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BCX Camera Back Fibre Optic Interface System

BCX-760 Portable Fibre Links

3G-SDI, Audio, Data, Genlock, GbE

The BCX-760 is a new portable fibre interface designed for use in Outside Broadcast and special events. A mixture of video and audio signals are combined to provide a flexible and cost effective solution for many production applications. The BCX-760CB is specifically designed to mount on the back of a broadcast camera offering full comms, control and genlock plus bidirectional 3G-SDI signals. Each unit is supplied in a compact lightweight enclosure making it ideal for the smallest studio/ENG cameras.

The BCX-760SA is a stand alone version with a small footprint designed for use with the latest compact cameras. It can easily be mounted on a tripod or robotic head to provide seamless integration of remote robotic cameras into a full live production. The BCX-760B can used stand alone or rack mounted and is offered in a single or dual channel 1RU 19" format.

The 3G-SDI signals are fully SMPTE compliant and pass all pathological signals for optimal signal performance and minimal jitter and eye pattern degradation. The highest grade optical components are used throughout the construction to retain maximum optical integrity.

Audio I/O is supported for communications and audio levels are SMPTE compliant as standard.

An Ethernet 10/100/1000BASE-T link provides the ability for control or simple IP connectivity over the same physical link. RS serial data can be used for full camera control with a genlock link to provide sync signals over the link.
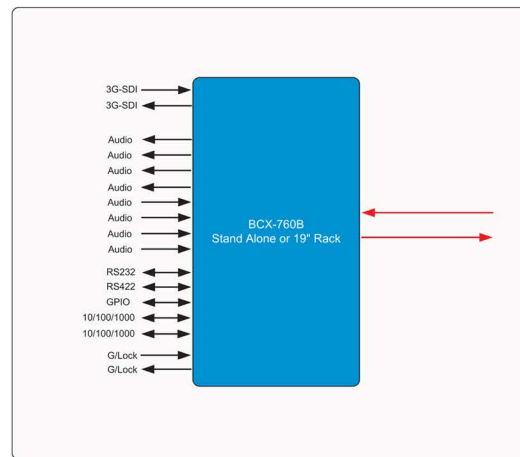
Fibre connectivity is via singlemode Neutrik OpticalCON DUO as standard.

Other connectors are available, please contact the Sales Office.

Schematic Diagrams
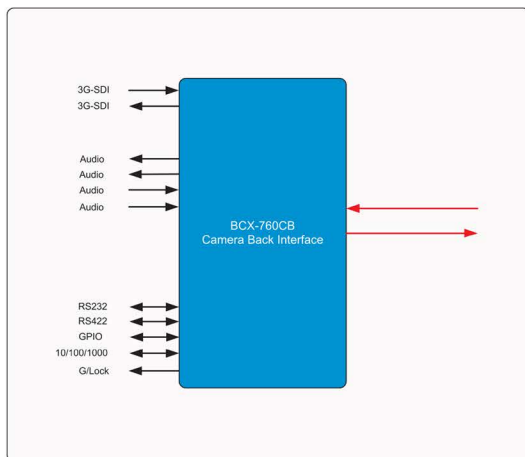
Schematic Diagram BCX-760CB

Schematic Diagram BCX-760B

Specifications for each link

Electrical 3G-SDI Input

Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
Standards	SMPTE 292M, SMPTE 259M
Equalisation	Automatic to 300 m @ 270 Mb/s
	Automatic to 200 m @ 1.485 Gb/s
	Automatic to 100 m @ 3 Gb/s
Return Loss	> 15 dB @ 1.485 Gb/s

Electrical 3G-SDI Output

Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
Return Loss	> 15 dB @ 1.485 Gb/s
Polarity	Non inverting
Signal	Level 800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalised

10/100/1000BASE-T

Connector	RJ45
Format	Bidirectional 10/100/1000BASE-T Ethernet

Audio Input/Output

Connector	2 6 way DIN connector
BCX-760CB	2 x Line Level In
	2 x Line Level Out
BCX-760B	4 x Line Level Out
	4 x Line Level In
Data	1 and Data 2 I/O
Connector	Hirose SR-30
Format	2 x In, 2 x Out for each of
	RS232, RS422/485 and GPIO

Sync/Genlock

Connector	BNC
Format	Black & Burst, Tri-level Sync

Power | 4 pin XLR DC input | BCX-760CB
| PowerCON | BCX-760B

Conformance

EMI/RFI	Complies with 89/336/EEC
Electrical	Complies with EN 61000-6-1,
	EN61000-6-2
Laser Safety	Complies with Class 1 laser product
	24 CFR 1040.10 & 1040.11
RoHS	Complies with Directive 2002/95/EC
Warranty	5 years
Dimensions	190 x 130 x 45 mm	BCX-760CB
	255 x 215 x 44 mm	BCX-760B
Weight	0.4kg	BCX-760CB
	0.7kg	BCX-760B

Base End Rear View BCX-760B
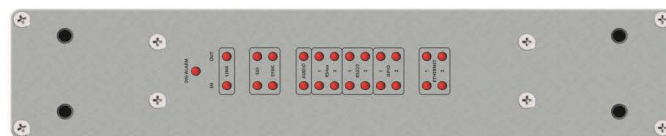
Base End Front View BCX-760B

Ordering Information

BCX-760CB/V/NOC   Remote Camera End for mounting on Camera Back between Camera and Battery.
                   Fitted with V-Lock as standard - Contact Sales Office for alternatives. 4 pin XLR for power.
BCX-760SA/NOC   Remote End Stand Alone Portable Fibre Interface - Remote Camera End.
                   Supplied in rugged aluminium free standing enclosure.
BCX-760B/S/NOC   Base End Portable Fibre Interface - Single Channel Base End.
                   Supplied in 19" 1RU rack mounting enclosure.
BCX-760B/D/NOC   Base End Portable Fibre Interface - Dual Channel Base End.
                   Supplied in 19" 1RU rack mounting enclosure.
                   For use with singlemode Neutrik OpticalCON DUO systems.
                   Provides bi-directional 3G-SDI signals plus genlock, data, audio and 10/100/1000Base-T signals

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