

P DX 3010

SERIES 3000

10 bit Video D/A + Analog Audio Deembedder

MiniModules

MUX / DEMUX

Description

The P DX 3010 is a high quality AES audio de-multiplexer (audio deembedder) providing both analog audio and analog video outputs. The module accepts one digital video (SDI) input that can have up to four audio groups embedded. One audio group can be selected, de-multiplexed and output as balanced analog audio signals (with adjustable gain). 10 Bit video D/A conversion provides high quality YUV / RGB / S-Video or Com-

posite (CVBS) analog video outputs. The module has a built in micro-controller featuring a integral menu display and adjustment control for user setup and configuration. Full remote control and remote status monitoring is possible when used with the rack frame and one of the available controller options, or by using the Service Adapter and LYNX control software.

Key Features

User selectable audio groups. (1 through 4)

24 bit audio conversion

2 x Stereo pair balanced analog audio outputs.

Adjustable audio gain
-39dB to +24dB

54 MHz (4xover-sampling)
10 bit video conversion.

Video output options:
3 x CVBS or,
RGB component or,
YUV component or
YC (S-Video) and CVBS.

SDI loop output

Dual standard operation
(525 / 625). Auto detection

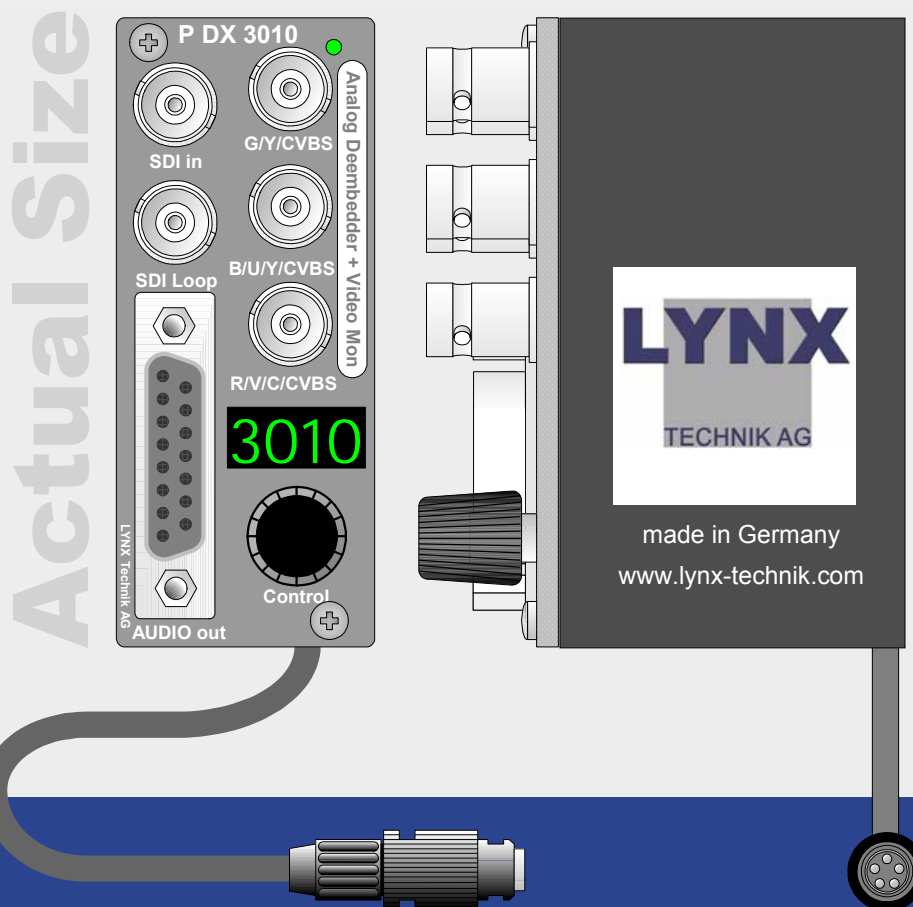
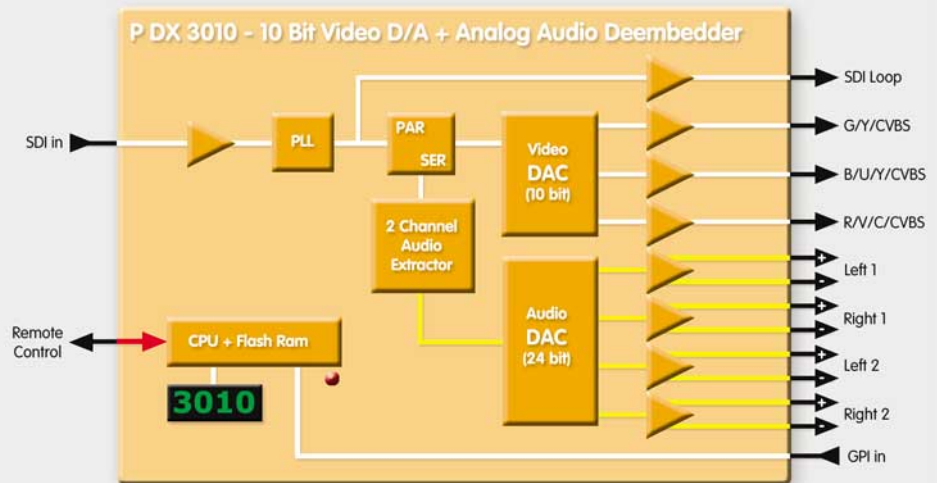
Local display with control
menu and adjustment
control.

2 x GPI inputs.

Microprocessor controlled

Flash ram storage for
module settings.

Remote control interface



10 bit Video D/A + Analog Audio Deembedder

This module is part of the 3000 series of MiniModules, which offer high quality and flexibility in a very small form factor ideal for applications where space is at a premium. The modules can be used either stand alone using the optional power supply brick or

as part of a tightly integrated space saving system where up to 10 MiniModules can be mounted using the optional R FR 3005 rack frame, with optional expansion for redundant power and remote control using one of the LYNX controllers and control software.

Specifications

INPUTS

SDI Video	1 x Serial Digital Video. SMPTE 259M-CD with embedded audio SMPTE 272M-C
Input impedance	75 Ohm
Connectors	BNC

Outputs (Video)

SDI Digital	1 reclocked Serial Digital Video. SMPTE 259M-CD
Analog Outputs	3 x CVBS / 1 x RGB / 1 x YUV / YC (S-video) + CVBS (Selectable)
Connectors	BNC
Output impedance	75 Ohm
Output Level	0.8v p-p (nominal)
Analog return loss	> 35dB
Digital return loss	> 15dB (270MHz)
Signal to noise	> 60dB
Quantization	10 bit (internal processing 10bit)
Sampling	54MHz (4 x over-sampling)

Outputs (Audio)

Signal (Audio)	4 x balanced analog audio (2 x Stereo Pairs) taken from one AES embedded audio group (selectable 1...4)
Connectors	Sub D 15 pin female
Output impedance	< 50 Ohm
Quantization	24 bit audio conversion
Dynamic range	> 85dB
Signal to noise	> 85dB
THD + N	> 85dB
Output Level	Max 24dB (adjustable from -39dB to +24dB in 0.5dB steps)

Performance

Cable Equalization	> 250m (Belden 8281 / 270Mbit/s)
Jitter	< 0.2 ui
Control	Local configuration using embedded alphanumeric menu and selector control.
Status Monitoring	Signal presence detection / alarm

Electrical Specifications

Operating Voltage	+ 5V DC
Power Consumption	5 W
Connection	DC input via 5 pin locking bayonet connector
Safety	IEC 950/ EN 60950/VDE 0805

Mechanical

Size	85.5mm x 35.3mm x 50.3 mm + connectors
Weight	350g

Ambient

Temperature	5°C to 35°C Maintaining specifications 0°C to 50°C Operating
Humidity	Max 90% non condensing

Options

Power Supply Options

R PS 3001 E	External power brick - wall plug style. (Europe)
R PS 3001 U	External power brick - wall plug style (USA)
R PS 3001-3	In-line power supply - suitable for all regions
R PS 3004	In-line supply for 4 MiniModules - suitable for all regions

Mounting Solutions

R FR 3000	Wall mounting brackets for individual MiniModules (5 sets)
R FR 3004	Wall mount for 4 MiniModules
R FR 3005	19" rear rack mount plate for 10 MiniModules
R FR 3010	Central power supply and control chassis
R PS 5010	Redundant power supply for R FR 3010

Adapter Cables

R PS C 15	DC power and control extension cable (1.5m)
R PS C 25	DC Power and control extension cable (2.5m)
R AC M15-4	SubD 15 > 4 x male XLR audio adapter (1m)

Controllers

R CT 3000	Service Adapter and control software for single modules
R CT 5020	Rack Controller and control software
R CT 5010	Rack Bus Expander
R CT 5030	Master Controller

Note.

Local controls on the module allow for basic set up and configuration, which is suitable for most applications. Access to extended feature sets requires the use of a controller option or the RCT 3000 Service Adaptor and control software.