The DSK-400 is a 4K(UHD) keyer with 12 inputs and 8 outputs for 3G-SDI. Add DSK-400CK for 4K chroma keying. Connect to an HVS-100 for control via HVS-100OU. Also controllable via dedicated GUI.

- 1080p/1080i supported
- 3G-SDI Level A input and Level B (only for FILL/KEY) input supported
- SQD and 2Sh59.97p, 50p supported
- Supported inputs: LINE (3G/HD-SDI x 4), FILL/KEY (3G/HD-SDI x 4 each)
  - 4K mode: LINE x 1, FILL/KEY x 1 each
  - HD (3G/1.5G) mode: LINE x 4, FILL/KEY x 4 each
- Supported outputs: PGM (SDI x 4), AUX (SDI x 4)
  - 4K mode: PGM x 1, AUX x 1
  - HD (3G/1.5G) mode: PGM x 4, AUX x 4
- Enables combined FILL/KEYs on LINE input. Equipped with FS on FILL/KEY input
- Equipped with INPUT STILL on FILL/KEY input. Available as still image source
- BOX mix, KEY INVERT, GAIN, TRANSPARENCY function
- Offers 1080p down-converted output from 4K for monitoring use
- Supports Genlock, BB or Tri-level Sync. Line lock supported for LINE input
- Bypass output supported as standard
- Built-in web server allows individual settings to be configured over web browser
- GPI input/tally output, with 16 pins assignable to input or output
- Remote control via RS-422 port available
- Simultaneous control from up to four DSK-RU, optional remote control unit
- 4K high-performance DSK-400CK chroma keyer (Option)*
- Redundant DSK-400PSM power supply (Option)

*Not available in 4K 2SI, or 29.97p and 25p format.
Specifications

Video format
3G-SDI: 1080/59.94p, 1080/50p, HD-SDI: 1080/59.94i, 1080/50i, 1080/29.97p, 1080/25p

Processing
4:2:2:4, Digital component 10-bit

Quantization
Y: 10-bit, C: 10-bit, KEY: 10-bit

Video input
BKGD (LINE) 3G-SDI: 3 Gbps (Level A), HD-SDI: 1.5 Gbps, 75Ω x 4
FILL 3G-SDI: 3 Gbps (Level A/B), HD-SDI: 1.5 Gbps, 75Ω x 4 (w/ built-in FS function)
KEY 3G-SDI: 3 Gbps (Level A/B), HD-SDI: 1.5 Gbps, 75Ω x 4 (w/ built-in FS function)

Reference Input
BB: NTSC: 0.429 Vp-p / PAL: 0.45 Vp-p or Tri-level Sync: 0.6 Vp-p, 75Ω BNC x 1, loopthrough (terminated w/ 75Ω terminator if unused)

Video Output
PGM (LINE) 3G-SDI: 3 Gbps (Level A), HD-SDI: 1.5 Gbps, 75Ω, BNC x 4 (Bypass function available when powered OFF)
AUX 3G-SDI: 3 Gbps (Level A), HD-SDI: 1.5 Gbps, 75Ω, BNC x 4

I/O Delay
Min. LINE HD, UHD(29.97p, 25p): Approx. 6 μs/3G, UHD(59.97p, 50p): Approx. 3 μs
Min. FILL/KEY HD, UHD(29.97p, 25p): Approx. 6 μs/3G, UHD(59.97p, 50p): Approx. 3 μs
If FS used 0 to 1 frame plus minimum delay
If FS + CK used 1 to 2 frames plus minimum delay
If FS + CK + Downconverter used 2 to 3 frames plus minimum delay (4K 2SI: 1 to 2 frames plus minimum delay)

Video Mixing
Keying External KEY/Self KEY/Full KEY selectable
KEY CLIP/GAIN/TRANSPARENCY Level Adjustable
FILL source FILL input/MATTE selectable
KEY source KEY video input for external keys
FILL MAT Hue/saturation/luminance (color adjustment)
Edge Effect Off/Soft/Hard selectable, Edge width 1H to 8H, Position: max. ±4 lines, Edge color adjustable
Box Mask Top/Bottom/Left/Right/Mirror settings available
Transition Cut or Fade in/out, remote control available

Interface
REMOTE 15-pin D-sub (female) x 1
GPI/INGPI-OUT/ALARM 25-pin D-sub (female) x 1 (16-input/output)
RE-422 9-pin D-sub (female) x 1
LAN 10/100BASE-TX, RJ-45 x 1

Temperature/Humidity 0ºC to 40ºC/10% to 90% (no condensation)
Power 100 V AC to 240 V AC ±10%, 50/60 Hz
Consumption 100 V AC to 120 V AC: 105 W, 200 V AC to 240 V AC: 109 W
Dimensions/Weight 430 (W) x 425 (D) x 44 (H) mm/6.2 kg as standard, 6.6 kg with full option

Accessories AC cable (w/ retaining clip), Rack mount brackets, Cable for DSK-RU connection, Operation manual (CD-ROM), Quick Setup Guide

Consumables (if used 24 hours a day at room temperature) Power supply unit: Replace every 5 years
DSK-400PSM: Replaced every 5 years
Cooling fan: Replace every 4 years

Options DSK-400CK: Chromakey expansion software, DSK-RU: Remote control unit, DSK-400PSM: Redundant power supply

Rear Panel

External Dimensions