

# **ImagePRO family**

All-in-one video scaler, scan converter and switcher







# **Empower your events**

Since 2004, ImagePROs have been the go-to solution, ensuring live events are successful – both in terms of scaling images correctly to fit any format and offering the very best image quality within each format.

For video professionals, the ImagePRO is the ultimate multi-functional problem solver. All of the ImagePROs support format conversion, scaling, and switching. When 4K is required, both the ImagePRO-II and the ImagePRO-4K are the go-to boxes. When you need maximum processing power, the ImagePRO-4K provides extreme performance with ultra-low latency, 12-bit internal processing and up to 4K60p 4:4:4 10bit signals. No matter what format you work in, you can be sure it will be scaled and converted accurately.



#### Easily the best

ImagePRO-4K makes it incredibly easy to get sensational results. In terms of performance, it utilizes industry-specific scaling algorithms designed for the lowest latency and best image quality to process signals up to 4K60p 4:4:4 10-bit.

Operation and configuration are easily managed from the front panel or the Event Master Toolset, with the ability to preview upcoming sources on the front panel. With a similar menu structure across the line, even the newest ImagePRO feels familiar.

## Matrix mode: all the tools in one box

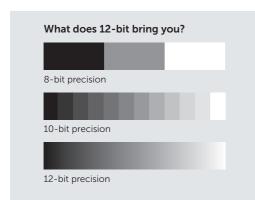
Not only is the ImagePRO a great converter, it also acts as a fantastic multi-format scaler and switcher. That's three boxes in one – without the need to worry about connectivity or compatibility.

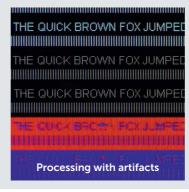
Pros that go for the ImagePRO-4K find themselves working with the equivalent of six ImagePROs in one box. Imagine the possibilities that will offer upcoming events and installations.

## 12-bit processing for better images in every format

To keep you up-to-spec with the demands of today's 4K market, all ImagePRO models boast 12-bit internal processing as standard. The jump from 8- to 12-bit processing is exponential. No matter the input or output format, your signals are always processed with 12-bit accuracy, creating better scaling and conversion.

The result is simple: faster and more accurate processing that leads to lower latency and the finest levels of detail in each format – even if the output is 8-bit. The ImagePRO-4K also opens the door to using full HDR signals.













#### **Fantastic return on investment**

This combination of extreme flexibility and quality gives a fantastic return on investment and a long product lifetime. Designed and built to survive the road, the ImagePRO-4K keeps earning.

With modular cards shared by the Event Master family of products, it is field-serviceable, keeping it on the job and not on the shelf. Down time and shelf time are kept to a minimum, and show time to the max.

Should new signal formats and connectors emerge in the future, the ImagePRO-4K is also field-upgradeable by changing the modular input and output cards.

Being a scaler, switcher, converter, matrix switcher, even a reference sync generator, the many uses save the expense of carrying multiple devices to perform multiple tasks.

When it comes to shipping and racking, the small size of the ImagePRO-4K will save you space and shipping costs.

#### **LED** at your fingertips

Need to slice and dice LED signals? The ImagePRO does it with ease. Either chop up single inputs across several connectors or drive multiple walls from multiple sources. The LED set-up menu will guide you through the process to achieve pixel perfect images.

There was never a second thought when it came to adopting the ImagePRO-4K. Looking at the current state of the market and the need to push more pixels, the ImagePRO-4K is the logical step. The ability to take the latest highres inputs along with the processing power and reliability made early adoption an easy decision for Rentex and our clients.

Don Gaskill, Owner, Rentex



# ImagePRO-4K

### Scale, convert and switch images for the way shows are created in a 4K world



- The highest resolutions (4K60p)
- The best color performance (4:4:4 sampling, 10-bit colors)
- The lowest latency for a scaler of this class (1 frame, progressive)

#### **Superb performance**

In 2004 the Folsom ImagePRO revolutionized HD video processing for live events. In 2018 the ImagePRO-4K continues that legacy and takes it even further, processing signals from XGA to full 4K60p 4:4:4 10-bit.

The latest I/O connectors enable you to seamlessly convert HDMI 2.0, DisplayPort 1.2 and 12G SDI signals while also enabling output image rotation.

Put simply, the flexibility and power of the ImagePRO is the backbone on which you build shows that run without a hitch.

#### Road-ready and reliable

Like all Barco image processing products, the ImagePRO-4K is built for life on the road. Assembled and tested for extreme use and abuse, the ImagePRO-4K performs just as well at the gig as it does in the shop. Modular input and output cards keep it on the road and off the shelf.

What's more, the live-source view on the front panel provides you with a clear view of the incoming signal giving you the confidence you need to execute your event flawlessly.



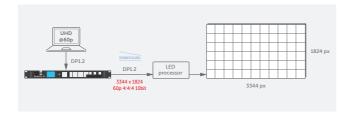




# What ImagePRO-4K can do for you

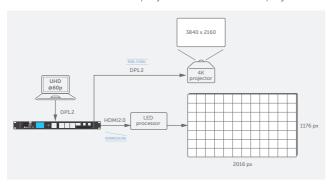
#### LED: single channel pre-scaling

Since most LED walls are not a standard 4K resolution, the incoming signal needs pre-scaling or cropping (e.g. UHD 3840 x 2160px) to the actual resolution of the LED wall. ImagePRO's 12-bit processing preserves the signal's details and color.



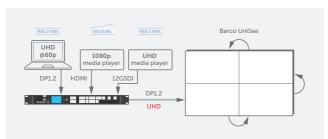
#### **Dual output application: LED + projection**

The challenge here is to output two separate signals with different resolutions: a 4K projector and an LED display.

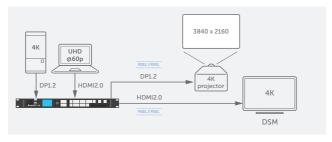


#### Upscaling + switching: 2x2 UniSee wall

Input different signals such as DP1.2, HDMI and 12GSDI, and output to the UniSee using DP1.2.

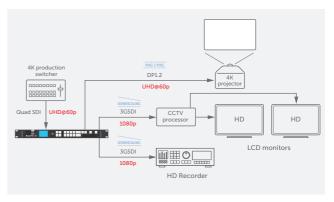


#### Small breakout room with matrix mode



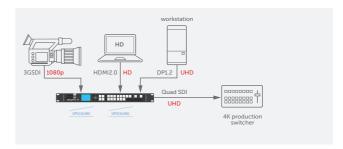
#### Houses of worship or campus feeds

Quad SDI and UHD@60p input signals can be distributed to a 4K projector, LCD monitors, and a recorder.



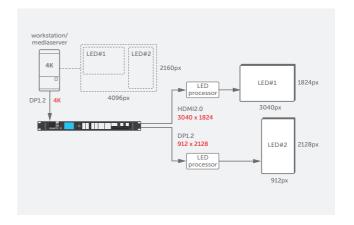
#### **Broadcast conversion**

Easily convert from 3G SDI, HDMI 2.0 or DP1.2 to UHD SDI.



#### Two LED walls from a single source

Use a single 4K source to feed two LED displays. Since the content is provided on a single connector, the LED walls will be in sync.







# ImagePRO-II series

### The accessible way to scale, convert and switch

- Converts any input signal format to any output format, up to 4K30n
- HDCP and EDID management
- USB back-up and restore
- Field replaceable DVI connectors

ImagePRO-II is an advanced highperformance scaler, scan converter, and switcher. ImagePRO-II supports Analog, dual link DVI, HDMI, DisplayPort and 3G SDI signal formats, including 4K30p via dual link DVI and DisplayPort 1.1. Loop-through outputs are provided for the Analog, DVI and SDI inputs and gen-lock signals. With features like 4K scaling, HDCP and EDID management, extremely low latency converting modes, still store capture/import/export, the ImagePRO-II solves your HD and many 4K needs.

## Simple setup and advanced control

The incorporated USB back-up and restore functionality makes configuration simple and efficient. ImagePRO is easily controlled via the front panel, browser or a mobile device. It automatically acquires and locks to any input signal. On the output side, ImagePRO-II can automatically determine the format of the attached display, optimizing its output resolution to match that of the display.

#### Shock tested, roadie approved

As the ImagePRO-II is built for the live event industry it has been designed with the road in mind. With features like field-replaceable DVI connectors, one rack unit form factor and professional ethercon connector, ImagePRO-II supports the demanding environment of any live event.





(





#### ImagePRO-II Jr

The ImagePRO-II Jr brings the high-performance scaling of the ImagePRO-II in an even more affordable package. By providing a streamlined input interface structure, this cost-effective model is perfect for general applications





## Choose to go for dual output, audio or both.

If necessary, you can expand the power of the ImagePRO-II with an optional dual output or audio processing card.

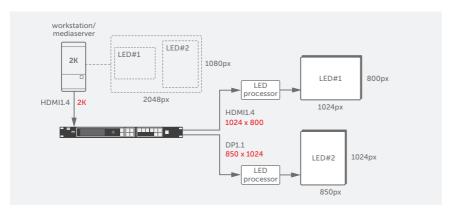


The **audio upgrade card** adds the ability to embed, preserve, or disembed audio signals among HDMI, DisplayPort and SDI connections. The DB-25 connector supports two analog inputs and outputs, or eight AES input and outputs via a custom audio

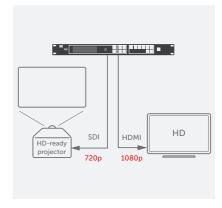
breakout cable with four XLR and eight BNC connectors.



Use the **dual-output card** to scale an input signal to two separate outputs at different resolutions and configurations. Furthermore, the dual output card also offers stereoscopic 3D conversion capability.



Dual outputs feeding two LED walls from the same content server. Outputs can be sized, positioned, and configured independently.\*



Dual output feeding an HD projector and a monitor, both independently scaled.\*

<sup>\*</sup> The optional dual-output card must be installed.





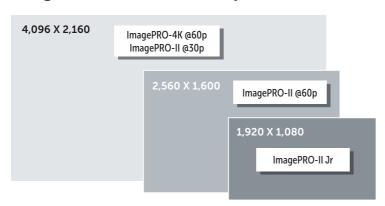
### ImagePRO processing comparison



### ImagePRO input comparison

	Analog	DVI	3G SDI	(HD) HDMI	(4K30p) DP1.1	12G SDI	HDMI2.0	DP1.2
ImagePRO-II Jr	•	•	•					
ImagePRO-II	•	•	•	•	•			
ImagePRO-4K			•	•	•	•	•	•

### ImagePRO resolution comparison



© 2018 Barco NV. All rights reserved. Reproduction in whole or in part without written permission is prohibited. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. Due to continued innovation, information and technical specifications are subject to change without prior notice. Please check www.barco.com for the latest specifications.

The new LED set-up menu is awesome! It's very simple and easy to navigate for the user, allowing quick set-up of the parameters we often need for scaling before an LED processor (...).

Aaron Raymond, Director of Technology, Mass AV

#### Order numbers:

- ImagePRO-II Jr R9004677

M00822-R00-1118-PB November 2018

Barco nv | www.barco.com

Beneluxpark 21 | 8500 Kortrijk | Belgium T +32 56 36 80 47 | F +32 56 36 83 86

**ENABLING BRIGHT OUTCOMES** 



