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
- 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: 2160/50p, 2160/59.94p (Level A, B)
- Quad link 3G-SDI: 2160/50p, 2160/59.94p (Level A/B, 283/3G)
- HD-SDI: 1080/50i, 1080/59.94i

Video inputs
- SDI: 12 Gbps BNC x 1
- Quad link 3G-SDI: 3 Gbps BNC x 1
- HD-SDI: 1.5 Gbps BNC x 2
- HDMI: 12GSDI: 2160/50p, 2160/59.94p, 1080/59.94i, 1080/59.34i
  - Input cable equalization: 12G-SDI: 90m (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: 2160/50p, 2160/59.94p, 1080/59.34i

Audio inputs
- Embedded: 12G/quad link 3G/HD-SDI, 16 channels (PCM audio pair x 8), 48 kHz, 24-bit
- 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

Specifications

Block diagram

Front view

Rear view

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