

4K(UHD) DOWN CONVERTER IF4K-DNC

The IF4K-DNC is a 12G-SDI compatible, cost-effective processor, equipped with a 4K (UHD) to HD down converter that provides simultaneous 12G and HD output. The unit also handles frame synchronization, color correction, HLG to SDR conversion, and supports wide color gamut as well as 12G and HD output. The IF4K-DNC supports AES and analog audio output and is ideal for audio monitoring.



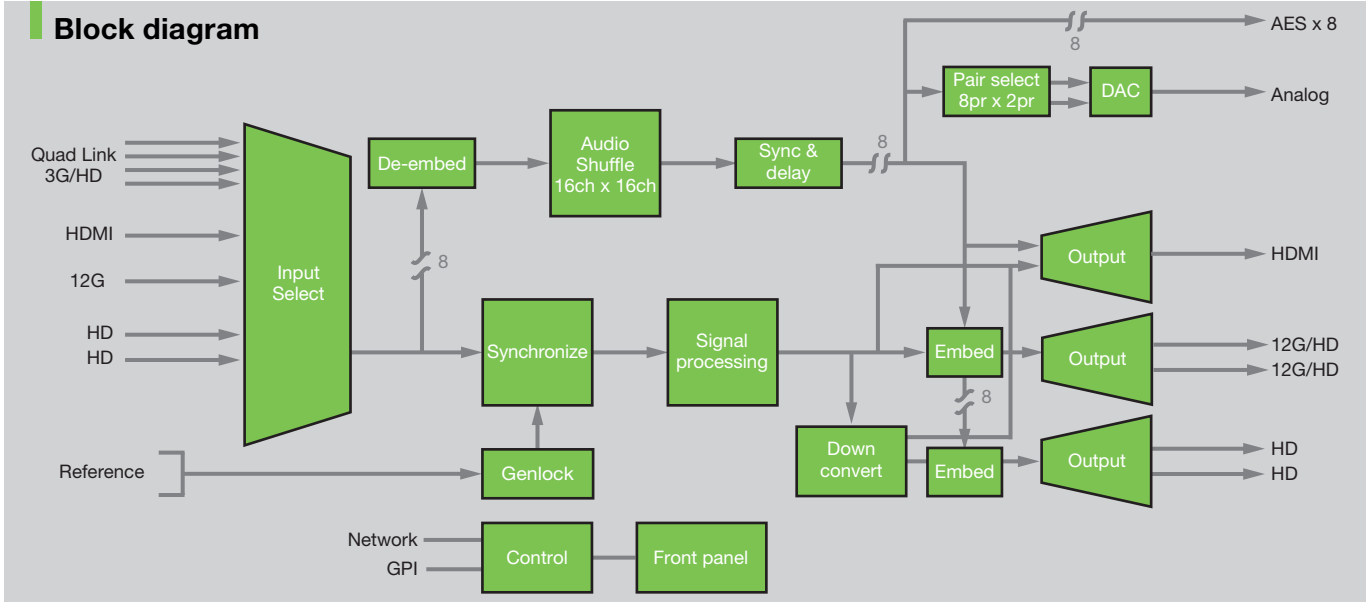
- 12G/quad link 3G/HD-SDI and HDMI inputs
- 12G-SDI x 2, HD-SDI x 2, HDMI x 1 video outputs
- AES x 8 and analog audio x 2 (pair) audio outputs
- Frame synchronization and color correction
- HDR (HLG)/SDR conversion and wide color gamut (ITU-R BT.2020/709) conversion support.
Enables simultaneous output of 12G-SDI HLG/ITU-R BT.2020 and HD-SDI SDR/ITU-R BT.709.
- HD video support from all outputs
- HDMI input/output generation in the 4K/HD
- Can be used as a frame synchronizer for HDMI to SDI conversion and SDI to HDMI converter for 4K/HD monitoring
- Adjustable audio delay
- Web server enables settings from PC or tablet

Remote panel IF4K-REMOTE

- Offers connection to IF4K-DNC for remote control of:
 - HDR (HLG)/SDR conversion
 - Select input signals
 - Audio delay settings



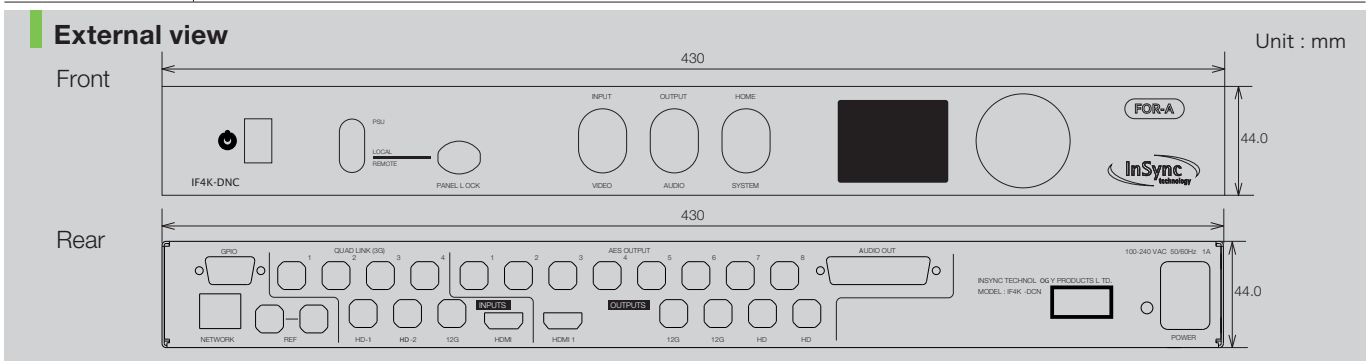
Block diagram



Specifications <Provisional>

Video formats	12G-SDI: 2160/60p, 2160/59.94p (Level A, 2SI) Quad link 3G-SDI: 2160/60p, 2160/59.94p (Level A/B, 2SI/SQD) HD-SDI: 1080/60i, 1080/59.94i
Video inputs	
SDI	12G-SDI: 12 Gbps BNC x 1 Quad link 3G-SDI: 3 Gbps BNC x 1 HD-SDI: 1.5 Gbps BNC x 2
HDMI	HDMI: 2160/60p, 2160/59.94p, 1080/60i, 1080/59.94i
Input cable equalization	12G-SDI: 50m (using 5C-FB or equivalent cable: Belden 1694A) 3G/HD-SDI: 100m (using 5C-FB or equivalent cable: Belden 1694A)
System phase adjustment	-0.5H to +0.5H (quad link 3G-SDI)
Video outputs	
SDI	12G-SDI: 12 Gbps BNC x 2 HD-SDI: 1.5 Gbps BNC x 2 HD-SDI output has 13-line delay in simultaneous output of 12G-SDI and HD-SDI.
HDMI	HDMI: 2160/60p, 2160/59.94p, 1080/60i, 1080/59.94i
Audio inputs	
Embedded	12G/quad link 3G/HD-SDI: 16 channels (PCM audio pair x 8), 48 kHz, 24-bit
Audio outputs	
Analogue	D-sub 25 pin x 1, 4 channels
AES	PCM output, unbalanced, BNC x 8
Genlock input	BB: Tri-level sync: 0.3 Vp-p, 75Ω, BNC x 2, loop-through (to be terminated with 75Ω terminator, if unused)
Color processing	ITU-R BT.2020/ITU-R BT.709 conversion, selectable from gamma (2.0/2.4)
Convert	Down conversion, frame synchronization, HDR (HLG) to SDR conversion
Video function	Video level: Y gain, Black level, Chroma gain RGB color corrector: RGB Gain, Lift, Gamma (SDR)
Interfaces	Ethernet: 10/100BASE-TX, RJ-45 x 1
Temperature/humidity	0°C to 40°C/30% to 90% (no condensation)
Power/Consumption	100 V to 240 V AC ±10%/20 W
Dimensions/weight	430 (W) x 44 (H) x 170 (D) mm/5 kg

External view



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