber option specified as a mandatory selection, meaning the basic module price does not include the fiber SFP (and is therefore not functional). Please select the device(s) requires from the tables below.

Table A (CWDM Transceiver)

Model Number	Wavelength	Model Number	Wavelength
OH-TR-1	1310nm **(non CWDM)**	**OH-TR-4-1450**	1450nm (CWDM)
OH-TR-4-1270	1270nm (CWDM)	**OH-TR-4-1470**	1470nm (CWDM)
OH-TR-4-1290	1290nm (CWDM)	**OH-TR-4-1490**	1490nm (CWDM)
OH-TR-4-1310	1310nm (CWDM)	**OH-TR-4-1510**	1510nm (CWDM)
OH-TR-4-1330	1330nm (CWDM)	**OH-TR-4-1530**	1530nm (CWDM)
OH-TR-4-1350	1350nm (CWDM)	**OH-TR-4-1550**	1550nm (CWDM)
OH-TR-4-1370	1370nm (CWDM)	**OH-TR-4-1570**	1570nm (CWDM)
OH-TR-4-1390	1390nm (CWDM)	**OH-TR-4-1590**	1590nm (CWDM)
OH-TR-4-1410	1410nm (CWDM)	**OH-TR-4-1610**	1610nm (CWDM)
OH-TR-4-1430	1430nm (CWDM)		

Table B (Dual Channel CWDM Transmitter)

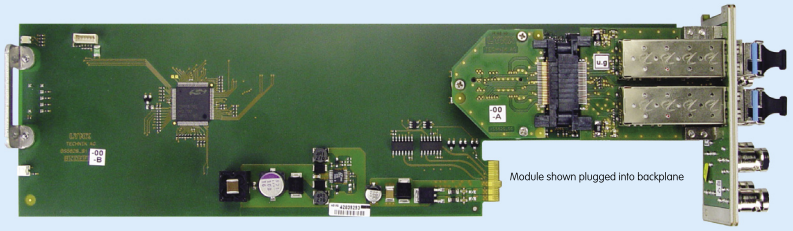
Model Number	Wavelengths (dual channel)
OH-TT-1	1310nm, 1310nm **(non CWDM)**
OH-TT-4-1270-1290	1270nm, 1290nm (CWDM)
OH-TT-4-1310-1330	1310nm, 1330nm (CWDM)
OH-TT-4-1350-1370	1350nm, 1370nm (CWDM)
OH-TT-4-1390-1410	1390nm, 1410nm (CWDM)
OH-TT-4-1430-1450	1430nm, 1450nm (CWDM)
OH-TT-4-1470-1490	1470nm, 1490nm (CWDM)
OH-TT-4-1510-1530	1510nm, 1530nm (CWDM)
OH-TT-4-1550-1570	1550nm, 1570nm (CWDM)
OH-TT-4-1590-1610	1590nm, 1610nm (CWDM)

SDTV HD 1.5G HD 3G FIBER

FIBER CONVERTERS

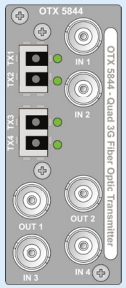
OTX 5844

3Gbit Quad SDI Fiber Transmitter



Features

- 4 independent optical TX channels and 2 x electrical outputs
- Supports SDI/ASI/DVB and SMPTE 310 up to 3Gbit/s
- CWDM or non CWDM via optional fiber SFP modules
- Selection of 18 wavelengths for CWDM applications
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode
- Input presence detection with LED indication for each channel
- Internal 4x6 signal router for flexible I/O mapping (remote only)
- LC fiber optic connections, single mode or multimode fiber
- Fiber SFP modules secured in backplane (removable)
- Module can be freely removed or replaced without disconnecting fiber cables
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable

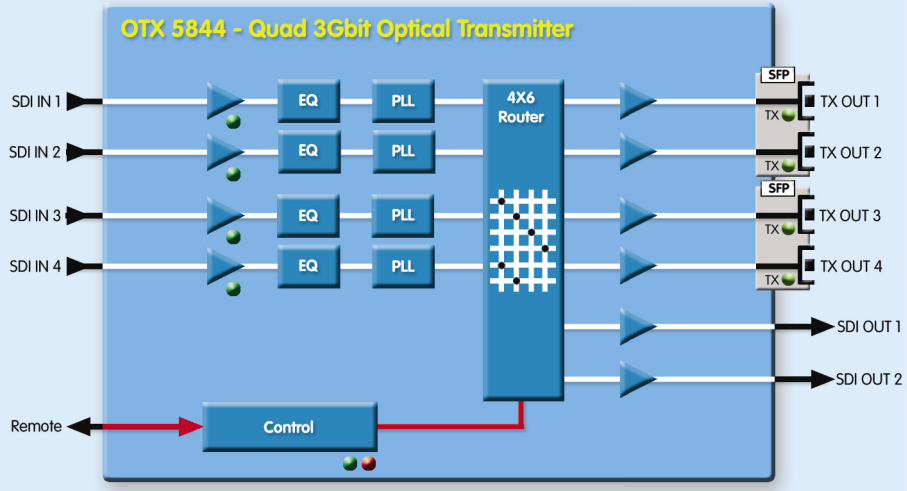


Connection Panel

Ordering Information

Mandatory Options : Please specify two fiber options

Part #	Description
6155025814	OTX 5844 - 3Gbit Quad SDI Fiber Transmitter
OH-TT-1	**OPTION:** Dual channel 1310nm SFP Transmitter (**non CWDM**)
OH-TT-4-XXXX-XXXX	**OPTION:** Dual channel SFP Transmitter (**CWDM**) Select wavelengths from Table B, Page 32

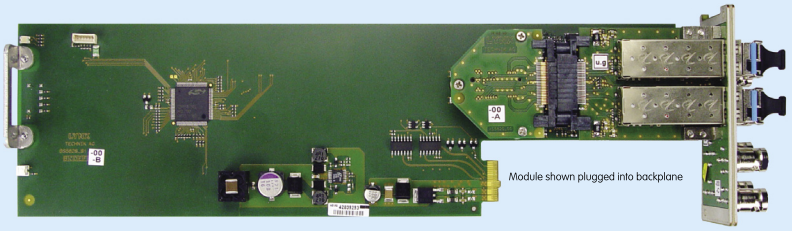


SDTV HD 1.5G HD 3G FIBER

FIBER CONVERTERS

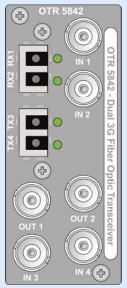
OTR 5842

3Gbit Dual SDI / Fiber Transceiver



Features

- 2 independent Fiber RX channels (1260nm - 1620nm)
- 2 Independent Fiber TX channels
- 2 channels selectable between optical or electrical inputs
- CWDM or non CWDM via optional fiber SFP modules
- Selection of 18 wavelengths for CWDM applications
- Supports SDI/ASI/DVB and SMPTE 310 up to 3Gbit/s
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode
- Input presence detection with LED indication for each channel
- Internal 4x4 router for flexible I/O mapping (remote only)
- LC fiber connections, single mode or multimode fiber
- Fiber SFP modules secured in backplane (removable)
- Module can be freely removed or replaced without disconnecting fiber cables
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable

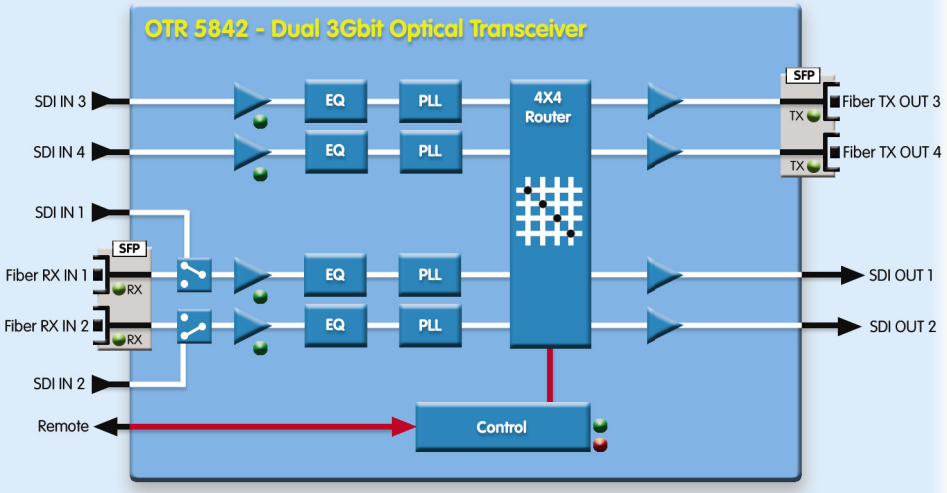


Connection Panel

Ordering Information

Mandatory Options : Please specify one fiber option (receiver SFP included)

Part #	Description
6155025842	OTR 5842 - 3Gbit Dual SDI / Fiber Transceiver
OH-TT-1	**OPTION:** Dual channel 1310nm SFP Transmitter (**non CWDM**)
OH-TT-4-XXXX-XXXX	**OPTION:** Dual channel SFP Transmitter (**CWDM**) Select wavelengths from Table B. Page 32

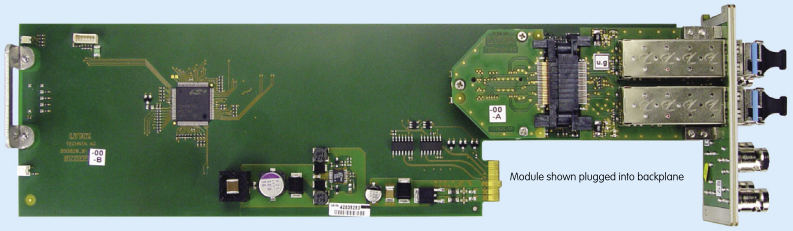


SDTV HD 1.5G HD 3G FIBER

FIBER CONVERTERS

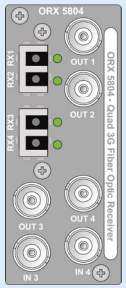
O RX 5804

3Gbit Quad SDI Fiber Receiver



Features

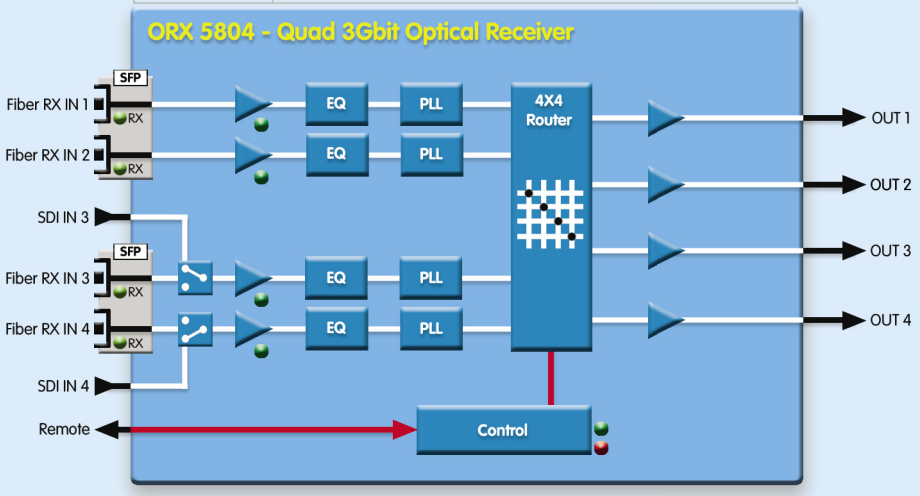
- 4 independent Fiber RX channels and 4 x SDI outputs
- Supports SDI/ASI/DVB and SMPTE 310 up to 3Gbit/s
- 1260nm to 1620nm wavelength operational range
- Selectable electrical / optical inputs for 2 channels
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode
- Input presence detection with LED indication for each channel
- Internal 4x4 signal router for flexible I/O mapping (remote only)
- LC fiber connections, single mode or multimode fiber
- Fiber SFP modules secured in backplane (removable)
- Module can be freely removed or replaced without disconnecting fiber cables
- Remote control and error reporting when used with LYNX control system
- SNMP error reporting when used with master controller option
- Hot Swappable



Connection Panel

Ordering Information

Part #	Description
6155025804	ORX 5804 - 3Gbit Quad SDI Fiber Receiver

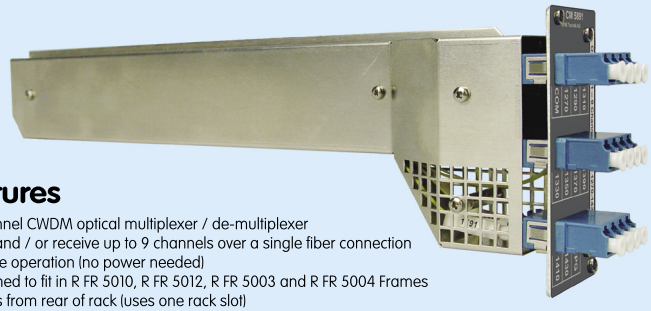


SDTV HD 1.5G HD 3G FIBER

OPTICAL MULTIPLEXERS

O CM 5891

9 Channel Optical Multiplexer / De-multiplexer

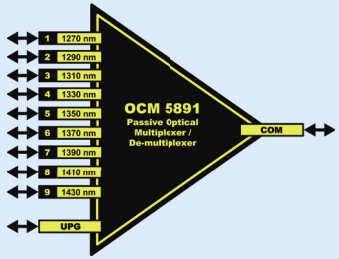


Features

- 9 channel CWDM optical multiplexer / de-multiplexer
- Send and / or receive up to 9 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5010, R FR 5012, R FR 5003 and R FR 5004 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, single mode
- UPG port for expansion (connect to O CM 1892 to add 9 more channels)
- Use with LYNX modules configured with CWDM fiber SFP options

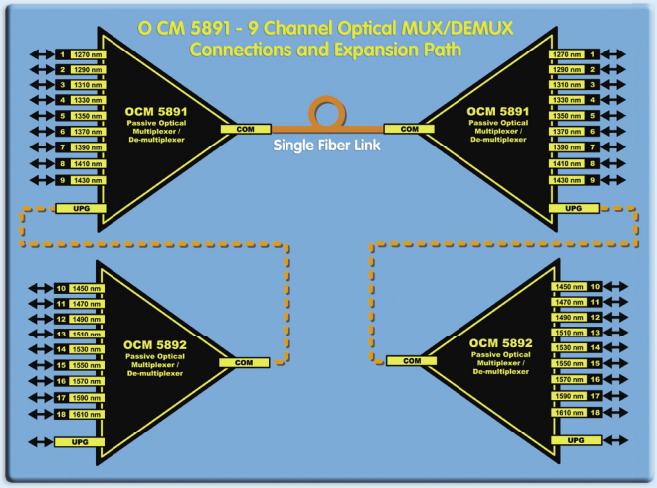
OCM 5891

Optical I/O	9 x Fiber Optic I/O channels
	Channel 1 = 1270nm
	Channel 2 = 1290nm
	Channel 3 = 1310nm
	Channel 4 = 1330nm
	Channel 5 = 1350nm
	Channel 6 = 1370nm
	Channel 7 = 1390nm
	Channel 8 = 1410nm
	Channel 9 = 1430nm



Ordering Information

Part #	Description
1000005891	O CM 5891 - 9 Channel Optical Multiplexer / De-multiplexer 1270 - 1430nm

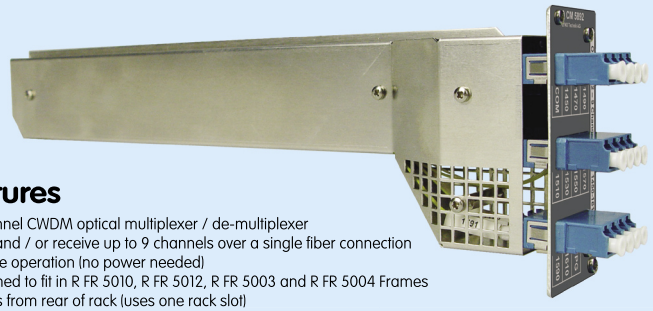


SDTV HD 1.5G HD 3G FIBER

OPTICAL MULTIPLEXERS

9 Channel Optical Multiplexer / De-multiplexer

O CM 5892



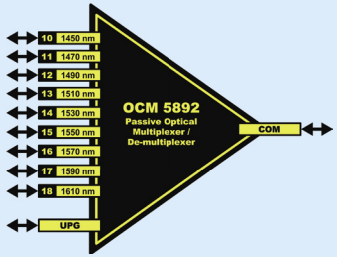
Features

- 9 channel CWDM optical multiplexer / de-multiplexer
- Send and / or receive up to 9 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5010, R FR 5012, R FR 5003 and R FR 5004 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, single mode
- UPG port for expansion (connect to O CM 1891 to add 9 more channels)
- Use with LYNX modules configured with CWDM fiber SFP options

OCM 5892

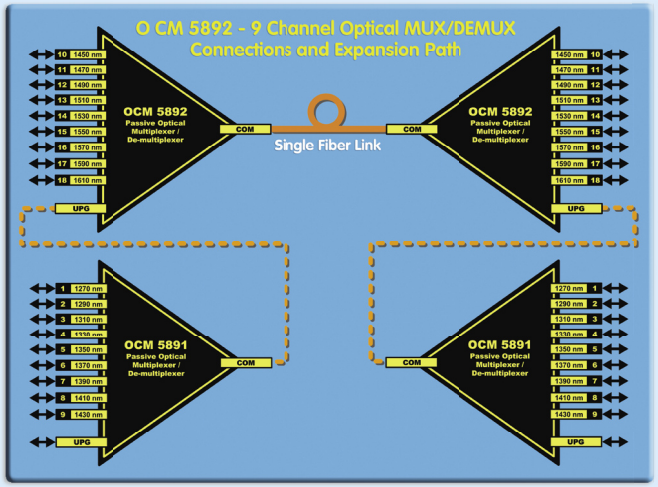
Optical I/O — 9 x Fiber Optic I/O channels

Channel 10 = 1450nm
Channel 11 = 1470nm
Channel 12 = 1490nm
Channel 13 = 1510nm
Channel 14 = 1530nm
Channel 15 = 1550nm
Channel 16 = 1570nm
Channel 17 = 1590nm
Channel 18 = 1610nm



Ordering Information

Part #	Description
1000005892	O CM 5892 - 9 Channel Optical Multiplexer / De-multiplexer 1450 - 1610nm



SDTV HD 1.5G HD 3G FIBER

OPTICAL MULTIPLEXERS

18 Channel Optical Multiplexer / De-multiplexer

O CM 5818

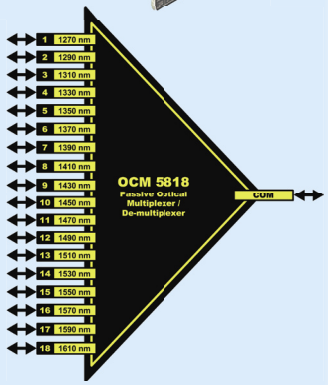
Features

- 18 channel CWDM optical multiplexer / de-multiplexer
- Send and / or receive up to 18 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5010, R FR 5012, R FR 5003 and R FR 5004 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, single mode
- Use with LYNX modules configured with CWDM fiber SFP options

OCM 5818

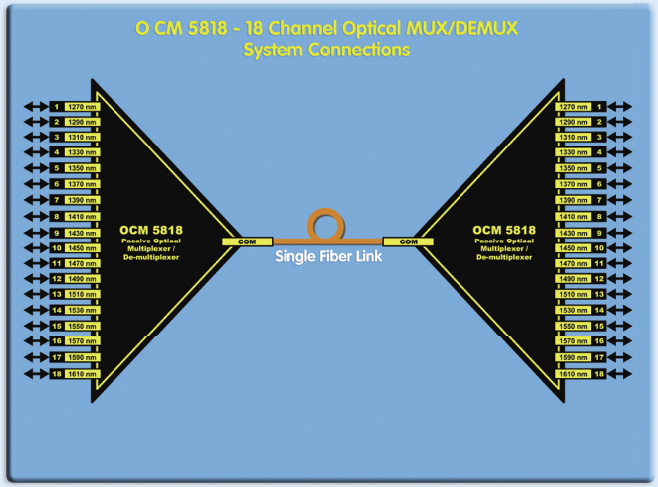
Optical I/O — 18 x Fiber Optic I/O channels

Channel 1 = 1270nm
Channel 2 = 1290nm
Channel 3 = 1310nm
Channel 4 = 1330nm
Channel 5 = 1350nm
Channel 6 = 1370nm
Channel 7 = 1390nm
Channel 8 = 1410nm
Channel 9 = 1430nm
Channel 10 = 1450nm
Channel 11 = 1470nm
Channel 12 = 1490nm
Channel 13 = 1510nm
Channel 14 = 1530nm
Channel 15 = 1550nm
Channel 16 = 1570nm
Channel 17 = 1590nm
Channel 18 = 1610nm



Ordering Information

Part #	Description
1000005818	O CM 5818 - 18 Channel Optical Multiplexer / De-multiplexer 1270 - 1610nm



SDTV HD 1.5G HD 3G FIBER

RACK FRAMES

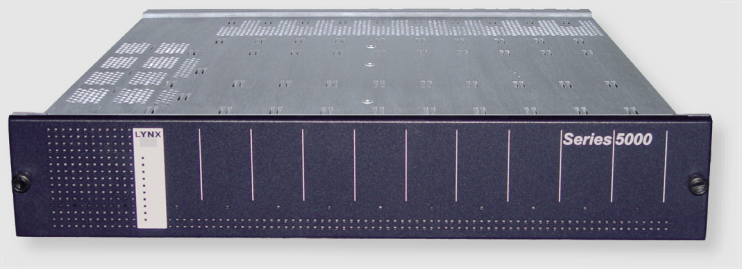
R FR 5010

2 RU Rack Frame for Series 5000

Features

Compact 19 inch 2 RU rack mount rack frame which accommodates any 10 CardModules, primary and redundant power supplies plus optional rack controller. The high quality stainless steel construction is fully EMC/FCC compliant. All racks are pre-wired for the LYNX control system.

Note: This version is recommended when multiple low power modules are used, e.g. Distribution Amplifiers.



Ordering Information

Part #	Description
6155001000	R FR 5010 19" Rack Frame with Primary Power Supply
6155001011	**Option** : RPS 5010 Redundant Power Supply

R FR 5012

Fan Cooled 2 RU Rack Frame for Series 5000

Features

Compact 19 inch 2 RU rack mount rack frame which accommodates any 10 CardModules, primary and redundant power supplies plus optional rack controller. Fan cooling is provided through the front cover. The high quality stainless steel construction is fully EMC/FCC compliant. All racks are pre-wired for the LYNX control system.

Note: This version is recommended when multiple medium or high power modules are used.

Ordering Information

Part #	Description
6155005012	R FR 5012 19" Rack Frame with Primary Power Supply with Fan Front Cover
6155025012	**Option** : R PS 5012 Redundant Power Supply

SDTV HD 1.5G HD 3G FIBER

RACK FRAMES

R FR 5003

1 RU Rack Frame for 3 x Series 5000 Modules

Features

Compact 19 inch 1 RU rack mount rack frame which accommodates any 3 CardModules, primary and redundant power supplies plus the integrated LAN controller for use with the LYNX control system (software included)

Note. Modules that have a double width backplane for the 2RU rack are supplied with a double height connection panel for the 1RU frame, and will occupy two slots.

Ordering Information

Part #	Description
6155505000	R FR 5003 1 RU Rack Frame with Primary and Redundant Power Supply + LAN controller + Software

R FR 5004

1 RU Rack Frame for 4 x Series 5000 Modules

Features

Compact 19 inch 1 RU rack mount rack frame which accommodates any 4 CardModules, primary power supply plus integrated LAN controller for use with the LYNX control system (software included). This version has an external DC input for redundant power protection using the optional RPS 5000 external power supply.

Note. Modules that have a double width backplane for the 2RU rack are supplied with a double height connection panel for the 1RU frame, and will occupy two slots.

Ordering Information

Part #	Description
6155505004	R FR 5004 1 RU Rack Frame with Primary Power Supply + LAN + Software
6155012208	**Option** : R PS 5000 External Redundant Power Supply (Brick)

Optional External Redundant PSU RPS 5000

ACCESSORIES

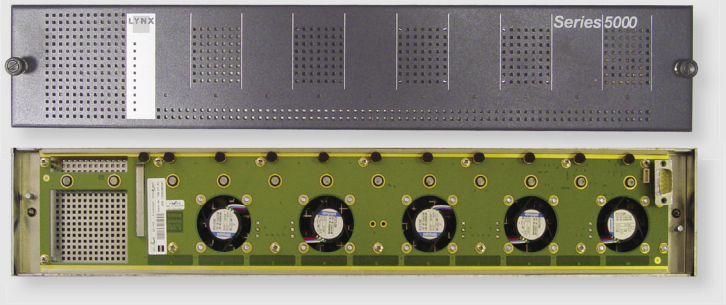
R FR 5001

Fan Front Panel Upgrade for R FR 5010 Rack Frame

Features

Designed to provide additional cooling and airflow into the front of the RFR 5010 rack frame. Features low noise DC fans with fan failure LED indication as well as monitoring capability through the LYNX control system. This item is the upgrade unit for existing R FR 5010 racks. For new systems, order the RFR 5012 rack frame which includes a front cover fan.

Note: This cover is recommended for systems that have a high percentage of complex processing cards.



Ordering Information

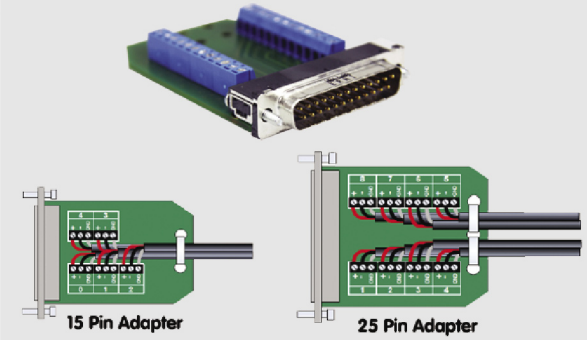
Part #	Description
6155001010	R FR 5001 Fan Front Cover Upgrade Kit for R FR 5010 (replaces standard cover)

R BO 5015,25

SubD Audio Adapter PCBs

Features

Analog audio and balanced AES connections to the modules are made using SubD connectors on the module backplanes (15 or 25 pin). The RBO 5015 and RBO 5025 PCB adapters can be used to facilitate connections via terminal strips. (As an alternative to using the optional breakout cable assemblies; or soldering custom connectors).



Ordering Information

Part #	Description
4155020015	R BO 5015 15 Pin SubD Audio Adapter PCB
4155020025	R BO 5025 25 Pin SubD Audio Adapter PCB

ACCESSORIES

Audio Adapter Cables

Features

For CardModules that utilize SubD connections for balanced audio we provide 7 breakout cables which adapts the SubD connection to standard in line 3 pin XLR connectors.

The table below shows audio adapter cable module compatibility:

R AC M25-8 SubD 25 (male) to 8 x XLR (male)	
Audio adapter cable with 1 x male Sub D 25 pin connector to 8 x Standard in line male XLR connectors.	For use with the following modules: **C DA 5220-D, D AA 5320-D, DAD 5321-D, D AD 5220-D, P DM 5288-D, P DX 5214-D, P DX 5314-D, P DX 5362-D, C DX 5624**
R AC F25-8 SubD 25 (male) to 8 x XLR (female)	
Audio adapter cable with 1 x male Sub D 25 pin connector to 8 x Standard in line female XLR connectors.	For use with the following modules: **C AD 5320-D, P DM 5288-D, PMX 5214-D, P MX 5312-D, P MX 5364**
R AC M15-4 SubD 15 (male) to 4 x XLR (male)	
Audio adapter cable with 1 x male Sub D 15 pin connector to 4 x Standard in line male XLR connectors.	For use with the following modules: **P TG 5010-D, P TG 5610-D**
R AC MF15-2/2 SubD 15 (male) to 2 x XLR (male) and 2 x XLR (female)	
Audio adapter cable with 1 x male Sub D 15 pin connector to 2 x Standard in line male XLR connectors and 2 x standard male XLR in line connectors.	For use with the following modules: **C AD 5320-D, C DA 5220-D, D AD 5220-D, D AA 5320-D, D AA 5321-D, P AD 5212 D**
R AC MF25-4/4 CMX SubD 25 (male) to 4 x XLR (male) and 4 x XLR (female)	
Audio adapter cable with 1 x male Sub D 25 pin connector to 4 x Standard in line male XLR connectors and 4 x standard male XLR in line connectors.	**C MX 5110**
R AC MF25-2/6 SubD 25 (male) to 2 x XLR (male) and 6 x XLR (female)	
Audio adapter cable with 1 x male Sub D 25 pin connector to 2 x Standard in line male XLR connectors and 6 x standard male XLR in line connectors.	**C MX 5112**
R AC MF25-4/4 SubD 25 (male) to 4 x XLR (male) and 4 x XLR (female)	
Audio adapter cable with 1 x male Sub D 25 pin connector to 4 x Standard in line male XLR connectors and 4 x standard male XLR in line connectors.	**P VD 5612-D, P VD 5630-1-D, P VD 5660-D, P VD 5806-D, P VD 5812-D**

Ordering Information

Part #	Description
5155005100	**R AC M25-8** Audio Adapter cable SubD 25 (male) to 8 XLR (male)
5155005105	**R AC F25-8** Audio Adapter cable SubD 25 (male) to 8 XLR (female)
5155005110	**R AC M15-4** Audio Adapter cable SubD 15 (male) to 4 XLR (male)
5155005115	**R AC MF15-2/2** Audio Adapter cable SubD 15 (male) to 2 XLR (male) and 2 x XLR (female)
5255005115	**R AC MF25-4/4 CMX** Audio Adapter cable SubD 25 (male) to 4 XLR (male) and 4 x XLR (female)
5155005200	**R AC MF25-2/6** Audio Adapter cable SubD 25 (male) to 2 XLR (male) and 6 x XLR (female)
5255001200	**R AC MF25-4/4** Audio Adapter cable SubD 25 (male) to 4 XLR (male) and 4 x XLR (female)

RACK CONTROLLERS

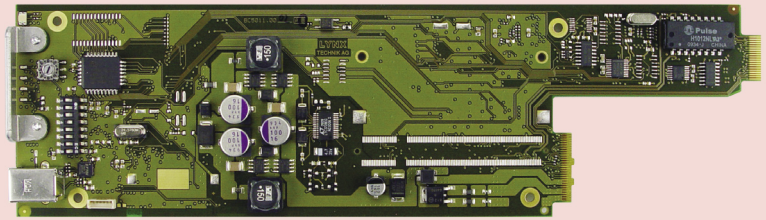
R CT 5021

Rack Controller

Features

Designed for use in our R FR 5010 and R FR 5012 Rack Frames. Adding this option will provide full remote control and status monitoring for all installed modules in a single rack frame. Supplied with the LYNX Desktop Controller software package to run on a standard Windows PC

- Remote control and status monitoring for all installed modules
- LAN or Serial RS-232 control interface
- Supports expansion into 7 (max) additional rack frames using the R CT 5010 Bus Expander
- Includes LYNX Desktop Controller software package for use on a standard Windows PC (not included)



Ordering Information

Part #	Description
6155003250	R CT 5021 Rack Controller
Includes module, reference manual and LYNX Desktop Controller software (on CD)	

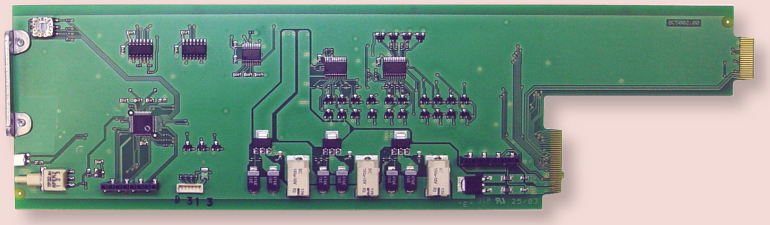
R CT 5010

Rack Controller Bus Expander

Features

Designed for use in our R FR 5010 and R FR 5012 Rack Frames. This module extends the reach of a host RCT 5021 Rack Controller or RCT 5031 Master Controller into additional rack frames situated close by.

- Remote control and status monitoring for all installed modules
- Serial (propietary) interface to host rack with R CT 5020 or R CT 5030 Controller
- Up to seven R CT 5010 Bus Expanders can be linked into to the R CT 5020 or R CT 5030 Controller



Ordering Information

Part #	Description
6155003245	R CT 5010 Rack Bus Expander
Includes module and reference manual (on CD)	

RACK CONTROLLERS

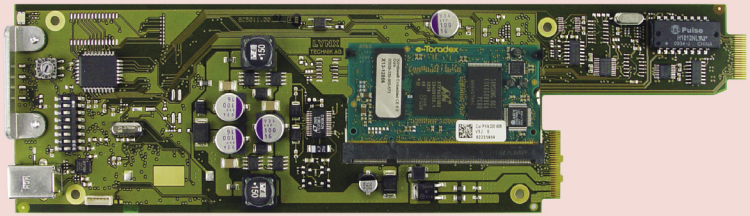
R CT 5031

Master Controller

Features

Designed for use in our R FR 5010 and R FR 5012 Rack Frames. The Master Controller functions as a mini server and typically used in mid to large sized systems. One R CT 5031 Master Controller will support up to 15 x R CT 5021 Rack Controllers and 7 x R CT 5010 Bus Expanders.

- Remote control and status monitoring for all installed modules
- Mini Server with LAN interface to PC
- Includes LYNX Desktop Controller software package for use on a standard Windows PC (not included)
- Supports optional SW plug ins (SNMP, Backup and Restore and User Access Control)



Ordering Information

Part #	Description
6155003255	R CT 5031 Master Controller
Includes module, reference manual and LYNX desktop controller software (on CD)	

R CP 5000

Remote Control Panel

Features

The R CP 5000 is a compact 1 RU remote control panel. It provides control and status monitoring for all connected devices. Ideal for control rooms, mobile production or any application where a PC based client is not practical. Optional R CP 5016 expansion panel adds 16 additional fast access buttons.

- Compact 19" rack mount 1 RU design
- Can be used with or without existing PC LYNX Desktop Contoroller software
- Display and adjustment of all module parameters
- Free assignment of any 4 modules to push buttons for fast access (+16 additional with R CP 5016 panel)
- 2 line 40 character LED display
- 5 x incremental / push button rotary controls with bi-color LED indicators
- Serial RS-232 and LAN connectivity
- Optional R CP 5016 expansion panel

Ordering Information

Part #	Description
6155005000	R CP 5000 Remote Control Panel and Power Supply
6155015016	**OPTION:** R CP 5016 16 Button Expansion Panel
Includes control panel, R PS 3601-3 power brick, reference manual and quick start guide.	

Control System Software Options

The basic LYNX Desktop Controller software package is included with the purchase of the R CT 5021 Rack Controller or R CT 5031 Master Controller. Updates are free and can be downloaded from our FTP server at anytime. The software options below are additional feature packages to extend the functionality of the basic system. Software options are enabled with a software licence key, entered into the basic LYNX Desktop Controller software.

R SL CTRL - SNMP Support and Remote Protocol Licence

SNMP Support
This option adds support for SNMP error reporting using standard SNMP protocol. This option enables a SNMPv2 compliant SNMP agent in the R CT 5031 Master Controller. Any R CT 5021 and R CT 5010 controllers that are connected to the host RCT 5031 controller are also supported. Each RCT 5031 in a system will require a seperate licence.

Remote control of LYNX system using simple UDP/IP based LYNX protocol.
Provides remote access to all aspects of the LYNX control system through a simple ASCII text based LYNX remote protocol. This option is for the R CT 5031 Master Controller and any connected R CT 5021 and R CT 5010 controllers are also supported.

Required: R CT 5031 Master Controller. (A licence required for each R CT 5031 Controller in a system)

Ordering Information

Part #	Description
5155090310	R SL CTRL - SNMP Support and Remote Control Protocol Licence

R SL AC 30 - User Access Control

Configure individual user access to system
With this option an administrator can restrict the access to the module settings for each user. All users are assigned user names and passwords for logging into the LYNX Desktop Controller client. Users have controlled access for individual module functions and the level of access is custom configured by the system administrator. This option is reccomended for systems with multiple desktop clients and / or systems where operators are granted controlled access.

Any R CT 5021 and R CT 5010 controllers that are connected to the host RCT 5031 controller are also supported. Each RCT 5031 in a system will require a seperate licence.

Ordering Information

Part #	Description
5155090320	R SL AC30 - User Access Control Licence

SOFTWARE OPTIONS

Software Options

Control System Software Options

R SL BR 30 - Backup and Restore

Backup and restore individual LYNX devices, groups of devices or whole systems.
This option complements the automatic "HotSync Backup" utility which is included in the basic LYNX Desktop Controller. HotSync provides a local backup in each rack controller's flash RAM. The Backup and Restore option is a more sophisticated utility which allows users to select specific devices for manual backup into the host controller flash RAM (including the complete system if required). A "backup set" can also be exported and stored on a LYNX Desktop Controller Cclient PC, which is useful to store different system configurations; and then later restore for a given application.

Required: R CT 5031 Master Controller. (seperate licence required for each RCT 5031 Master Controller). One licence will support all connected R CT 5021 controllers as well as any connected R CT 5010 controllers.

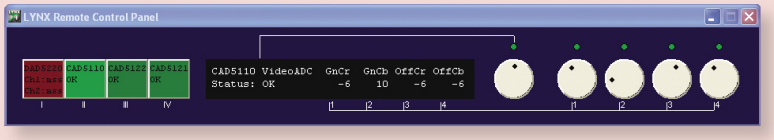
Ordering Information

Part #	Description
5155090330	R SL BR30 - Backup and Restore Licence for R CT 5030 Master Controller

R SL RS 20 / R SL RS 30 - Virtual Remote Control Panel

Simulate the R CP 5000 Remote Control Panel on a PC Client
If the LYNX Desktop Controller is too complex for the application and / or operators, the RCP 5000 remote control panel can be simulated on a PC. The on screen controls are operated with the pointing device and the function is identical to a physical R CP 5000 panel.

Required: R CT 5031 Master Controller or R CT 5021 Rack Controller. Please select the software option for the controller used. R CT 5021 Licence will support all R CT 5010 modules in the control stack. R CT 5031 licence will support all connected R CT 5021 controllers as well as any connected R CT 5010 controllers.



Ordering Information

Part #	Description
5155090340	R SL RS30 - Virtual Control Panel Licence for R CT 5030 Master Controller
5155090345	R SL RS20 - Virtual Control Panel Licence for R CT 5020 Rack Controller

Software Support

Free Support for all Licensed LYNX Software
LYNX provides free updates and support for the Desktop Controller software and options. This includes all bug fixes and any new software features we may add into the current packages. Updates can be downloaded from our FTP server anytime.

No software maintenance contracts. Keep completely up to date with the latest software innovations and new software releases. **Simple, Intelligent software support from LYNX Technik.**

Control System

The LYNX control system delivers a powerful centralized solution for remote control, status monitoring and error logging for a Series 5000 system. A system can be as small as a single rack or hundreds of racks spread across multiple locations. Our control concept is straight forward yet adds considerable flexibility to any system.

We offer users the option of three different hardware controllers to address various requirements as well as an expansion path that grows to suit systems needs. Regardless of your starting point, no existing controller hardware is ever made redundant, which fully protects investments.

The passive nature of the LYNX control system allows you to add a control system at any time by simply making the necessary connections to the rack termination panel and plugging in a rack controller. The control system software automatically detects newly installed system components and enters the devices into the control system.

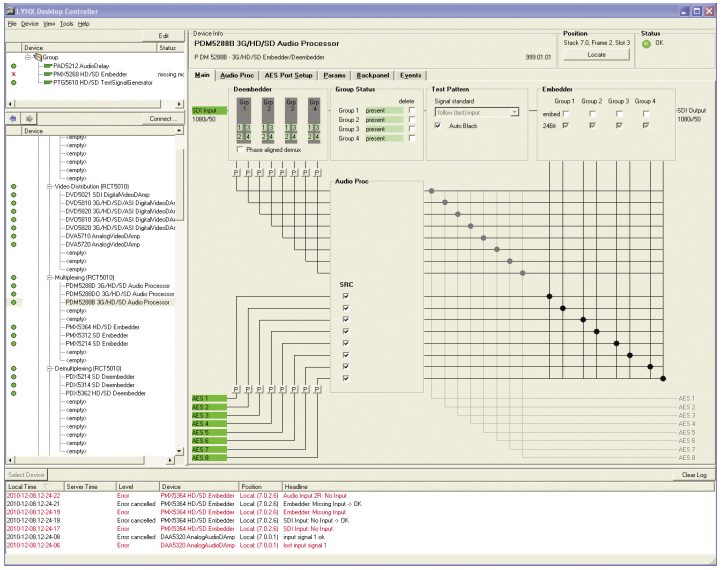
Settings are always stored in the individual modules flash RAM or rack controller and not the control system PC itself. If the system experiences a failure in the control system, or a lost network connection, there is no impact on the normal operation of the system making it ideal for mission critical ON AIR applications where uptime is vital.

Control System Software

The LYNX Desktop Controller is an intuitive user interface and GUI which runs as a client on a standard Windows PC. The basic software package is fully featured and included with the purchase of a hardware controller. Available enhancements to the software include plug in options for *SNMP Error Reporting*, *System Backup and Restore* and *User Access Control*.

The user interface features a visually familiar hierarchical device browser, with drop-down menus and a variety of intuitive on-screen controls for module configuration, control and monitoring. Module signal flow is shown graphically, making each modules function easy to comprehend and manage.

When the system is expanded or changed, the software automatically adapts to the new system configuration, displaying all newly discovered devices and modules.



HotSync Backup

To avoid data loss and to take the task of routine backup off your hands, LYNX Technik has developed a unique utility within the control system called "**HotSync Backup**."

Some of the more sophisticated modules have over 1,000 parameters stored, keeping an up to date backup is vital. Manually reconfiguring the replacement module (assuming you remember the settings) can be a daunting task.

When HotSync Backup is enabled, each rack controller takes an inventory of the system and records a copy of all the module settings into its own flash RAM. This effectively becomes a local backup of the complete Series 5000 rack. If a module setting is changed then the backup is immediately and automatically appended, so backups are always 100% up to date.

If a module is exchanged, then HotSync Backup will automatically reload the last used settings into the replacement module in a matter of seconds bringing you back online.

The HotSync Backup feature is included in the basic LYNX Desktop Controller application and runs in the background continuously updating the backup.

It is designed primarily for maintenance use and requires no scheduled manual backup.. Simply enable HotSync backup and forget about it.

Warranty

LYNX Technik AG warrants that the product will be free from defects in materials and workmanship for a period of three (3) years from the date of shipment. If this product proves defective during the warranty period, LYNX Technik AG at its option will either repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, customer must notify LYNX Technik of the defect before expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by LYNX Technik, with shipping charges prepaid. LYNX Technik shall pay for the return of the product to the customer if the shipment is within the country which the LYNX Technik service center is located. Customer shall be responsible for payment of all shipping charges, duties, taxes and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure, or damage caused by improper use or improper or inadequate maintenance and care. LYNX Technik shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than LYNX Technik representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; c) to repair any damage or malfunction caused by the use of non LYNX Technik supplies; or d) to service a product which has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty servicing the product.

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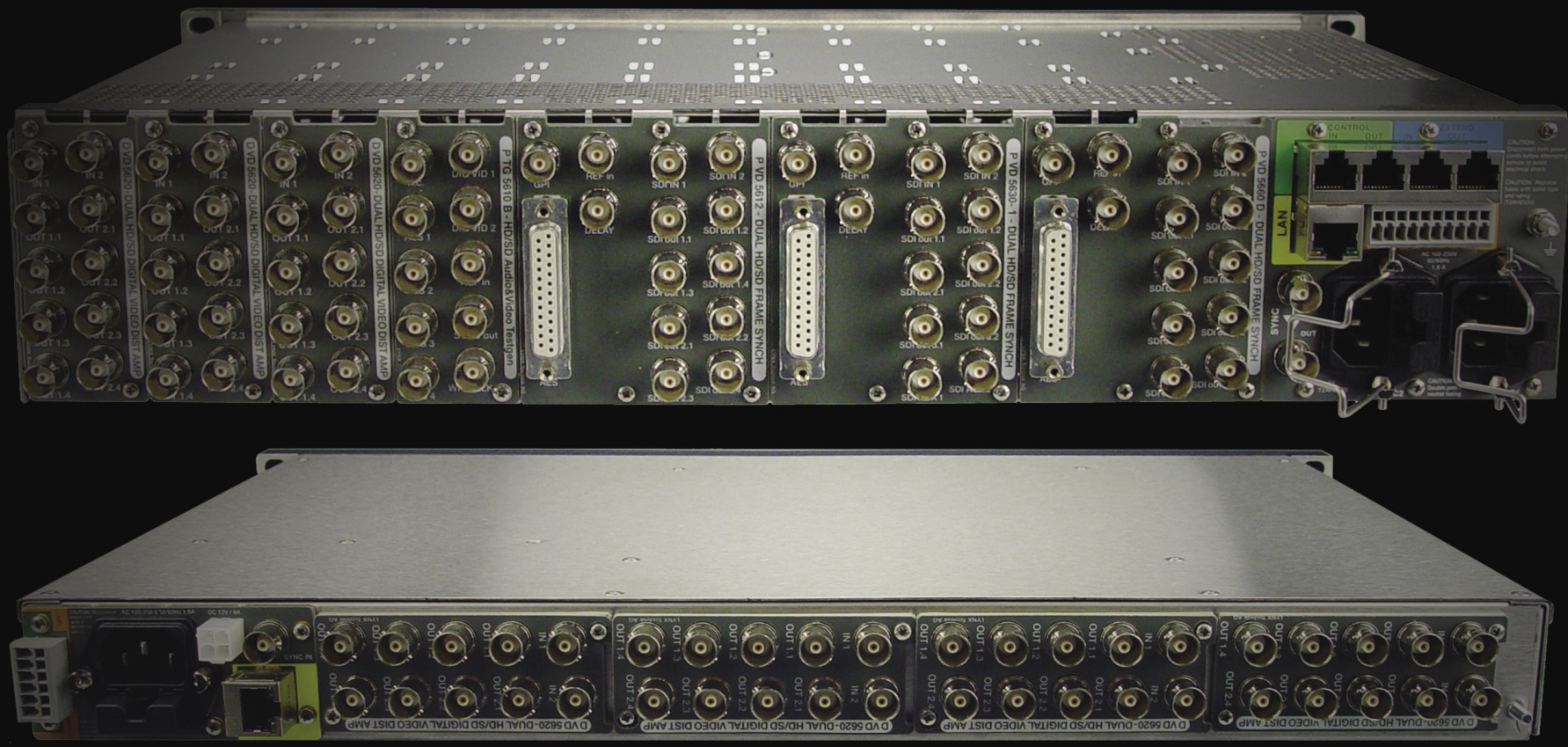

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