

Motion Compensated Converter

# MCC-4K-A

Universal standards conversion. Live.

InSync  
technology

FOR-A®



Experience exceptional quality frame rate and format conversion on demand, on premise and in your control. Designed and manufactured by industry specialists, InSync Technology, for exclusive distribution by FOR-A.

## Your hardware option

International sports, concerts, breaking news and current affairs can all be simply and impeccably converted to the desired output format and frame rate.

The MCC-4K-A offers a wide range of conversions:

### Live UHD frame rate conversion

MCC-4K-A is ideal for live frame rate conversion applications, where UHD content sourced at a chosen production frame rate needs to be converted to other frame rates for international contribution and distribution.

### HD/3G to UHD up-conversion

MCC-4K-A is perfect for integrating HD and 3G content into UHD

programming. Benefitting from proprietary aperture control for up-conversion with enhancement features, MCC-4K-A transforms 3G/HD content into superb UHD output.

### UHD to HD/3G down-conversion

Simultaneous transmissions in UHD and HD are easy with MCC-4K-A. Simply configure UHD as input and choose the required HD standard output.

### HD to HD frame rate conversion

MCC-4K-A also operates as a 3G/HD motion compensated standards converter, allowing its rapid redeployment for all conversion applications.

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Contact us:



: <https://www.for-a.com/>

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## Specifications

### Video format:

UHD: 2160p  
60/59.94/50/30/29.97/25/24/23.98  
HD/3G: 1080p  
60/59.94/50/30/29.97/25/24/23.98  
1080psf 30/29.97/25/24/23.98  
1080i 60/59.94/50  
720p  
60/59.94/50/30/29.97/25/24/23.98

### Video input (SDI):

12G/6G/3G/HD:BNC x 5  
Dual Link 3G 2SI: BNCs 1-2  
Quad link 3G\*/HD-SDI:BNCs 1-4

### Video input (SFP):

12G/6G/3G/HD: 2 channels

### Video output (SDI):

12G/6G/3G/HD/ Quad link 3G\*/HD:  
BNC x 4  
Dual Link 3G 2SI: BNCs 1-2

### Video output (SFP):

12G/6G/3G/HD: 2 channels

### Audio:

Passes 16 channels of PCM embedded audio. (Link 1)  
- Audio channel remapping  
- Audio delay tracks video delay

### Genlock input:

BB: Bi-level or Tri-level sync: 0.3 Vp-p,  
75Ω, BNC x 2, loop-through (to be  
terminated with 75Ω terminator, if  
unused)  
- Lock to external reference with  
adjustable H/V offset

### Colorimetry output:

BT.2020 / BT.709 conversion  
- BT.2087 process with selectable gamma  
(2.0/2.4)  
Colour legalization

### Conversion modes:

- Up/down/cross-conversion and  
synchronization  
- Any valid input to any supported  
12G/6G/3G/HD output format  
- Motion compensated conversion  
- Linear frame rate conversions for the  
following input/output frame rates: 59i/  
p / 60i/p , 29p / 30p and 23 PsF/p /  
24 PsF/p  
- Motion compensated frame rate  
conversion in all other modes

### Processing features:

Video level control (Y gain, Black level,  
Chroma gain)  
RGB color corrector (RGB Gain and Lift)

Aperture control and enhancement  
features

### Processing option:

HDR conversions: PQ, HLG, S-Log3  
HDR / SDR conversion

### Control:

Front panel with short-cut keys  
Video confidence monitor  
Built-in Web control  
SNMP

### Interface:

Ethernet: 10/1000 BASE-TX, RJ-45 x 1

### Temperature/humidity:

0°C to 40°C / 30% to 90% (no  
condensation)

### Power consumption:

100 V AC to 240 V AC / 70 W

### Dimensions/weight:

431 (W) x 370 (H) x 88 (D) mm /  
Approx. 6 kg

### Closed captions

### Timecode passing

\*Level A/B 2SI/SQD support

## Workflow support

With both 12G/6G-SDI and SFP connectivity, as well as quad link 3G-SDI, MCC-4K-A can be used in a wide range of production and transmission environments, integrating simply into your workflow.

MCC-4K-A supports 16 channels of embedded PCM audio with a delay matched to the video delay, and straightforward tools enable audio channel remapping, synchronization and delay.

Control is available via an intuitive front panel, with video screen for confidence monitoring, with individual quadrants for square division output.

Remote control is also offered via a clearly laid-out browser interface.