

# UKON Universal Conversion Platform



Whatever your input and output requirements, Ukon provides upconversion, downconversion and crossconversion (SD to SD or HD to HD).

Ukon is designed for real world applications, where precise lip-sync, and time-code integrity are important considerations. Accordingly, it takes care of all your audio requirements, including embedded, AES and compressed audio formats. It also carries out time-code conversion from any SD or HD format to any HD or SD format with the reassurance of exact frame mapping.

## Features

- All current SMPTE 292M and ITU 709 HD standards supported
- Digital color space conversion
- Aspect ratio control
- 2 x HD/SD-Serial Digital in
- 4 x HD-Serial Digital out / 3 x Rec. 601 out (option)
- Powerful 3:2 detection and repair
- Image enhancer/de-enhancer
- 4 user display memories
- 2 genlock inputs with loop-through
- 8 global control memories
- Audio processing with adjustable audio delay
- Time-code processing
- Real-time pan/zoom control

## Features

### Signal Inputs

Serial Digital  
2 x BNC 10-bit HD or SD SDI digital inputs  
HDTV 1.48GHz - SMPTE 292-1997 and embedded audio SMPTE 299M and or 270MHz Rec 656 and embedded audio SMPTE 272M.

### Analog Reference

2 x BNC HDTV Tri-syncs or SD Bisync for Genlock - SMPTE 240M/274M

### Film Sequence Flag

RS422  
1 x BNC

### Network

1 x Control port 9-pin D type

### Audio embedder/disembedder

1 x RollCall/RollNet remote via BNC  
4 x BNC 20-bit 48kHz AES3 75 Ohm unbalanced digital audio inputs

### Signal Outputs

Serial  
4 x HDTV serial digital outputs at 1.48GHz - and embedded audio SMPTE 299M

3 x SD serial digital outputs at 270MHz - Rec. 601 and embedded audio SMPTE 272M

Serial  
1 x BNC Input Loop-through on units with only one digital input fitted.

### Film Sequence Flag

1 x BNC

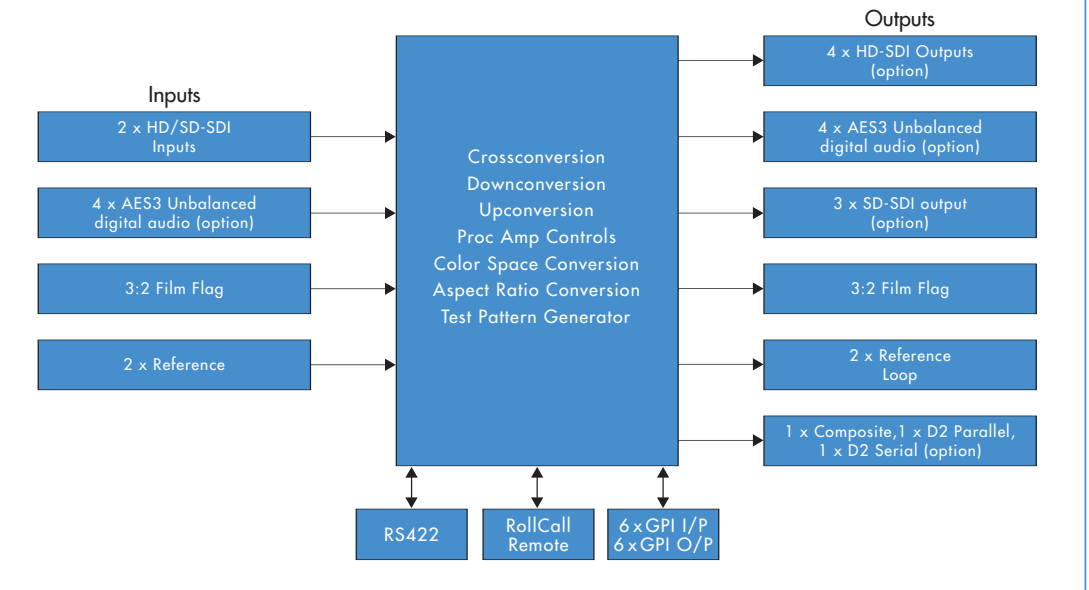
### Analog Reference

2 x loop-through

### Audio embedder/disembedder

4 x BNC 20-bit 48kHz AES3 75 Ohm unbalanced digital audio inputs

## UKON Universal Conversion Platform



**Full Product List**

**Base Model**

UKON 10-bit Universal High Definition Conversion Platform, including upconversion, downconversion, crossconversion and Audio (3608800)

**Option**

Redundant PSU (CSO)

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Company policy is one of continuous product improvement. Specifications are therefore subject to change without notice.

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**Features continued**

Note - embedded audio is not available for 625/24sF and 625/23sF input or output video standards. The AES/EBU inputs and outputs are always available.

**Input Standard**

HD to SMPTE 292M, 299M  
HD-SDI  
750(720)/60p, 1125(1080)/30I  
750(720)/59p, 1125(1080)/30p  
750(720)/50p, 1125(1080)/30sF  
750(720)/30p, 1125(1080)/29i  
750(720)/29p, 1125(1080)/29p  
750(720)/25p, 1125(1080)/29sF  
750(720)/24p, 1125(1080)/25i  
750(720)/23p, 1125(1080)/25p  
750(576)/50p, 1125(1080)/25sF  
750(480)/60p, 1125(1080)/24p  
750(480)/59p, 1125(1080)/24sF  
1125(1080)/23p  
1125(1080)/23sF  
1125(1035)/30i  
1125(1035)/29i

**Output Standard**

SD-SDI  
525(480)/29i, 625(576)/25i  
625(576)/24sF, 625(576)/23sF  
HD - SMPTE 292M, 299M  
HD-SDI  
750(720)/60p, 1125(1080)/30I  
750(720)/59p, 1125(1080)/30p  
750(720)/50p, 1125(1080)/30sF  
750(720)/30p, 1125(1080)/29i  
750(720)/29p, 1125(1080)/29p  
750(720)/25p, 1125(1080)/29sF  
750(720)/24p, 1125(1080)/25i  
750(720)/23p, 1125(1080)/25p  
750(576)/50p, 1125(1080)/25sF  
750(480)/60p, 1125(1080)/24p  
750(480)/59p, 1125(1080)/24sF  
1125(1080)/23p  
1125(1080)/23sF  
1125(1035)/30i  
1125(1035)/29i

SD-SDI  
525(480)/29i, 625(576)/25i  
625(576)/24sF, 625(576)/23sF

**Input & Output Blanking**

Left & Right in steps of 1 pixel.  
Top & Bottom in steps of 1 line.

Input/Black  
Video Sync Modes  
Conversion Modes

Input/Black  
Auto/Optimize/Interpolate/Synchronize  
Auto/Video/Video to sF/Video to 3:2/Film/Film to sF/Film to 3:2/sF to 3:2/sF to 1:1/3:2 to sF/3:2 to 1:1/1:1 to 3:2/1:1 to sF

**Audio Embedding**

Strip ANC data, select tone/silence, audio pass

**Color-space conversion**

Auto, SMPTE 274, 260, 240, BT709, No correction

**Enhance**

Vertical, Horizontal, DeRing

**Control Functions**

GPI  
Display

6 inputs, 6 outputs  
Preset Sizes:-  
Full Height, Full Width, Anamorphic, 16:9 Letterbox, 14:9 Letterbox, Center 4:3  
Variable Pan, Tilt, Size, Aspect and slew-rate.

**Specifications**

Display memories  
Reference

4 user memories  
Auto / Ref.A / Ref.B / Input  
Input Horizontal & Vertical timing  
8 machine memories  
Pattern On/Off, Pattern select  
Freeze On/Off  
Mono On/Off. Mono type  
Timecode output/synchronizing  
Y/C delay

**Power**

Mains Supply  
Power Consumption

115 V to 230 V AC 45/60 Hz  
Max. 240 W

**Mechanical**

Temperature Range  
Cooling  
Case Type  
Dimensions  
Weight

0° to 40° C operating  
Axial fan  
2RU Rack Mounting  
483 mm x 530 mm x 95 mm (w,d,h)  
14 kg



U01 12/06 V2