

Application Examples

4K Quad Link 2SI/SQD to 12G SDI Conversion



Quad Link 2SI / SQD ► Single Link Converter

12G SDI to 4K Quad Conversion



Single Link ► Quad Link 2SI / SQD Converter

Distribution Mode 1 ► 5+1



1x Single Link Input ► 5x Single Link Output + 1x Fiber SFP

Note: Fiber SFP are optional equipment and not included with the base module.



CQS1462_R01

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Technical Specifications

SDI I/O	1 x dedicated SDI video input on BNC connector				
	2 x dedicated SDI video output on BNC connector (1 x Loop/Processed output)				
	3 x switchable SDI video in-/outputs on BNC connector				
	SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1				
	Multi-standard operation from 1.5G to 12G				
	720p	(23.98/24/25/29.97/30/50/59.94/60 Hz)*			
	1080psf	(23.98/24/25/29.97/30 Hz)*			
	1080i	(50/59.94/60 Hz)*			
	1080p	(23.98*/24*/25*/29.97*/30*/50/59.94/60 Hz)			
	2160p	(23.98/24/25/29.97/30/50/59.94/60 Hz)			
	Electrical Return Loss	to 1.5GHz	to 3GHz	to 6GHz	to 12GHz
		>15dB	>10dB	>7dB	>4dB
		1.5Gbit/s	3Gbit/s	6Gbit/s	12Gbit/s
	Automatic cable EQ	200m	150m	90m	85m
		Belden 1694A		Belden 4794R	
Fiber I/O	1 x fiber optic input and output (optional, see table)				
	SMPTE 297M - 2006				
Power	+12VDC @ 13.24W nominal (incl. SFP) - (7-24VDC input range)				

* Only supported in **Distribution Mode**

We are constantly adding more yellobrik modules.
Please visit our website for the latest product updates.
www.lynx-technik.com

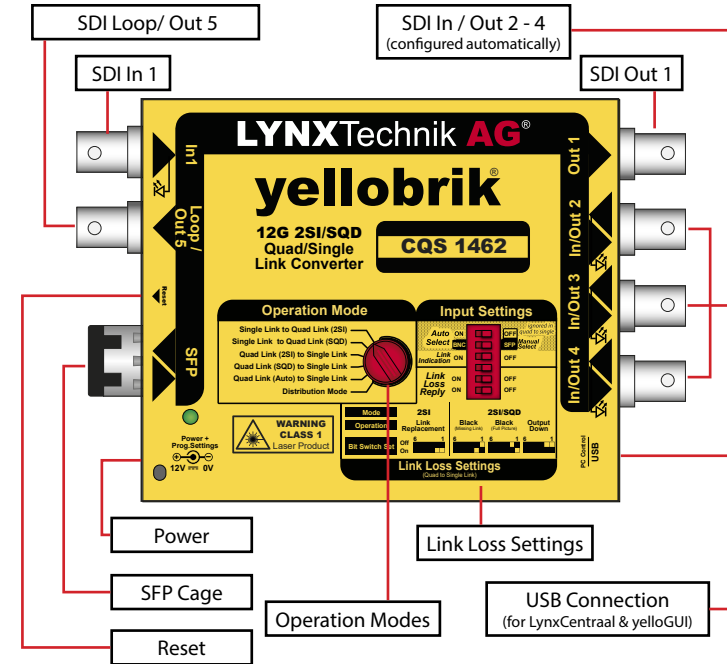
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Quick Reference

CQS 1462

Bidirectional 2SI / SQD Quad Link to 12G Single Link Converter



WARNING
CLASS 1M LASER PRODUCT



Laser Radiation
Do not look directly into emitter
with optical instruments

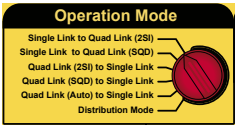
Connections

This module has six BNC connectors and one SFP cage. One link dedicated input, one for dedicated output, one for loop or dedicated output, and three switchable in/outputs. The optical port (SFP slot) can be used for transceiver SFPs (i.e. OH-TR-12G-LC) as well as single Transmitter or Receiver SFPs.

Operation Modes

Operation Mode settings can be changed on the device itself or in our control software.

- 6G/12G SDI Single Link ► 4 x 1.5G/3G SDI Quad Link (2SI)
- 6G/12G SDI Single Link ► 4 x 1.5G/3G Quad Link (SQD)
- 4 x 1.5G/3G SDI Quad Link (2SI) ► 6G/12G SDI Single Link
- 4 x 1.5G/3G SDI Quad Link (SQD) ► 6G/12G SDI Single Link
- Auto Quad Link to Single Link
- Distribution mode

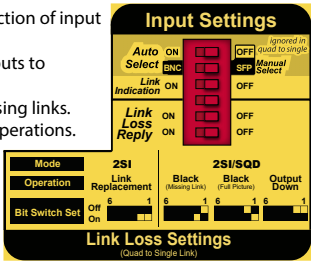


In Distribution Mode the CQS 1462 can be used for distributing SDI signals from Input 1 (BNC/SFP) to the five Outputs (BNC) as well as the fiber Output (SFP).

Operation Modes

Following Input Settings are available:

- **Auto Select:** Switch Automatic and Manual Selection of input sources (Ignored in quad to single modes)
- **Link Indication:** Add numbered overlay for outputs to indicate link source.
- **Link Loss Reply:** Choose how to respond to missing links.
» **Mode** shows in which modes support which Operations.
» **Operations** are:
Link Replacement (only 2SI output) duplicates input link 1 to preserve image brightness.
Black "Missing Link" replace missing link with frame black (reduces the image brightness).
Black "Full Picture" output full frame black image if a single link is lost.
Output Down turns off the output entirely (no SDI output signal).
» **Bit Switch Settings** visualizes how to set the DIP switches.



Power

The module requires a 12V DC power input and the LED confirms when power is connected. A power supply is provided, however, if you use your own power supply, please provide a clean 12V DC power source(or between 7 and 24V DC).

Module LEDs

The module has several LEDs included to indicate status:

SDI Present LED (electrical and fiber input have individual LEDs)

- Green Valid SDI signal
- Off No valid or missing SDI signal

Power / Prog Setting LED

- Green Power OK and no internal programmed settings are present
- Yellow Power OK and control software exclusive settings are not at factory default*
- Yellow (blinking) "Locate" functionality enabled via control software to identify physical module
- Red Power OK and physical settings are overwritten by software settings
- Red (blinking) Hardware malfunction (Fan Error, Overheating, etc.)
- Off Power not present

* The module can be reset to factory defaults by using the reset switch

Central Control Interface via USB

The USB connection on the module is for firmware updates and control via the Lynx Centraal or yelloGUI software applications.

Please register to connect to our update server [Database settings > Registration] and you will receive the latest firmware updates automatically. Check in the "update" section on Lynx Centraal or look for the red update flag in yelloGUI.



yelloGUI



Firmware updates and our control software are free of charge.

LYNX | Centraal.

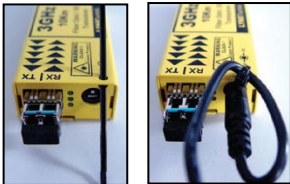
Fiber I/O Options

The optional fiber I/O SFP modules plug into the side of the yellobrik and are ideal to bridge longer distances. We offer Singlemode CWDM versions (in 18 different wavelengths according to ITU-T G694.2), as well as Singlemode. This module can use TR (Transceiver), TX (Transmitter), RX (Receiver) SFPs.

Option #	Wavelength	TX Power	RX Sensitivity	Max Distance
OH-TR-12G-LC	1310 nm	-5 ... +0.5dBm	6 - 12G: -10dBm 1.5 - 3G: -14dBm	10km (6.2miles)*
OH-TR-12G-XXXX-LC	1270 - 1610nm	-2 ... +3dBm	6 - 12G: -10dBm 1.5 - 3G: -14dBm	10km (6.2miles)*
OH-TX-12G-LC	1310nm	-5 ... +0.5dBm	-	10km (6.2miles)*
OH-RX-12G-LC	1310nm	-	6 - 12G: -10dBm 3G: -14dBm 1.5G: -16dBm	10km (6.2miles)*

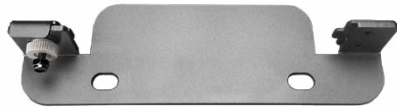
Power Lead Strain Relief

The module (different module shown here) has a small hole in the case located above the power connection. This prevents the power lead from being accidentally pulled out. Use the supplied tie-wrap and secure the lead, as shown below.



Mounting Solutions

The optional RFR 1001 mounting bracket can be used to permanently mount the module on any surface or on 19" rack rails.



The optional RFR 1200 rack mount can be used to mount up to 14 yellobrik modules permanently. In addition, the RFR 1200 can provide full power redundancy for all mounted yellobriks.

