



Perfect scaling,
HDTV up to 1080p and 100% digital

picture optimizer plus II SDI

- Full HDTV support
- 100% digital signal processing
- 22 predefined resolutions
- 4 adjustable „custom resolutions“
- max. resolution 1080i & 1080p 50/60Hz
- special filmmode detection for PAL/NTSC
- 8 source video switcher with auto input
- 2 digital, 6 analog video inputs
- 2 HDTV /progressive bypasses
- 1 DVI, 3 analog video outputs

With perfect scaling, all common resolutions up to "true" HDTV 1080p and completely digital signal processing the picture optimizer plus II SDI delivers unique picture quality for projectors and plasma screens at an affordable price.

The completely renewed successor model of the picture optimizer plus utilizes most up to date technologies to their fullest extent and with its foreseeing features is perfectly prepared and future proof for upcoming devices.

The picture optimizer plus II SDI offers HDTV and the fully digital signal processing via SDI, the only digital standard input signal, able to transfer a 1:1 rendition of the digital video data stream provided by either DVD or digital TV.

Besides video picture optimization the device is also a high quality video switcher with auto input function. 10 inputs and 4 outputs also offer all common interfaces for in- & output signals and

allow all variations necessary for a home cinema or presentation room.

Operation and configuration are preformed using the infrared remote control with an easy to handle menu structure, accessible via graphical display or on-screen menu.

The unit is shipped „ready to run“ in order to allow all home cinema owners to immediately operate the picture optimizer plus II SDI.

The device is also available without SDI inputs: The **picture optimizer plus II** as price attractive alternative offers identical functionality, though instead of the two SDI inputs there are 2 FBAS inputs integrated.

Features, functions & equipment



Full HDTV support

with the new predefined resolutions 720p, 1080i and 1080p at 50/60Hz. This feature is based on "true" scaling without horizontal interpolation in the output.

100% digital signal processing

using the two SDI inputs and the HDCP conform digital DVI output. The result of this "full digital chain" is a clear increase in the brilliance of the playback: More sharpness, flicker-free pictures and complete data information for an error-free picture in quasi digital perfection.

Mathematically 100% perfect scaling

cinemateq guarantees the 100% perfect mathematical scaling of the input signal for each output resolution. Result is a pixel exact output picture with maximal granularity, matching international norms in all aspects.

22 predefined resolutions for both PAL & NTSC

9 resolutions can be selected directly via remote control, 13 further ones via navigation in the on screen menu. Each resolution is provided for both PAL and NTSC; in total 2 times 22 = 44 resolutions. The resolutions are: Doubling, Tripling, Quadrupling, HDTV 720p, XGA, SXGA (5:4), HDTV 1080i, 480p, Wide-XGA, Wide-VGA, 540p, 576p, 576i, SVGA, Wide-XGA 2, Wide-XGA 3, SXGA (4:3), PDP 1, PDP 2, DILA, UXGA (4:3), HDTV 1080p.

Maximum resolutions

depend on the frame rate used. E.g. quadrupling with 50/72 Hz, wide-XGA with 100/90 Hz, DILA with 75/72 Hz or 1080p with 50/60 Hz (frame rate PAL/NTSC).



In- and outputs

The cinemateq picture optimizer plus II SDI in total offers 10 inputs and 4 outputs in all common format and interface variations. In order to comply with European demands SCART inputs have also been integrated. This ensures the coverage of all common variation possibilities for sources and displays and highest possible flexibility. The combination of all inputs with the four outputs allows even special conversions such as YUV to RGB or vice versa.

These are just a few highlights of the picture optimizer plus II SDI. Details about features, functions & equipment of the device, a resolutions table and a lot more interesting information can be found on the internet under

www.cinemateq.com

cinemateq
home theater technology

Modell naming / current version

- High-End video picture optimizer with integrated video switcher function
- current hardware version: pp2.5/eu/0104 - silver
- current firmware version: 3.0

Supported video signal standards

- PAL/NTSC (PAL 60, NTSC 3.58, NTSC 4.42/SECAM)

Resolutions

- 22 predefined standard resolutions for both PAL and NTSC
- max. resolution: HDTV 1920 x 1080p with 50/60Hz
- 2 pixel exact, freely definable "custom resolutions" for both PAL and NTSC

Video-Inputs (8)

- 2x SCART-sockets with RGB or FBAS signal
- 2x BNC-sockets with digital SDI (interlaced)
- 2x S-Video-sockets with S-Video signal
- 2x 3 Cinch-sockets with YUV (component video) signal

All Inputs only accept "interlaced" signals!

Bypass-Inputs (2)

- HDTV bypass 1: 5xBNC-socket pass through to BNC-output (RGBHV, RGBS, RGsB, YUV, progressive, 200 MHz loopthrough)
- HDTV Bypass 2: VGA-socket pass through to VGA output (RGBHV, RGBS, RGsB, YUV, progressive, 200 MHz loopthrough)

Video-Outputs (4)

- 5 x BNC-socket: RGBHV / RGBS / RGsB / YUV
- VGA-socket: RGB HV / RGBS / RGsB / YUV
- 3x Cinch socket: YUV / RGBS / RGsB
- DVI-socket: digital DVI (HDCP conform)

Optimization functions

- cinemateq optimizing procedure
- High end deinterlacer
- Flexible line multiplier
- Flexible frame doubling
- 2:2 & 3:2 pull-down
- Adaptive motion control
- Adaptive comb filter
- Time base correction
- 10-Bit processing

Basic functions

- custom resolution
- frame rate conversion
- aspect ratio conversion
- aspect ratio correction
- electronic lensshift
- overscan
- Input configuration (picture parameters)
- sharpness adjustment
- Horizontal & vertical image size and positioning
- TV-Mode
- Noise reduction
- Fixed Presets
- RS-232 output commands

Video switching

- Free allocation of the 8 inputs to the 4 outputs
- Auto input function with priority recognition
- Parallel outputting of the optimised signal to 4 outputs
- Bypass function for RGBHV & VGA
- Parallel output of 2 different sources (with bypass)
- Conversion from YUV to RGB or from RGB to YUV signals

Format conversions

- Pass through (1:1 no format change)
- Horizontal -33% (4:3 frame => 16:9 anamorphic)
- Vertical +33% (4:3 and 16:9 letterbox => 16:9 anamorphic)
- Vertical -33% (16:9 anamorphic => 4:3 frame or letterbox)
- Horizontal -33% & vertical -33% (4:3 frame => 16:9)

Adjustable picture parameters

- Brightness
- Contrast
- Colour saturation
- Colour graduation (hue)
- Colour temperature
- Gamma correction
- Chroma delay
- Image position & image size readjustment

All of the above parameters can be adjusted separately for each input.

Furthermore features

- Remote control via infrared remote control and RS232-interface (9-pole Sub-D, female) for control systems
- Display via on-screen menu & blue graphical display with 3-level brightness control
- Complete configuration and operation using remote control and menu guidance via display or on-screen menu
- Firmware update via RS232 interface possible (Internet download)
- External power supply via 230V AC power supply
- Dimensions: 431 x 300 x 69 mm (W x D x H)
- Colour: Silver chassis, blue graphical display, flat brushed, anodized silver front panel
- Weight 4.0 kg
- Scope of supply: cinemateq picture optimizer plus II SDI, infrared remote control, external power supply, operating instructions German/English
- opt. accessories: analog cable TV tuner (upgrade board) „black kit“ (rework to black chassis possible), SDI connection cable
- 2 years guarantee

We reserve the right to remedy errors & make alterations without prior notification.