

UHD Cross Converter

The UXC-2000A is Cross Converter for broadcast level 4K signal to 12G, 3G, HD, and optical fiber.

Cross convert 12G / 3Gx4(2SI, Quad Split) / HD-SDI and optical fiber signals to 12G / 3Gx4(2SI, Quad Split) / HD-SDI and optical fiber. Up & Down cross convert with any broadcasting level format.

HDR control with HLG10, PQ10, SDR (BT709, BT2020) with instant conversion with color correction, Nit control, WCG control with Cross convert also can shuffle audio, Gain control, SRC control, with embedding, De-embedding, and even Re-Embedding.

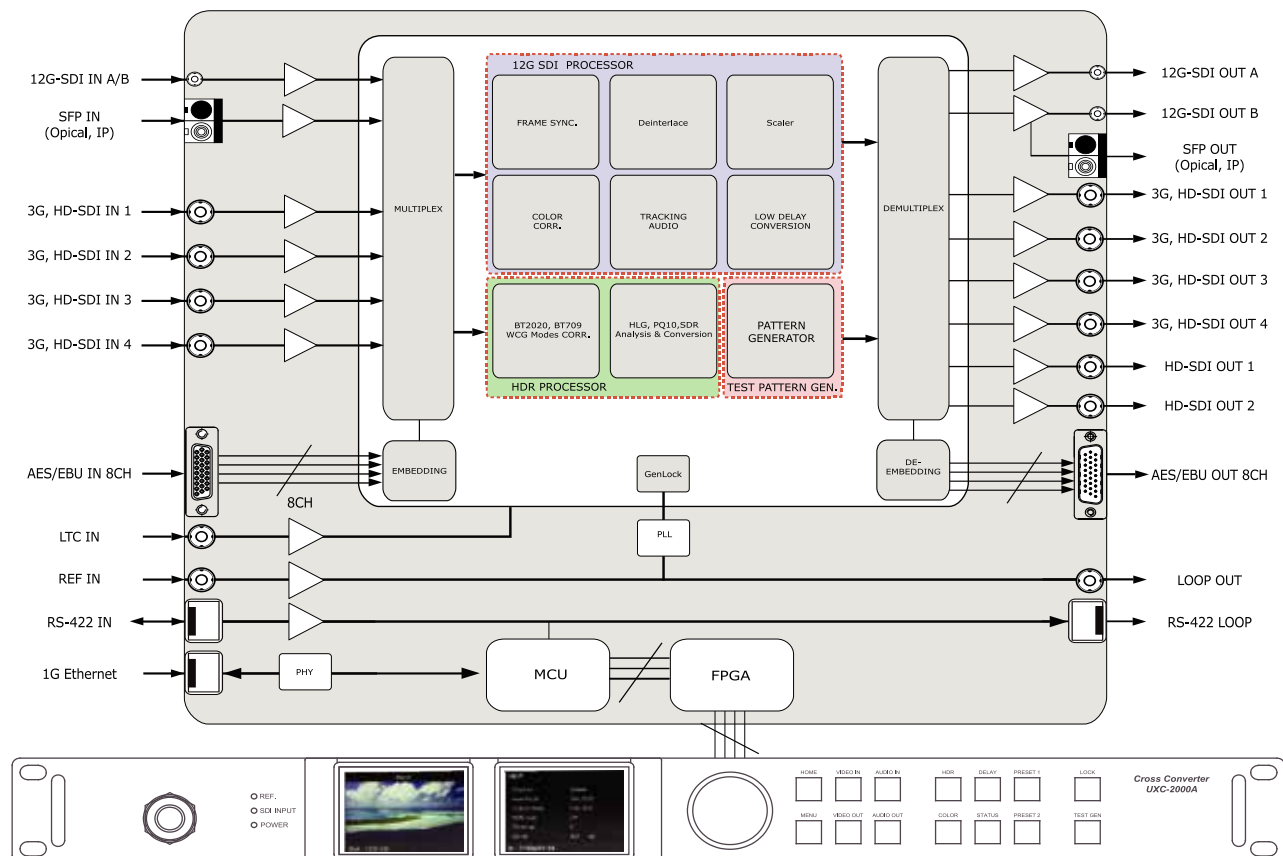
Test Pattern & Audio Tone Generator function included SD up to 12G-SDI UXC-2000A have all function to broadcast 4K simple without additional converting equipment.

UXC-2000A / UHD 4K Cross Converter



- UXC-2000A is 4K UHD 12G,3G,HD-SDI & IP Cross Converter and Frame Synchronizer. It convert all kind of Signal to change each other.
- Up & Down format Conversion (12G-SDI to 3G/HD-SDI, 3G/HD-SDI to 12G-SDI) and Gear box, Video test Pattern Generator, and Audio Tone Generator functions.
- Converts HDR(PQ10, HLG10) to SDR, SDR / HDR(PQ10, HLG10)
- Converts WCG to BT.709, BT.2020
- KNOB to select category or change the setting. SDI Input & HDR Processing acknowledge by LED lights. (SDI Input Locked : White, SDI Input lossed : Red, HDR Processing : R,G,B).

Block Diagram



Feature & Functions

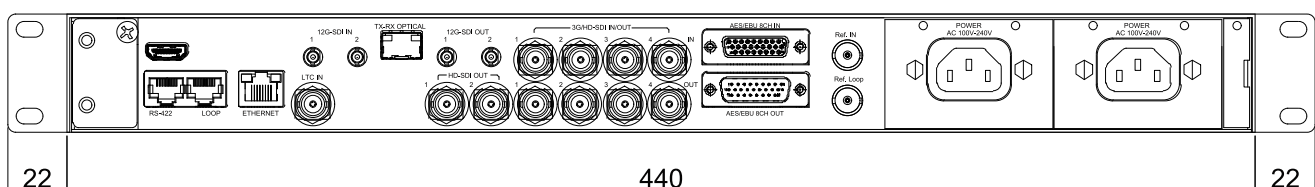
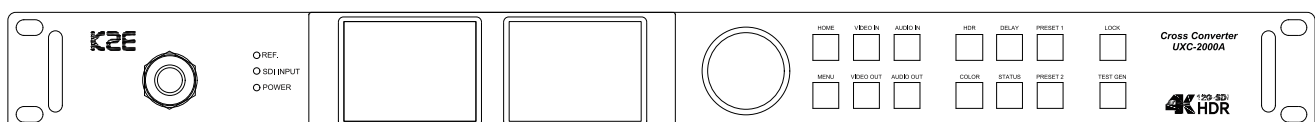
HDR		Delay	
Process	: Bypass	HDelay	: -12.3 uSecs
Input Mode	: Auto	VDelay	: 0 Lines
Output Mode	: Rec.709	FrameDelay	: 1 Lines
		AudioDelay	>

Color		SDI Output	
SD-nit	: 400 nit	Format	: HD(1080i)
Gamma	: 0.90	MonitorOut	: Input
Gamma Adjust	>	HDelay	: -12.3 uSecs
Pre Color	>	VDelay	: 0 Lines
Post Color	>		

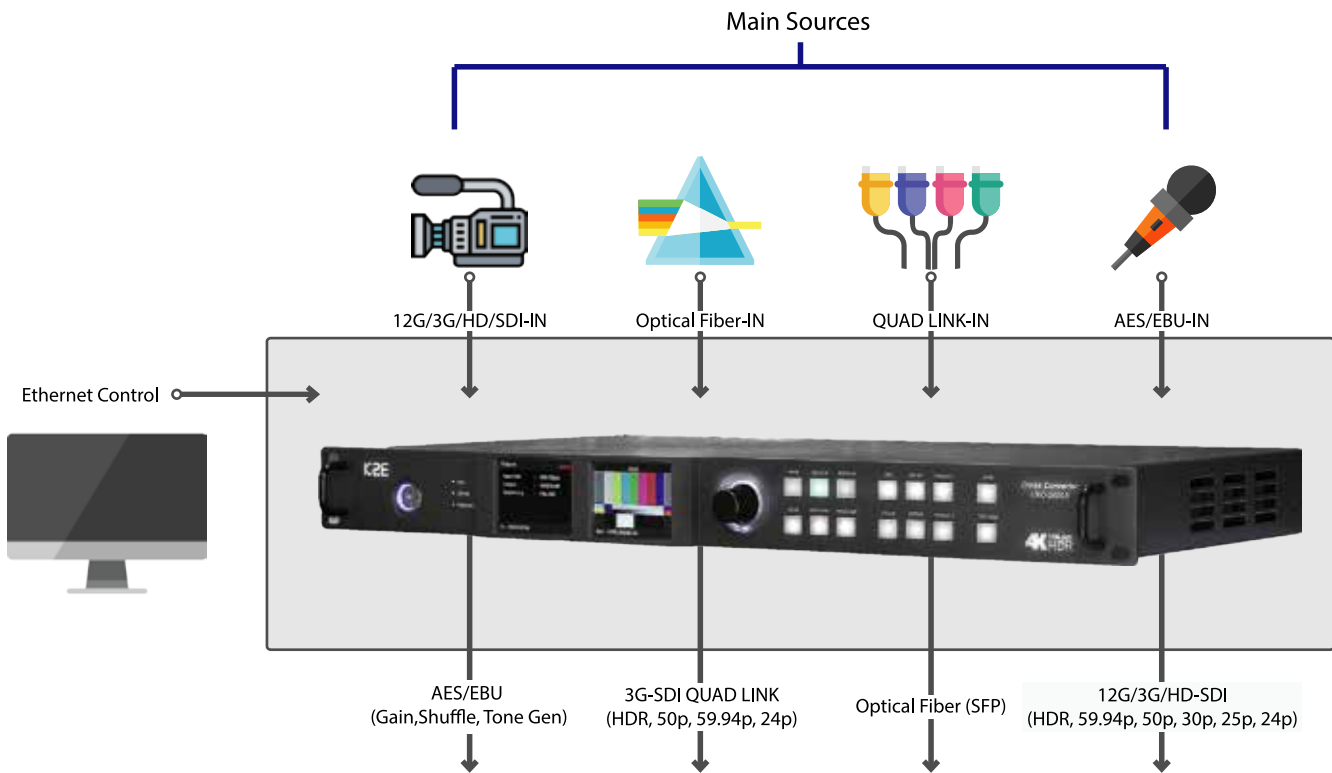
Audio Out/De-Emb				Audio Out/De-Emb				
	CH1/2		CH3/4		Out	Channel	Out	Channel
G1	ST1-P1	0dB	ST1-P2	+5dB	A1	Stream1-P1	A5	Stream1-P1
G2	ST1-P3	-1dB	ST1-P4	+11dB	A2	Stream1-P1	A6	Stream1-P1
G3	ST2-P1	+3dB	ST2-P2	+2dB	A3	Stream1-P1	A7	Stream1-P1
G4	ST2-P3	-23dB	ST2-P4	-20dB	A4	Stream1-P1	A8	Stream1-P1

- 12G-SDI, 3G-SDI, HD-SDI Cross Convert
- HDR Cross convert
- Color correct control
- Audio Embedding and De-embedding
- Video Pattern Generator
- Audio Tone Generator
- CRC Error check
- 12G,3G,HD Cross Convert and Frame Synchronizer.
- Up & Down Format Conversion (12G-SDI ⇔ HD,3G-SDI)
- Gear Box 104(12G to 3Gx4), 401(3Gx4 to 12G)
- HDR Conversion : SDR, HLG10, PQ10
- WVG Conversion : BT.709, BT.2020
- Color corrector control : SD-nit, Gamma, RGB, Contrast, Brightness, Color
- Video Pattern : Disable / Moire / RP219 / SMPTE-EG1 / 75% Colorbar / Multiburst / Ramp /
- Audio Tone Generator : Mute, 500Hz, 750Hz, 1K, 1.5K select
- 12G-SDI Input 2ch, 3G/HD-SDI 4ch, HDMI 1ch
- 12G-SDI Output 2ch, 3G/HD-SDI 4ch, HD-SDI (only) 2ch SFP 1ch
- AES/EBU 110 ohm Input 8ch, Output 8ch
- Video H-Delay, V-Delay and Audio Delay control
- R, G, B Color corrector control
- 3G / HD-SDI Level A, Level B compliant
- Dual Power System
- User friendly display & Hot buttons
- System controlled by SNMP
- 19 inch standard rack mountable (1RU)

Dimension




Signal Processing



Conversion

SIGNAL CONVERSION			
Up Conversion	720p -> 1080i / 1080p / 2160p	1080i -> 1080p / 2160p	1080p -> 2160p
Down Conversion	2160p -> 1080p / 1080i / 720p	1080p -> 1080i / 720p	1080i -> 720p
Gear Box	3G Quad Split(Level A/B) <-> 2160p	3G Quad 2SI(Level A/B) <-> 2160p	
Optical Fiber	Optical <-> 12G/3G/HD-SDI		
Frame Rate	24fps <-> 25fps <-> 30fps <-> 50fps <-> 59.94fps <-> 60fps		



UXC-2000A UHD 4K Cross Converter	
Image	
Number of SDI Input	12G-SDI 2ch 3G/HD-SDI 4ch
Number of HDMI Input	HDMI In 1ch
Number of SDI Output	12G-SDI 2ch 3G/HD-SDI 4ch HD-SDI(Only) 2ch
AES/EBU 110Ω Input / Output	Input 8ch, Output 8ch
Ref. & Loop	Reference Output 1, Loop 1
FUNCTION & SELECTION	
Input Select	12G-SDI/ 3G,HD-SDI A,B,C,D/ Quad/ 2SI/ Optic
Output Select	Up /Down, SDR/HDR, Audio Embed/De-embed, Pattern Generator
HDR In/Out	Auto, BT.709, BT.2020, PQ10, HLG10
Color	SD-nit, Gamma, RGB, Contrast, Brightness, Color
Audio Output	Audio Source Select : SDI, AES/EBU, Tone Generator Tone Generator : Mute, 500Hz, 750Hz, 1KHz, 1.5KHz
Video	Output Select : Disable, Moire, R219, SMPTE-EG1, 75% Color, Multibust, Ramp. Outline Speed Select : Slow, Normal, Fast
COMMUNICATION	
Ethernet	1Port 10/100base-T
System Protocol	K2E Standard
Data Communication	Ethernet or RS-422
STANDARD	
HD	720p50, 720p59.94 1080p23.98, 1080p24 1080p25, 1080p29.97 1080p50, 1080p59.94 1080i50, 1080i59.94
UHD	2160p50, 2160p59.94
Audio	AES/EBU 110Ω
OTHER	
Dimension	484(W) X 44(H) X 240(D)mm
Weight	4.85Kg(10.7lbs)
Power	AC100V - AC240V, 3A