ScreenPRO-II series

Multi-layer video display system

- **Four image layers**
- **Low video processing delay**
- **Enhanced Output Card (EOC)**

Looking for a worthy replacement? Check out the S3-4K!

ScreenPRO-II uses four image layers (unscaled background, up to two scaled PiPs or keys, and an unscaled downstream key) to produce sophisticated effects, including live transitioning backgrounds, transitioning PiP windows, wipes, dissolves and keys. An internal 8x2 analog video router provides universal analog sources to each scaler schannel. Barco's ScreenPRO-II features a low video processing delay of three input fields maximum. With the EOC, the ScreenPRO-II can use the DVI background channels as inputs to the scaler channels, adds HD-SDI and interlaced output for recording, and can have storage for 100 logo stills.

Full flexibility

Using the mixer's two scalers, you have the flexibility to mix or key HD-SDI, DVI, and analog source on top of the transitioning background, or display two independent PIPs (or Keys) over a background. In addition, two unscaled high-resolution layers enable you to transition seamlessly between backgrounds, or use a background plus a high-resolution DSK.

Truly seamless

With ScreenPRO-II, the term 'seamless' goes far beyond the system's ability to create clean, glitch-free switches between inputs. With a typical single-format switcher (such as an all-SDI system), 'seamless' is easy - because input timing is uniform. However, when multi-format and multi-resolution sources are connected simultaneously, the clean switching challenge arises, and that is precisely where ScreenPRO-II shines.

Enhanced Output Card (EOC)

The EOC card provides an additional output that can be programmed to a different resolution from the Main/Preview outputs. The additional output is provided on the SD/HD/3G/BarcoLink and five-wire formats. The EOC card also enables the DVI inputs to be routed to the scaler channels. Finally, the EOC includes a memory card allowing the storage of up to 100 logo stills.

- Transitioning PiP or key on a transitioning background
- Native high resolution background channels independent of the PiP/key processing channel
- PiP Effects
  - PiP size from 1/8 to 8X source resolution
- PiP size from 1/8 to 8X source resolution
  - Adjustable PiP aspect ratio
- Adjustable PiP aspect ratio
  - PiP borders, including drop shadows and soft edge
- PiP borders, including drop shadows and soft edge
- Keying
  - Luminance key
- Luminance key
  - Split key (key alpha and fill)
- Split key (key alpha and fill)
  - Reverse key (key on background)
- Reverse key (key on background)
- Native high resolution downstream key channel independent of PiP/key processing channels
- Numerous mix and wipe effects
- Video processing
  - 10-bit processing
- 10-bit processing
  - 1:1 pixel sampling
- 1:1 pixel sampling
  - Motion adaptive de-interlacing (SD & HD)
- Motion adaptive de-interlacing (SD & HD)
  - 3:2 and 2:2 pull down detect
- 3:2 and 2:2 pull down detect
  - Image cropping
- Image cropping
  - Aspect ratio correction

- Aspect ratio correction

- Low video delay - less than 3 input fields
- Programmable matte
- Z-order control (priority layers) for overlapping PiPs or keys
- Mixer dynamically re-assignable as a mixing (transitioning) PiP or as two individual (split) non-transitioning PiPs or keys
- Capture and storage of two LOGO images for use as full-screen image or downstream key source
- Look-ahead preview
- Output synchronization: free-run or vertically locked to NTSC/PAL blackburst, CSync or HD tri-level sync
- Architecture supports future addition of optional output modules (for example, a recordable output)

PRODUCT SPECIFICATIONS	SCREENPRO-II SERIES
Inputs	
Scaled Channel Inputs	■ Analog inputs (8) - RGBHV/RGBS/RGsB computer video, YPbPr video (SD or HD), S-video or Composite video on 15-pin HD connector ■ Sd and HDSDI input (2-optional) - per SMPTE 259M-C (NTSC/PAL resolution) SMPTE 292M (HDTV) on BNC connector
Scaler Input Resolutions	■ 480I ■ Computer Resolutions VGA (640 x 480) through UXGA (1600 x 1200) HDTV Resolutions up to 1920 x 1080 (720p, 1080I, 1080p) ■ 2048 x 1080p (Digital Cinema format) ■ Plasma Display Resolutions
Un-Scaled Background/DSK Channel Inputs	DVI Inputs (2) -Digital DVI per DDWG 1.0 on DVI-I connector
Background/DSK Input Resolutions	■ Computer Resolutions VGA (640x480) through UXGA (1600 x 1200) ■ HDTV Resolutions, progressive up to 1920 x 1080(1080p) ■ 2048 x 1080p (Digital Cinema format) ■ Plasma Display Resolutions
Outputs	
Digital Outputs	Digital DVI per DDWG 1.0 on DVI-I connector (Program Output)
Output Resolutions	■ Computer Resolutions SVGA (640x480) through UXGA (1600 x 1200) ■ HDTV Resolutions, progressive up to 1920 x 1080(1080p) ■ 2048 x 1080p (Digital Cinema format) ■ Plasma Display Resolutions
Analog Outputs	RGBHV/RGBS/RGsB (non-interlaced only) on 15-pin HD connectors (preview and two program monitor/projector outputs)
User control	
Front Panel Control	LCD touch screen display, keyboard circuitry, rotary encoders and LED lighted push buttons
Remote control	The unit may be controlled from a computer or external controller via LAN or an RS-232 serial link. Control options include: ■ source input configuration ■ output format selection ■ test pattern selection ■ Video source selection for PIPs or keys ■ transition effect selection and control

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