

# ImagePRO-II

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



## Why ImagePRO-II ?

- Best-in-class scaling
- Low latency
- Best ROI for your rental inventory
- Fastest source acquisition
- Familiar user interface
- Roadworthy design
- Proven history of performance
- Professional video tool set

ImagePRO-II is an advanced high performance all-in-one video scaler, scan converter, switcher and transcoder converting any input signal format to any output format. ImagePRO-II supports universal analog, DVI single and dual link, HDMI, DisplayPort and SD/HD/3G SDI signal formats. Loop-through outputs are provided for the analog, DVI, SDI input and genlock signals. With features like HDCP and EDID management, USB backup and restore, multiple video effects and a web page user interface, ImagePRO-II is the most advanced and flexible signal processor in the rental and staging industry making it the most suitable solution for your live event.

ImagePRO-II is offered in two models: standard and dual output. The dual output adds a second Athena scaler allowing one input to be scaled to two separate resolutions, doubling the output capability of your ImagePRO-II. Standard models can be field upgraded with the dual output option card.

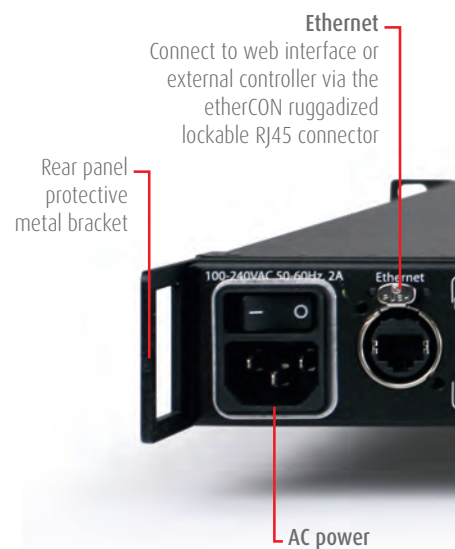
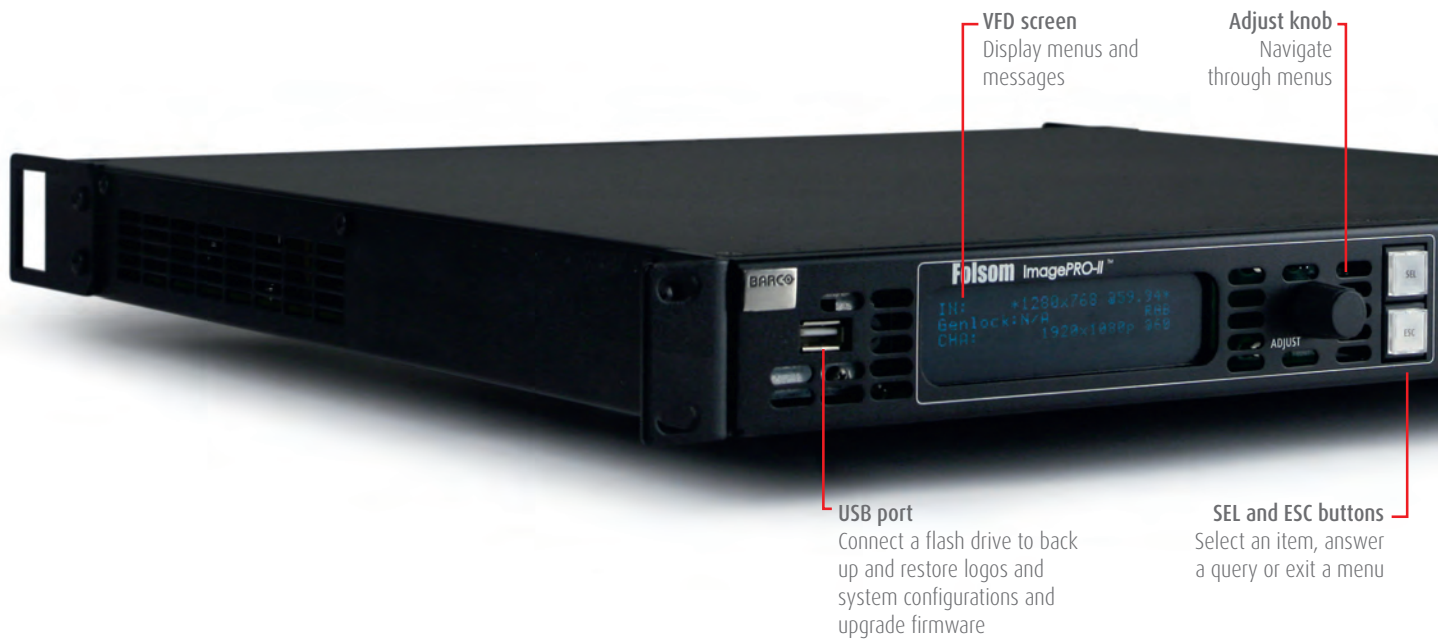
## Available models

- R9004677: ImagePRO-II
- R9004683: ImagePRO-II with dual output
- R9004684: ImagePRO-II dual output option upgrade kit

**BARCO**

Visibly yours

# Professional connections, professional signals



## Field replaceable DVI connectors

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 it supports the demanding environment of any live event. In order to keep you up and running at all times, you can easily replace the DVI connectors on your device.

“ The best  
just got better.

*Adam Benjamin, Vice President PRG Video*



# Endless scaling and switching possibilities

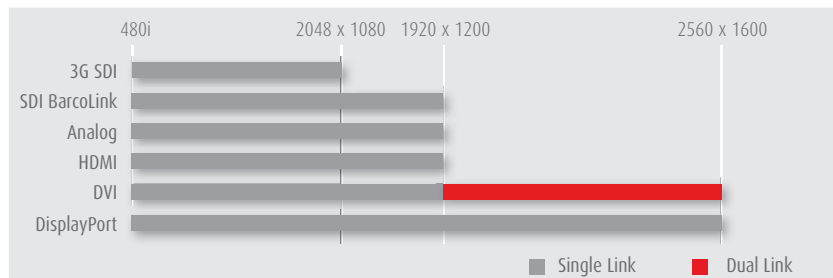
## New features you will love

Drawing from its predecessor, ImagePRO, the ImagePRO-II maintains the legendary look, feel and operational ease of use professionals have grown to trust. In addition, ImagePRO-II now includes more advanced functionalities:

- Higher resolution: up to 2,560 x 1,600
- New input types
- Remote control via integrated web server
- USB backup and restore
- User-friendly LED setup menu
- 12-bit processing
- Automatic output configuration

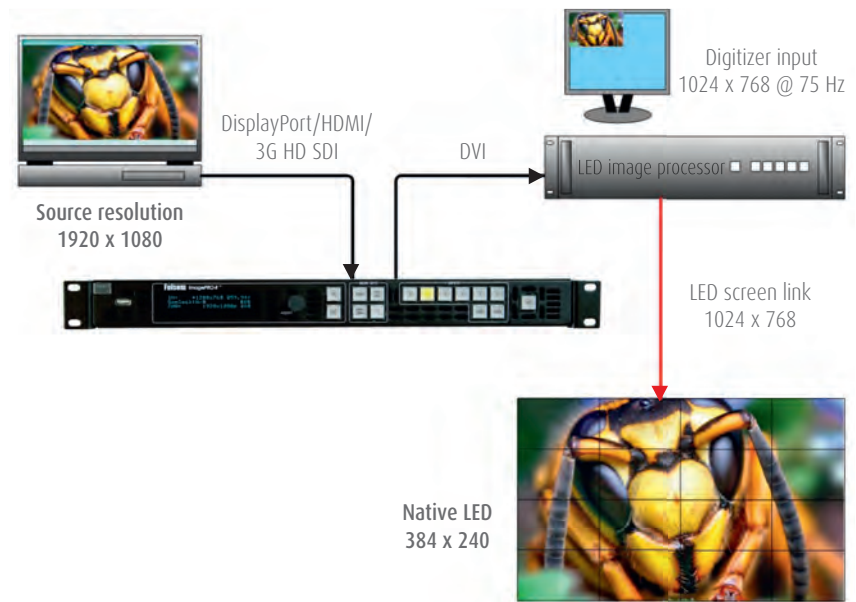


## Supporting higher resolutions and the latest signal interfaces



## Quick LED setup

The new Area of Interest (AOI) feature makes setting up your LED display easier than ever. Input sizing is quick and easy with instant selections like 1:1 to match the input pixel for pixel. The AOI feature allows you to center cut your source and fill the display horizontally and/or vertically. The zoom settings in the LED setup menu provide custom scaling settings for pixel perfect sizing. ImagePRO-II also outputs a single pixel raster box indicating the size and position of the AOI window.

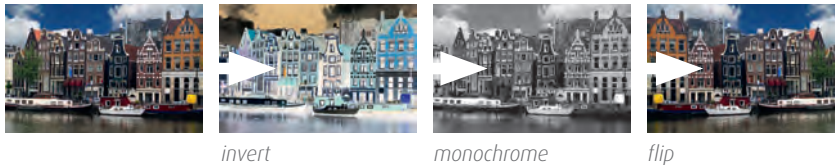


## Automatic output configuration

Thanks to the DisplaySense technology, ImagePRO-II automatically sets its output format to match the display's native resolution. When more than one display is connected to ImagePRO-II, users can select which device determines the output format. As display formats are constantly changing, ImagePRO-II guarantees the best resolution for the best image quality.

## Built-in video effects

The ImagePRO-II is able to apply video effects on its output, including color correction, invert, monochrome, flip, strobe or mask.

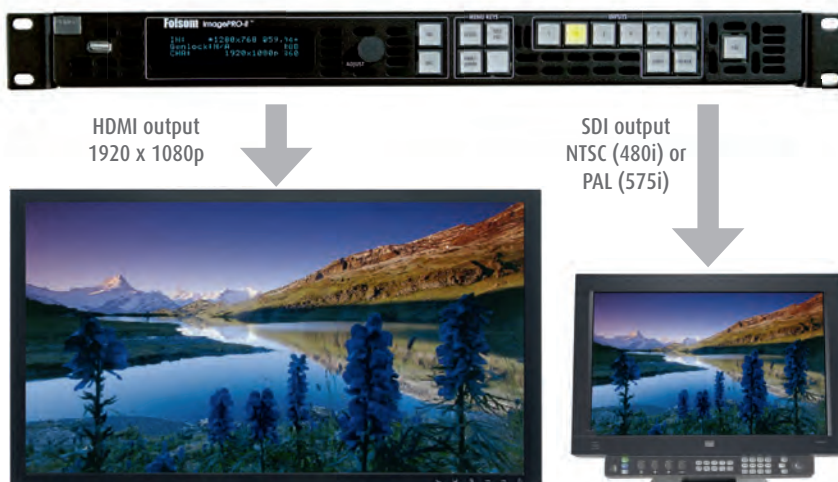


## Custom resolutions

By duplicating and editing an existing video format, you can easily create your own custom video timings for both input and output sources. The ImagePRO-II can store up to 32 custom resolutions. Since these are available in the EDID table, you can request these custom resolutions from your computer connected to ImagePRO-II.

## Optional: dual output mode

The optional dual output card turns your ImagePRO-II into an even more powerful tool. By providing an additional scaled output, the same input can be routed to two separate outputs doubling the output capability of your ImagePRO-II, as illustrated below.



“ Live events  
without  
ImagePRO  
would be  
tough.  
It's the  
workhorse for  
the industry,  
with perfect  
performance  
and an  
attractive ROI.

Georg Rössler, CT Germany

# ImagePRO comparison table

	FEATURES	IMAGEPRO-3G	IMAGEPRO-II	IMAGEPRO-II WITH DUAL OUTPUT
INPUTS	Analog universal	3	2	2
	Loop through	✓	✓	✓
	EDID	—	✓	✓
	DVI	1	1	1
	Dual-link	—	✓	✓
	Loop through	✓	✓	✓
	EDID	✓	✓	✓
	HDMI	—	1	1
	EDID	—	✓	✓
	3G/HD/SD-SDI	1	1	2
	Dual-link	—	—	✓
	Loop through	—	✓	✓
	Display port	—	1	1
	External genlock	✓	✓	✓
	Loop through	—	✓	✓
OUTPUTS	DVI	1	1	1
	Display port	—	1	1
	HDMI	—	1	1
	3G/HD/SD-SDI	1	1	2
	Analog universal	1	1	1
	Composite	1	1	1
	Scalers	1	1	2
	Max. output resolution	1900x1200, 1080p	2560x1600	2560x1600

	FEATURES	IMAGEPRO-3G	IMAGEPRO-II	IMAGEPRO-II WITH DUAL OUTPUT
CONTROL	Front panel display	1	1	1
	Backlit buttons for live inputs	—	✓	✓
	USB for system and LOGO backup/restore and software update	—	✓	✓
	Ethernet	✓	10/100 Mbps	10/100 Mbps
	High quality Ethercon connector	—	✓	✓
	Web page interface	—	✓	✓
	iPhone/iPad app (Q3/2012)	—	✓	✓
PROCESSING	1:1 pixel sampling	✓	✓	✓
	Video effects	—	✓	✓
	Auto detection of latest software version	—	✓	✓
	Auto setup of output format	—	✓	✓
	Custom AOI (LED) menu	—	✓	✓
	Frame rate up to 120Hz	—	✓	✓
	Custom output formats	✓	✓	✓
	Custom formats available on EDID table	—	✓	✓
	Still logo	✓	✓	✓
	Pan and zoom	✓	✓	✓
	Pan and zoom fill H/V	—	✓	✓
	Stereoscopic 3D processing	—	—	✓
	Discrete audio I/O	—	Option	Option

“ImagePRO has been an important part of our business.

Hubertus Beckmann, LANG AG



# Simple setup and advanced control



## Remote control via web browser

An integrated web page server provides remote control to configure and switch the ImagePRO-II. This powerful integrated web interface also enables system diagnostics, import and export of png logo files and firmware upgrades.

## Advanced EDID and HDCP configuration

Each compatible input can be separately configured for both EDID and HDCP compliance.

## USB backup, restore and upgrade

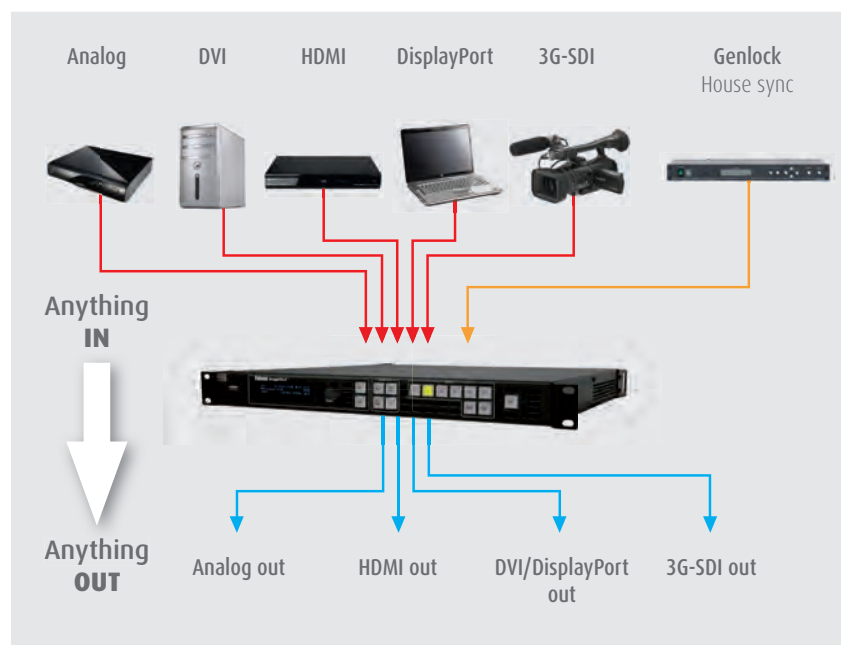
Via a USB flash drive you can back up settings, logos and even upgrade your firmware. When you need to copy settings from one system to another, you can simply copy the configuration to the USB drive and move it to the next unit for a quick and easy duplicate of the first unit's settings. In this way, multiple units can be set up and configured in just a few minutes.

## Online software management

When connected to the Internet, ImagePRO-II can check for the latest software release. If necessary, it will download and upgrade its firmware automatically, keeping your unit's functionality up to date.

## How to connect your ImagePRO-II

4:3	NTSC
PAL	HDSOI
3G SDI	HDTV
UXGA	1080i
HDMI	DVI
DISPLAY PORT	COMPOSITE
1080p	720p
DUAL LINK DVI	SINGLE LINK DVI
VGA	RGBHV
S-VIDEO	XGA
16:9	16:10
WQXGA	QXGA
2K	WUXGA
SXGA+	WXGA
SXGA	WSXGA+
DEEP COLOR	COMPONENT



# Technical specifications

VIDEO INPUTS	
Input 1: DVI-I	<ul style="list-style-type: none"> <li>Digital formats; all single-link DVI digital formats up to 165 Mhz, per DVI 1.0 specification and all dual-link DVI formats up to 330 Mhz; max H active: 4096, max V active: 3072</li> <li>Analog formats: NTSC/PAL composite and Y/C video, SD YPbPr with bi-level sync, HD YPbPr with tri-level sync, RGBHV/RGBS/RGB computer video with bi-level sync</li> <li>Analog sampling: sources with pixel rates up to 170 Mhz are sampled 1:1; sources with pixel rates above 170 Mhz are filtered and sampled at 170 Mhz, including but not limited to 1920x1200p, 2048x1080p</li> <li>Active loop-through output of all input signals, including HDCP and EDID</li> <li>EDID version 1.3 compatible - HDCP version 1.4 compatible</li> </ul>
Input 2: HD-15 VGA	<ul style="list-style-type: none"> <li>Format: NTSC/PAL composite and Y/C video SD YPbPr with bi-level sync, HD YPbPr with tri-level sync per SMPTE 274, RGBHV/RGBS/RGB computer video with bi-level sync</li> <li>Sampling: sources with pixel rates up to 170 Mhz are sampled 1:1; sources with pixel rates above 170 Mhz are filtered and sampled at 170 Mhz, including but not limited to: 1920x1200p, 2048x1080p</li> <li>Active loop-through output of all input signals</li> <li>EDID version 1.3 compatible</li> </ul>
Input 3: HDMI (Type A)	<ul style="list-style-type: none"> <li>Formats: RGB and YCbCr; resolutions up to 2048x1080p @ 60 Hz per HDMI 1.4 specification</li> <li>EDID version 1.3 compatible - HDCP version 1.4 compatible</li> <li>Deep color (30/36 bits)</li> </ul>
Input 4: DisplayPort	<ul style="list-style-type: none"> <li>Formats: resolutions up to 2560x1600 @ 60Hz (30 bits) per DisplayPort 1.1a specification</li> <li>HDCP version 1.4 compatible</li> </ul>
Input 5 & 6 (dual output option): SD/HD/3G SDI on BNC	<ul style="list-style-type: none"> <li>Formats: SD-SDI per SMPTE 259M-C (NTSC/PAL resolution); HD-SDI per SMPTE 292M, 296M; 3G-SDI per SMPTE 424</li> <li>Re-clocked loop-through output</li> <li>Dual link HDSDI per SMPTE 372 (dual output option)</li> </ul>
VIDEO OUTPUTS	
Output 1 & 2 (dual output option): SD/HD/3G SDI on BNC	<ul style="list-style-type: none"> <li>Formats: SD-SDI per SMPTE 259M-C (NTSC/PAL resolution); HD-SDI per SMPTE 292M, 296M; 3G-SDI per SMPTE 424</li> <li>Dual link HDSDI per SMPTE 372 (dual output option)</li> </ul>
NTSC/PAL composite video	CVBS on BNC connector
DVI-D	<ul style="list-style-type: none"> <li>Formats all single-link DVI digital formats up to 165 Mhz, per DVI 1.0 specification</li> <li>All dual-link DVI formats up to 330 Mhz</li> <li>EDID version 1.3 compatible - HDCP version 1.4 compatible</li> </ul>
HD-15 VGA	<ul style="list-style-type: none"> <li>Formats: NTSC/PAL composite on green, NTSC/PAL Y/C video with bi-level sync on Y only, (Y: Green, C: Red); SD YPbPr with bi-level sync; HD YPbPr with tri-level sync per SMPTE 274; RGBHV/RGBS/RGB computer video with bi-level sync</li> <li>EDID version 1.3 compatible</li> </ul>
HDMI (Type A)	<ul style="list-style-type: none"> <li>Formats: RGB and YCbCr at 4:4:4, YCbCr at 4:2:2, per HDMI 1.4 specification; resolutions up to 2048x1080p @ 60Hz</li> <li>EDID version 1.3 compatible - HDCP version 1.4 compatible</li> </ul>
Output 3: DisplayPort	<ul style="list-style-type: none"> <li>Formats: resolutions up to 2560x1600 @ 60Hz (30 bits) per DisplayPort 1.1a</li> <li>HDCP version 1.4 compatible</li> </ul>
OTHER	
Genlock	Analog ref input/loop/output on BNC connectors; bi-level and blackburst at SD and tri-level at HD or locked to any input
Remote control	<ul style="list-style-type: none"> <li>USB 1.1</li> <li>Ethernet RJ-45, 10/100 Mbps autosense</li> <li>Computer, tablet, smartphone, or external Encore or ScreenPRO-II controller via Ethernet link.</li> <li>Control functions include: source input configuration, output format selection, test pattern selection, transition effect selection and control</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Height: 1.75 in (4.4 cm) - 1 RU rackmount</li> <li>Width: 17 in (43.2 cm) without chassis handles, 19.06 in (48.4cm) with chassis handles attached</li> <li>Depth: 17.09 in (43.4 cm) from front to rear panel, 18.51 in (47 cm) overall</li> </ul>
Weight	15.75 lb (7.144 kg)
Input power	Power 100-240 VAC, 47-63 Hz, auto-selecting 2.0A maximum
Environmental	Temperature: 0-40° C; humidity: 0-95% noncondensing
Warranty	Full three-year parts and labor warranty