



Irix Pro^{HDR}

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INTRODUCTION

Irix Pro HDR

Irix Pro HDR is an incredibly powerful and cognitive image editing software incorporating best of latest technologies like Artificial Intelligence, GPU processing, HDR, HDR10, HDR10+, Extended Dynamic Range (XDR) image rendering, up to 64 bit image editing, to name a few.

In addition to all the standard tools for image editing, Irix Pro HDR offers novel tools and features to simplify and make photo editing truly professional.

Technologies that Irix Pro HDR employs to empower you to infinitely calibrate the nuances of your imagination.

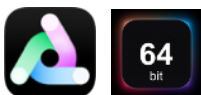
This document describes the features provided in Irix Pro HDR.

MyND[®] AI Engine, Spitfyre[®] Graphics Engine and GPU optimized processing are the backbone of the editor which provide split second, crisp and non-destructive edits with previews in real time, as you edit.



MyND[®] AI Engine

Irix Pro HDR is powered by proprietary MyND[®] Engine that propels Artificial Intelligence (AI) computations to a whole new level with 'Real Time Foreground Implementation' as the Engine analyses raw data.



Spitfyre[®] Engine

Irix Pro HDR uses proprietary Spitfyre[®] Graphics Engine to accelerate image rendering and editing inHDR and XDR Color Space. Parallel 64 bit GPU processing augments the engine to bring crisper and well appointed finish, in real time.

Spitfyre[®] Graphics Engine pushes color space boundaries to human eye perception limits with processing and rendering in Extended Dynamic Range (XDR). The XDR envelop subsumes SDR, HDR, HDR 10 and HDR 10+ gamuts.



GPU Processing – Irix Pro HDR harnesses full-power of integrated and/or dedicated GPU to deliver lightning-fast processing without bottlenecking the CPU.



Extended Dynamic Range - Irix Pro HDR is built on latest technologies and supports 16 bit/channel [RGB & α] image with 64 bit parallel processing. This allows Irix Pro HDR to push the dynamic range to well beyond HDR, rendering extremely high fidelity image post editing.



Industry First in this Genre of Photo Editors...

- **Multiple simultaneous Irix Pro HDR Editor windows** can be opened and different images can be edited. Multiple catalogs can be imported, edited simultaneously and exported as IRX catalog. Irix also supports multiple monitors.
- **Extended Dynamic Range Editing** (EDR or XDR) color space editing that almost matches human eye perception, in addition to HDR, HDR10 and HDR10+
- **Panorama and 360° viewer**. Irix supports Panorama and 360° image editing and also provides a viewer.
- **Apple M1 support** - Delivers native performance on the latest M1 architecture
- **Batch processing and export in .IRX file format**. .IRX files can be viewed online via IRX Viewer.
- MyND[®] AI engine powered **Image Auto Enhance** and tools viz. Dehaze, Clarity, Denoise etc.
- **Spitfire[®] Graphics Engine**
- **GPU Optimizer** - Optimized for GPU, provides CPU and GPU load balancing
- **RGB and CMYK color space Histogram**
- **LUTs export**
- **Masking overlays** using local adjustments
- **Text** skewing and overlays in text
- **Automatic image crop** if excessive skewing leads to absence of data in the visible canvas of the image
- **No image proxies** are created and all edits are made on live images



**Irix Pro
HDR**

1IRX200

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Loading AI Engine...

Patricia Nelson, Sarah Howard, Karen Powell, Amy Watson, Jason Long, Eric Reed, Nathan Green, Carl Smith, Gerald Cooper, Wayne Cox, Jerry White, Haruka Omori, Eido Hashimoto, Kaya Keiko, Akira Haber, Janko Takacs, Theo Bergqvist, Ludvig Nilsson, Emma Lindberg, Joshua Moore, Gerald Clark, Joe Harris, Jordan Smith, Kyle Taylor, Eric Lee, Anshu Lawragga, John Martin, Lisa Ray, Sandra Walker, Ruth Hall, Debra Garcia, Vikas Verma, Bo Malmqvist, Vijay Malhotra, Bob Anand, Suri Malliya, Anir Ghosh, Husain Abbas, Jerry Thompson, Kishor Punia, Ash Kumar, Steve Jones, Luke Stewart, David Jones, Mateo Pasi, Alan Gamble, Anshu Lawragga





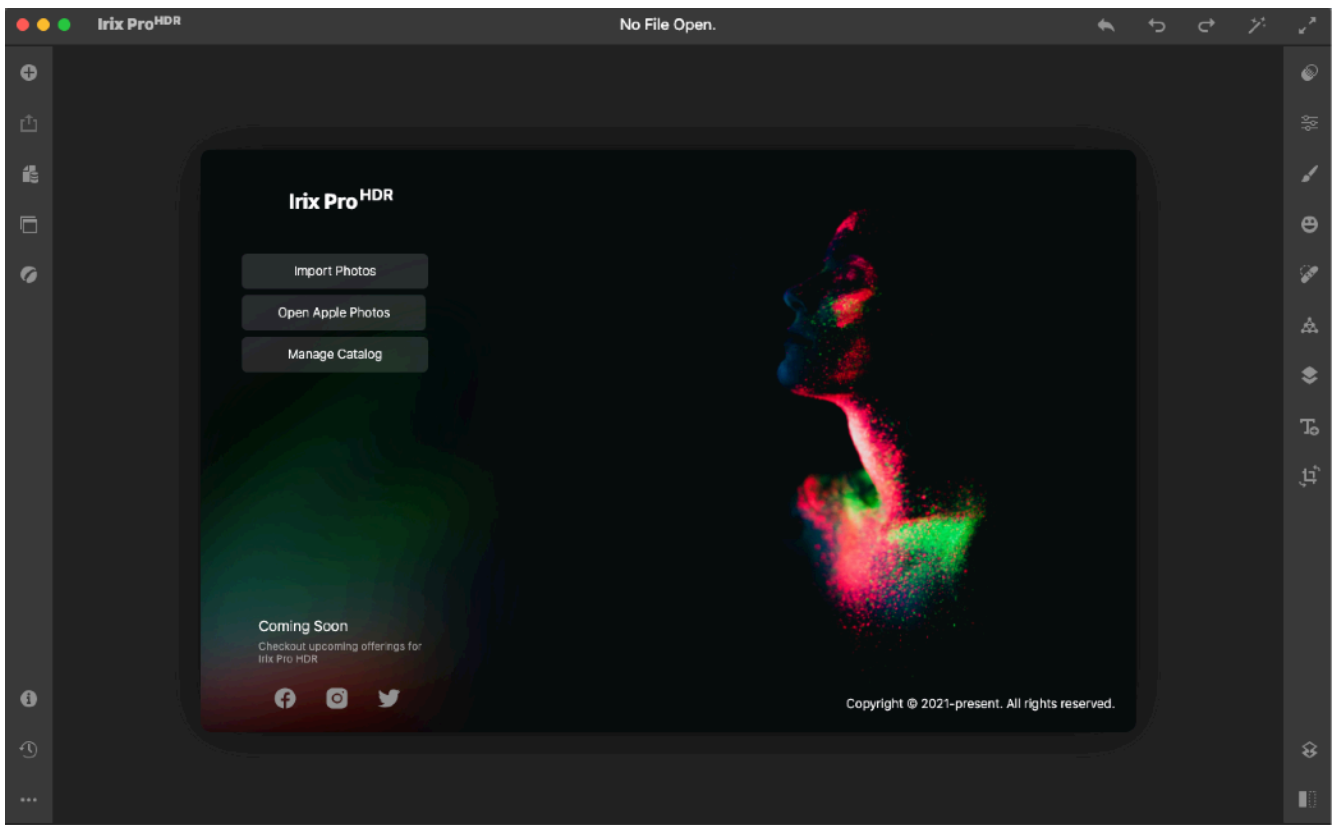
Layout

The user interface of Irix Pro HDR is engineered to keep learning curve flat and to be effective and expedient as you get familiar with it.

The UI is split into four main sections;

- Top toolbar
- Side toolbar on the left
- Side toolbar on the right
- Bottom toolbar

All top tier tools can be seen on the launch screen. Individual tool sidebars are collapsed and can be accessed when an image has been imported and the specific tool is selected.



Tooltips are active and can be accessed by hovering the mouse over the icon for 2 seconds or longer.

Canvas Background Color

For comfortable editing environment and to reduce ambient screen distraction, you can toggle between various light and dark image canvas colors. To do so, click on [...] at the bottom of left toolbar and select preferred Background Color from the menu.

Distraction-free Mode / Hide UI

For distraction free viewing, click [⌘+F] on the right top corner to toggle between show or hide the UI. This helps in viewing the image as it would look when finished.

Note – Hide UI mode works best when a tool layer is not active.



Toolbars

Top Toolbar

- Window control
- Undo
- Redo
- AI assisted auto enhance
- Show or hide User Interface

Side toolbar on the left

- Import
- Export
- Manage IRX catalog
- Open reference image in a new window
- Open & view Panorama image
- Image Information
- History
- More tools -
 - Keyboard shortcuts
 - Soft proofing
 - Copy or Paste adjustments, apply last edits
 - Background color
 - Histogram

Side toolbar on the right

- Quicksets
- XDR Color Grading
- Local Adjustments
- Face Retouch
- Spot removal
- Warping tool
- Overlays
- Text
- Crop
- Rasterize (flatten)
- Before/After

Bottom Toolbar

- Filmstrip
 - Filmstrip management tools on the left when filmstrip open

Note - Exit the dialog boxes via ESC key or press [×] in the dialog box.



Application Menu

Irix Pro HDR

- About Irix
- Services
- Hide Irix
- Hide Others
- Show All
- Quit Irix

FILE

- Launch Apple Photos
- Export Image
- Batch Export Images
- Watermark Image
- Manage Catalog
- Reference Image Viewer
- Panorama
- Editor Window - Open multiple Irix Pro HDR windows as independent editors
- Quit Irix

EDIT

- Undo
- Redo
- Reset
- Copy Edits
- Paste Edits
- Apply Last Edits
- Speech
- Start Dictation
- Emoji & Symbols

VIEW

- Toggle Full Screen

EDITOR

- Relaunch Viewer
- Filmstrip
- Keyboard Shortcuts
- Background Color

IMAGE

- Image Info
- Histogram
- Zoom
- Image - Before/After
- Soft Proofing
- AI Auto Enhance
- Rasterize



TOOLS

- Quicksets
- Main Adjustments
- Local Adjustments
- Face Retouch
- Spot Removal
- Warp
- Overlays
- Text
- Crop
- History

WINDOW

- Minimize
- Zoom
- Tile Window to left of screen
- Tile Window to right of screen
- Bring all to Front
- Irix Photo Editor

HELP

- Search
- Contact
- Website
- Legal
- Provide Feedback



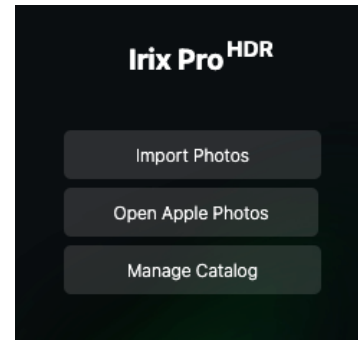
Get Started

Launch Screen

The launch screen provides a view of all the top tier tools and buttons for importing images for editing or viewing.

Following tabs are available;





- Import Photos - opens file explorer
- Open Apple Photos
- Manage Catalog - Provision for managing the catalog of images using proprietary IRX file format, more on this [here](#).
- Open Sample Photo - Opens sample photo provided in the Editor



Click on any of the above to get started. In case you wish to go back to the launch screen, Go To File Edit menu > Editor > Relaunch Editor. Note that any editing work you may have done will not be lost.

Only image import and few editor settings related functions will be active while no image has been selected for editing.

Coming Soon - Checkout upcoming new features and applications that will augment your Photo Editing prowess.

Connect and share your creations on    

Opening and Importing Images +

You can edit compressed and camera RAW images in Irix Pro HDR.


Note that RAW images do not require any pre-processing to start editing and can be edited as seamlessly as compressed images.

No proxies are generated for any of the image file formats when processing and the image can be viewed in real time as the edits are applied, thanks to Spitfyre[®] Graphics Engine and GPU optimized editing.

Supported File Formats;


Compressed Image Formats - JPG, JPEG, PNG, BMP, GIF, GRAY

Raw Image Formats - TIFF, TIF, 3FR, ARI, ARW, BAY, CRW, CR2, DCS, DCR, DNG, DRF, EIP, ERF, FFF, IIQ, K25, KDC, MEF, MOS, MRW, NEF, NRW, OBM, ORF, PEF, PTX, PXN, R3D, RAF, RAW, RWL, RW2, RWZ, SR2, SRF, SRW, X3F

Irix Pro HDR supports editing of Panorama and 360° Images. The edited images can be viewed in the Panorama/360° image viewer  in the left tool bar.

To Import/Open an image from;

Local Disk

From the Left Toolbar, click on Import icon 



Select image from the file explorer

Drag-and-drop images from your storage directly into the editor workspace. The image will simultaneously appear in the filmstrip.

External Disk

1. From the Left Toolbar, click on Import icon [⊕]
2. Select image from the file explorer
3. Drag-and-drop images from your external storage directly into the editor workspace. The image will simultaneously appear in the filmstrip.

iCloud

1. From the Left Toolbar, click on Import icon [⊕]
2. Select image from the file explorer
3. Drag-and-drop images from your storage directly into the editor workspace. The image will simultaneously appear in the filmstrip.

Apple Photos

Irix Pro HDR supports Apple Photos.

Drag-drop single or multiple images directly from apple photos to import them into the editor. Imported images will now be visible in the filmstrip.

Open Apple Photos from;

- Launch Screen - Hit 'Open Apple Photos' tab
- Application Menu - File> Launch Apple Photos
- Apple macOS Launch Pad

NOTE - Images that were previously imported to the editor, if re-selected for import, will open with all previous edits applied.

If you need to remove the edits and start afresh, you can choose any of the following options;

- Remove image from filmstrip - Right click on the image in the bottom filmstrip and select Remove Photo. Now you can re-import the image by following the steps above.
- Revert to original - Open history tab, scroll to the bottom and click on Original. Or click Reset [↶] on the top toolbar.



Saving and Exporting Images

Irix Pro HDR supports multiple image file formats for exporting images.

Compressed image file formats supported;

- Image imported in JPG or JPEG can be exported as JPEG
- Image imported as PNG can be exported as PNG
- Image imported as BMP, GIF, GRAY or RAW format can be exported as JPEG

Camera RAW Images supported;

Raw images can be exported in multiple formats, different from their original format. There are five available export formats;

- JPEG
- PNG
- HEIF
- WEBP
- TIFF

Quality Settings: Each file format has its own quality settings.

JPEG and WEBP support multiple image qualities;


- Medium (70% quality)
- High (90% quality)
- Best (100% quality)
- Custom quality – Can be varied between 1 to 100 using the up/down arrow buttons with a quality indicator. Estimated image size (data) is indicated

To change name of image to be exported, click on the name field and change the name.

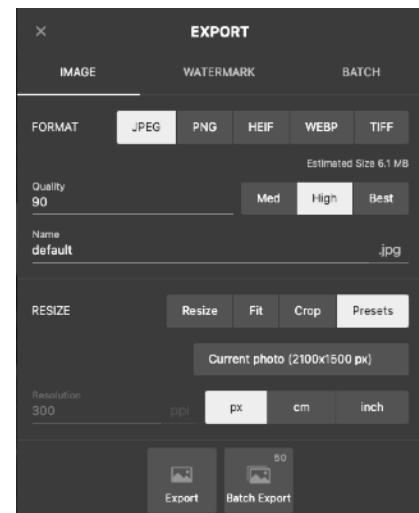
Images to be exported can be resized in four ways. Except Presets, other methods require you to enter the width and height in pixels, centimeters or inches.

- Resize – this will resize the image, with/without keeping the aspect ratio
- Fit – this will export image with Fit sizing, so based on required output dimensions, the image will introduce white space to fill up the missing pixel information
- Crop – this will crop the image based on required image resolution from center and eliminate remaining pixel data/information
- Presets – select the required image export preset for social media distribution or other applications

To export the image or the batch with required adjustments;

1. Click on Export icon  in the left toolbar
2. Click on IMAGE tab or the BATCH tab in the EXPORT dialog box
3. Click on 'Export' to save the currently opened image anywhere on your local disk/iCloud. Click on Batch Export button to export images in batch with selected options in the Batch tab

NOTE - Estimated file size is indicated in KB upon selection of file format and image size





IRX Catalog 📁

IRX Catalog is a chronological compilation of all the edits made to an image or a batch of images.

Note that Irix Pro HDR automatically saves all edits applied on the imported images and hence edited images retain the edits even after closing the editor.

Image or batch of images exported as IRX catalog are exported in .IRX file format. This file format is highly optimized and consumes significantly less memory than other popular formats. The .IRX file can be stored or shared using all conventional methods.

.IRX file can be opened on Irix Pro HDR only for further editing. Note that IRX catalogue saves the original image with all edits. Thanks to non-destructive editing, these edits can be undone.

.IRX file can be viewed on the browser using [IRX Viewer](#).

IRX Catalog has two personas;

Edits only

Export the IRX Catalog in case you need to save or share only the edits without images. When the IRX Catalog is imported, the editor will apply edits to the images.

Note: Edits only mode should be used with caution. Ensure that edits copied from the edited images are applied to a duplicate set of images which are in the same order and same file names as the ones edited.

USE CASE for Edits only IRX Catalog:

A wedding photographer-‘A’ sends a set of photographs to a colleague-‘B’ who edits photos. B edits the photos and send the edits only IRX catalog to ‘A’. ‘A’ downloads the IRX catalog and the photo editor applies all the edits to the unedited images instantly.

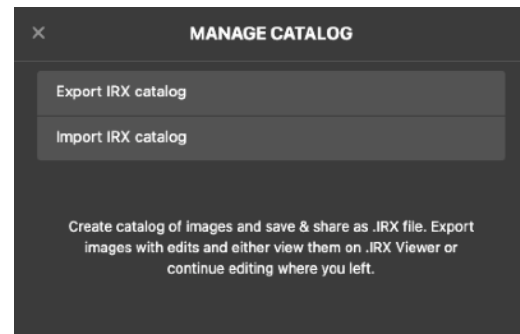
Both ‘A’ and ‘B’ had identical set of images, in same sequence and same filenames.

Edits only IRX Catalog is an extremely small file and can be shared through all the file sharing methods, and on slow internet connections too.

Edits along with images

Export IRX Catalog in case you need to save or share the image(s) along with the edits. When IRX Catalog is imported, the editor will import all the images and their respective edits

Find more information on IRX catalog [here](#).



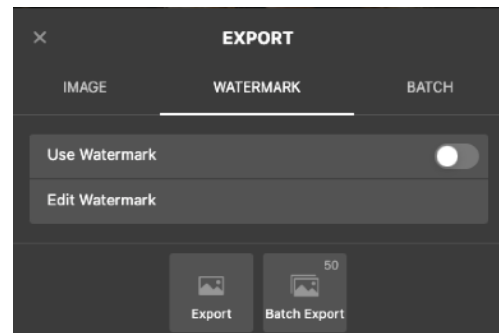


Watermarking Images

Irix Pro HDR provides watermarking feature where you can export the image with a custom watermark. The editor ships with a default watermark, however you can import a custom image as watermark. If selected, watermark is applied to all images in the filmstrip.

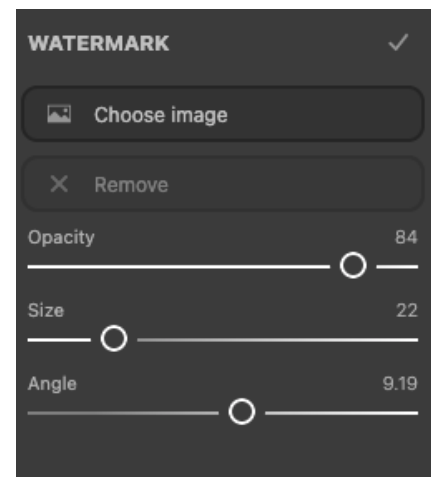
To include a watermark

1. Click on Export icon [📄] in the left toolbar
2. Click on 'Watermark' tab in the SAVE dialog box
3. Click on Use watermark



To import a Custom watermark

1. Click on Export icon [📄] in the left toolbar
2. Click on Watermark tab in the SAVE dialog box
3. Click on Edit Watermark. From here you can import a custom watermark.
4. For importing a custom watermark, click on Choose image in the right sidebar.
5. In the Search Folder, select the image you want to use as watermark and click on Open. Supported File formats for watermark include - JPG, JPEG, PNG, BMP, GIF, GRAY
6. Adjust properties such as Opacity, Size and Angle of Watermark
7. To revert to original watermark, click Remove
8. To go back to Watermark menu, click on [✓] at the top right





Batch Processing

Irix Pro HDR supports Batch processing of images. Batch processing can significantly reduce image editing time by exporting multiple images with the same adjustments, sizes, formats and prefix-renaming. Batch export only works if you have imported more than one image into the editor.

Batch processing naming methodology – when the images have been imported to the editor, based on the sequence in which the images are present in the filmstrip from left to right, the batch processor renames them with indices 1, 2, 3 ... If you use a prefix for the batch to be exported, the name becomes <batch_prefix>_<index>.<format>

To start batch processing;

Click on Export icon [📄] on the left toolbar

Click on the Batch tab in the Export dialog box

Select photos to export

- All - export all the images with the required adjustments and settings
- Edited - only edited images
- Choose - choose between original and edited images from filmstrip

To add a file name, click on Use Prefix and assign a prefix name

Image batch can be resized through Fit or Crop

Fit - This will resize the images to required resolution, regardless of dimensions. There will be pillar-boxing of images that do not support transparency

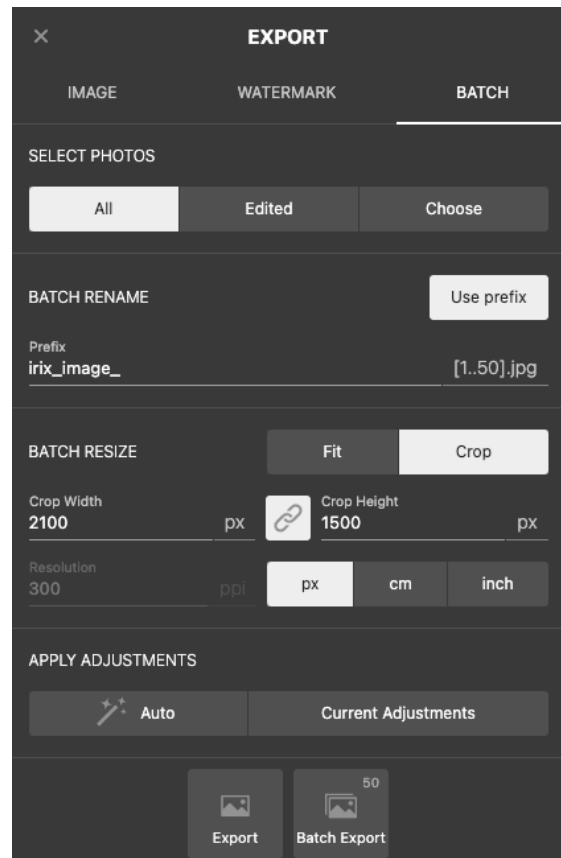
Crop - this will crop the image based on required image resolution from center and permanently remove pixel data/information outside of selection

To choose type of adjustments for the batch

AI Auto Enhance – enhances individual image based on AI suggestions before export

Current Adjustments – uses the adjustments applied to individual images that will be exported during batch export

To export, click on Batch Export






Viewing Images

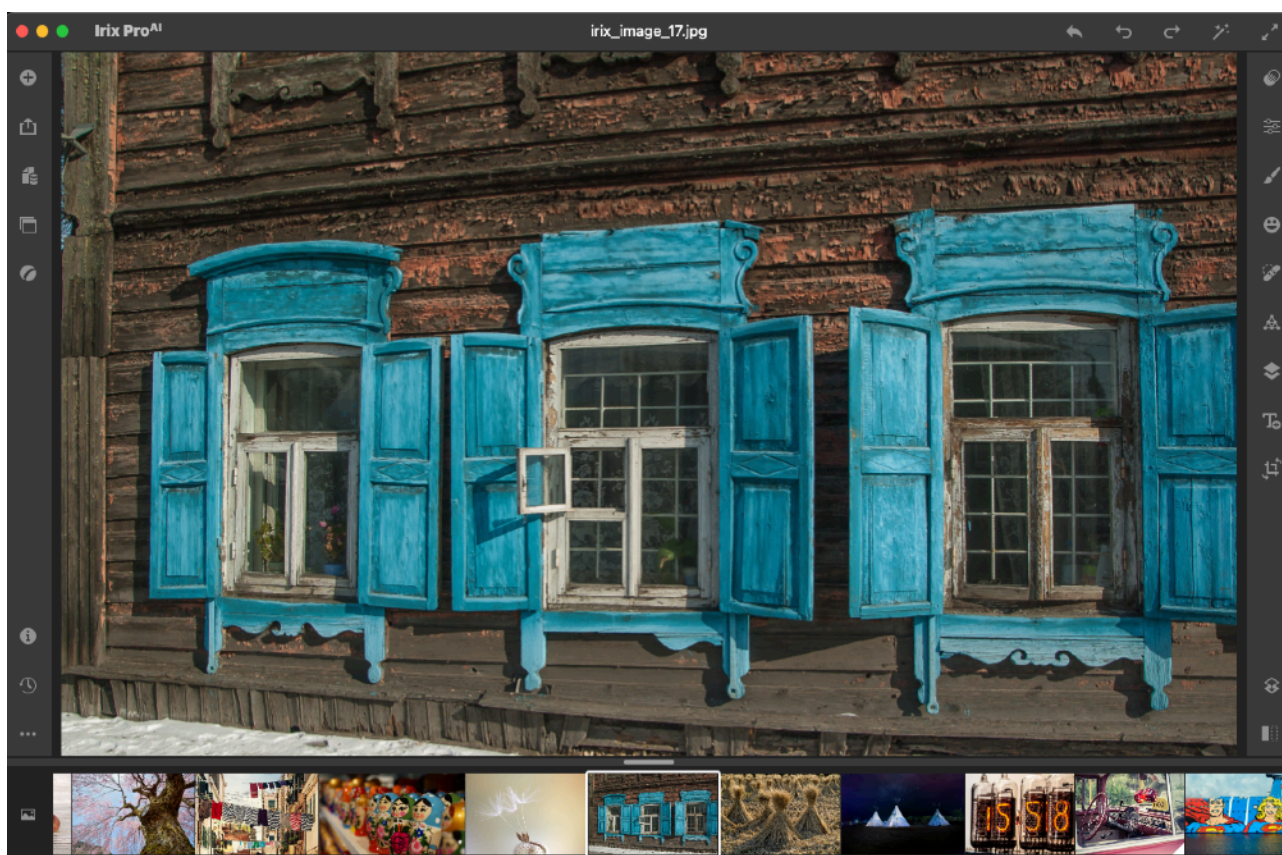
Images can be viewed by accessing the filmstrip. To open the filmstrip, you can

1. Use the keyboard shortcut [⇧+F]
2. Drag the handle at the bottom center upwards
3. Single Click on the handle at the bottom center

You can either use the mouse or touchscreen to zoom and pan the image

Filmstrip  offers following functions;

- Import Photos
- Remove selected Photos
- Remove all photos



Mouse

Use the mouse scroll to zoom in/out

Click and drag the image to pan


Double click left mouse button to fill at 100% resolution or zoom out to fit image inside the viewport.

Touch - Double tap to fill at 100% resolution or zoom out to fit image inside the viewport

Pinch in/out to zoom out/in respectively

Touch and drag the image to pan

Double tap the image to resize to 100% resolution

If a brush or mask based tool is opened, click on the Pan icon  to zoom and pan the image.



To switch between images, open the filmstrip by lifting the handle at the bottom center and click on an image thumbnail to open.


The following shortcuts are available for image zooming, panning and changing

- Next photo [⌘+K]
- Previous photo [⌘+J]
- Zoom in [⌘+=]
- Zoom out [⌘+-]
- Filmstrip [⇧+F]

Reference Image Viewer

Provision for opening another image as a reference while you edit another or same image.

Panorama/360 Image Viewer

Import & view Panorama and 360° Images. The images edited in Irix Pro HDR can be viewed in the Panorama/360° Image viewer  in the left tool bar.

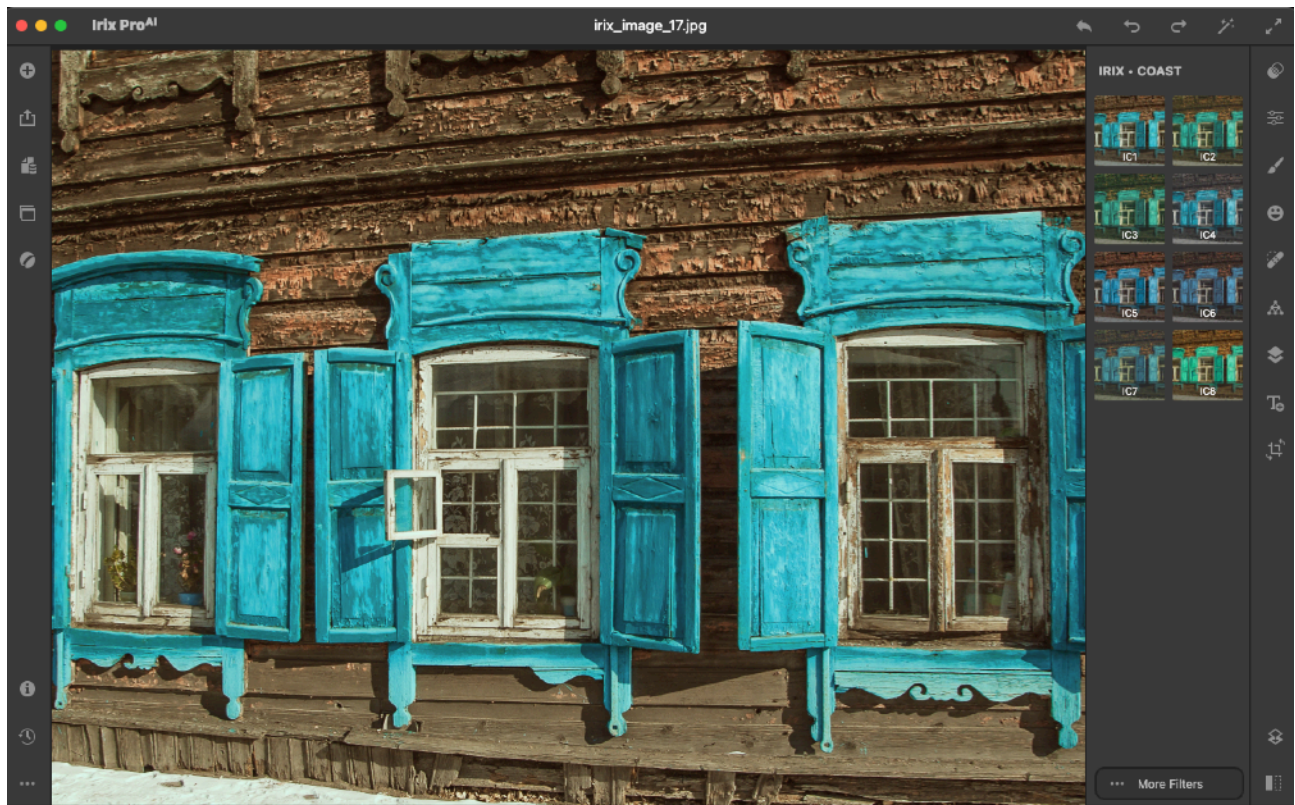


Quicksets 🎯

Irix Pro HDR comes pre-loaded with a whopping 220 thoughtfully designed XDR color space presets. The presets are called Quicksets, used for applying quick global adjustments to enhance your photographs on a single click.

Quicksets appear in the right sidebar with the edits applied on the image selected for editing. Thus you can preview the images for a quick selection of a Quickset.

You may click on a Quickset to try on the image and change the Quickset as many times you wish as all edits are non-destructive.



Right Toolbar

Following genres of Quicksets are provided;

SET-1

- COAST - 8
- TROPICANA - 8
- ESTUARY - 8
- LAGOON -12
- WAIKIKI -12
- SURF -12
- WASABI - 8
- PERCH - 8
- RADIO - 8
- TRANQUIL - 8
- SOLSTICE -6



- ZENITH - 8
- IMPALA - 8
- CAPITOL -10

SET-2

- SUMMER - 8
- SCAPE - 8
- DRIFT - 8
- MEANDER - 8
- TRAIPE - 8
- BLACK & WHITE - 8
- AMBLE - 8
- SYRAH - 8
- MERLOT - 8
- SERENE - 8
- DUNES - 8
- MARIMBA - 8

All Quicksets in the editor are non-destructive and can be further edited using Adjustments tool to achieve desired results.

Pro tip – Simply choose a preset from the list and head over to the Adjustments tool

To apply a Quickset;

Click on the Quicksets icon  on the right toolbar or use the keyboard shortcut [⌘+⇧+N]

You may see a set of Quicksets on the right sidebar. This is the one that was last selected in your previous photo editing session.

To view other Quicksets, click on 'More Filters' at the bottom of the right sidebar. Now you may select or browse between a range of Quicksets available in SET1 and SET2.


To quit the Quickset sidebar;

Click on the image to exit the Quicksets preview.

Click on the Quicksets icon on the right toolbar  to exit the Quickset tool.



Adjustments

Irix Pro HDR ships with multiple global adjustment sliders and XDR color-space sliders. Image editing is completely non-destructive and hence you can revert to the original image by clicking the Revert button  in the top toolbar.

Adjustments can be copied and pasted to other images to speed-up your workflow.

To copy adjustments, click on Copy Edits at the bottom of the right sidebar, or you can use the keyboard shortcut [⌘+C]

To paste adjustments, click on Paste Edits in the sidebar, or you can use the keyboard shortcut [⌘+V]

To reset any adjustment, right click on the adjustment title name and select “Reset”.

Adjustments include following tools and sliders;

Light

Exposure - Sets overall image brightness. Move the slider between -100 to +100 until desired result is achieved. The range between -100 to -90 and between +90 to +100 is in the XDR color space.

XDR Contrast - Contrast is the difference in brightness between objects in the image. Increasing the contrast makes light areas lighter and dark area in the frame becomes much darker. Decreasing the contrast inversely affects the image tones. Changes contrast in the range of -100 to +100. The range between -100 to -90 and between +90 to +100 is in the XDR color space.

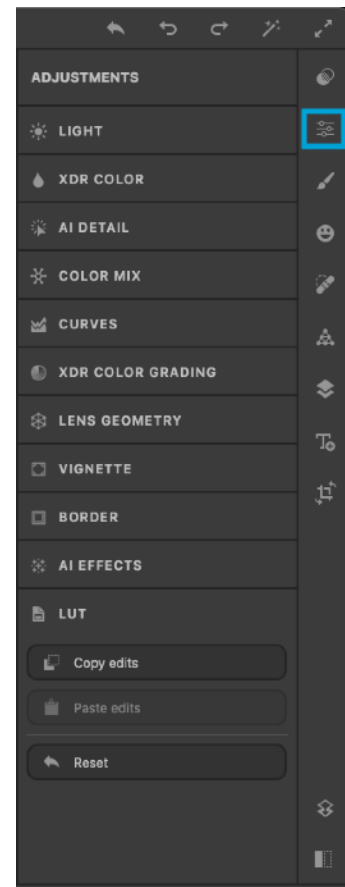
XDR Brightness - Adjusts image brightness, mainly affecting mid-tones. Move the slider between -100 to +100 until desired result is achieved. The range between -100 to -90 and between +90 to +100 is in the XDR color space

Highlights - Adjusts the details in the brighter parts of the photo. Changes highlights from -100 to +100.

Shadows - Adjusts the details in the darker parts of the photo. Changes shadows from -100 to +100.

Whites - Adjusts white clipping. Changes whites in the range of -100 to +100. Clipping is where the intensity in a certain area falls outside the minimum and maximum intensity which can be represented. The range between -100 to -90 and between +90 to +100 is in the XDR color space.

Blacks - Adjusts black clipping. Changes blacks in the range of -100 to +100. Clipping is where the intensity in a certain area falls outside the minimum and maximum intensity which can be represented. The range between -100 to -90 and between +90 to +100 is in the XDR color space.





XDR Color 🌈

Temperature -Fine-tunes the white balance using the Kelvin color temperature scale, ranging between -100 to + 100. Move the slider to the left to make the photo appear cooler, and right to warm the photo colors

Tint – Fine-tunes the white balance to compensate for a green or magenta tint. Changes the color tint of the image between -100 to 100

XDR Saturation – Color saturation refers to how rich, vivid, or intense a color is. Changes saturation in the range of -100 to +100. The range between -100 to -90 and between +90 to +100 is in the XDR color space

XDR Vibrance – Preferentially adjusts saturation of pixels that are less saturated than other pixels. Changes vibrance in the range of -100 to +100. The range between -100 to -90 and between +90 to +100 is in the XDR color space

AI Detail ✨

AI Clarity – Increases the contrast between dark and light pixels along the edges of objects in an image picture. Note that it does not correct blurred photos. Uses artificial intelligence to change clarity of an image from -100 to 100.

Sharpen – Increases the contrast between bright and dark regions to bring out features. Changes image sharpness from 0 to 100.

AI Dehaze –Adjusts the amount of haze in a photograph. Uses artificial intelligence to dehaze an image from -100 to 100

Pan [🖱️] – used for panning and zooming

AI Denoise - reduce noise without losing image features (edges, corners, and other sharp structures)

-Color – for removing color noise from pixels

-Luminance - for removing luminance noise from pixels

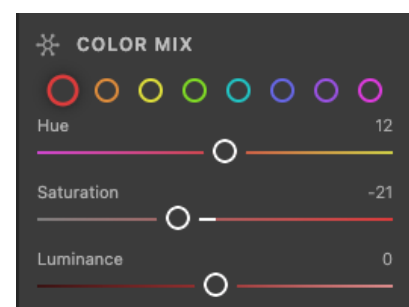
Color Mix (HSL) ✨

Includes the following color range - red, orange, yellow, green, pink, purple, blue, cyan

XDR Hue – Changes the color. Select the color to change from the palette above and use the slider in the range of -200 to +200

XDR Saturation - Changes the vividness or purity of the color. Select the color to change from the palette above and use the slider in the range of -100 to +100

XDR Luminance – Changes the brightness of the color range. Select the color to change from the palette above and use the slider in the range of -100 to +100



Curves 📈

Includes the following tone curve frequencies - white (all frequencies), red channel, green



channel, blue channel.

Select the color to change from the palette above, click & hold and drag the curve. Or click in the tone curve space to adjust the tone.

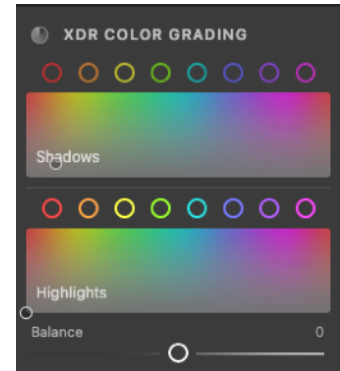
XDR Color Grading

Includes the following color range for highlights and shadows - red, orange, yellow, green, pink, purple, blue, cyan.


Shadows and Highlights

Click & hold and drag the control point in the color box to adjust, or Select the color to change from the palette above to move the control point at the desired color in the color box. Click & hold and drag the control point in the color box to adjust

Balance – for balancing color palette between concentration of highlights and shadows. Move the slider between -100 to +100. -100 denotes only shadows and +100 denotes only highlights



Lens Geometry

Perspective  – Use the 8 control points for stretching and shearing the image for lens corrections, horizon alignments etc.

Pro-tip - Use perspective correction to straighten a tall building photographed from a close range

Lens Distortion – for correcting distortions created by undesired radius of curvature of the camera lens

Horizontal Distortion – for correcting horizontal distortions

Vertical Distortion – for correcting vertical distortions

Vignette

Amount – extent of vignette ranges from -100 (dark) to 100 (bright)

Feather – amount of spread of vignette effect

Highlights – amount of highlights generated by the vignette effect

Size – varying the feather size of the vignette

Roundness – ranging from rectangular to elliptical for vignette boundary

Center – for changing the center of vignette effect. Deselect the center button after adjusting the center

Border

Border tool can be accessed via the Border tool. Click on the button in the sidebar.

To change the Border Width, use the Border Width slider. Use the arrow keys on the keyboard for finer control.

There are multiple aspect ratios for custom border thickness. Included are 17 aspects;

Width:Height :: 1:1, 2:1, 11:8.5, 5:4, 7:5, 16:10, 16:9, 4:3, 3:2

Height:Width :: 1:2, 8.5:11, 4:5, 5:7, 10:16, 9:16, 3:4, 2:3

You may choose border width of your choice by entering a numeral in the Width & Height fields. Preset aspect ratio is highlighted when the custom ratio matches that of a preset ratio.



You can change the color of the border by clicking on the Color button.

Border tool automatically picks up colors which are most visible in the image. These colors can be accessed as circular buttons below the Color button

On pressing the Color button, color palette opens for a custom color. The left color picker is for varying the shades of colors from greyscale to selected hue.

The right color picker is for selecting different hues

AI Effects ✨

Irix Pro HDR comes with AI Effects which can be used for adding special effects to the images.

To use AI Effects, click on the AI Effects icon [🌟]

The AI Effects are;

- Pixelate
- AI Diffuse
- Invert
- Fringing
- Grain

Pixelate

1. Click on Pixelate button [🔲]
2. In the dialog box, click Yes to flatten and rasterize the image. Otherwise pixelate effect will not work
3. To change the amount of pixelation, use the Pixelate slider. The slider is set at 10 as default.

You can select pixelate patterns in the following shapes;

- Square
- Hexagon
- Dot
- Triangle
- Diamond

To cancel the pixelation effect, click on Cancel button

To restore to default pixelate value, click on Reset button

AI Diffuse

AI Diffuse slider ranging between 0 - 100.

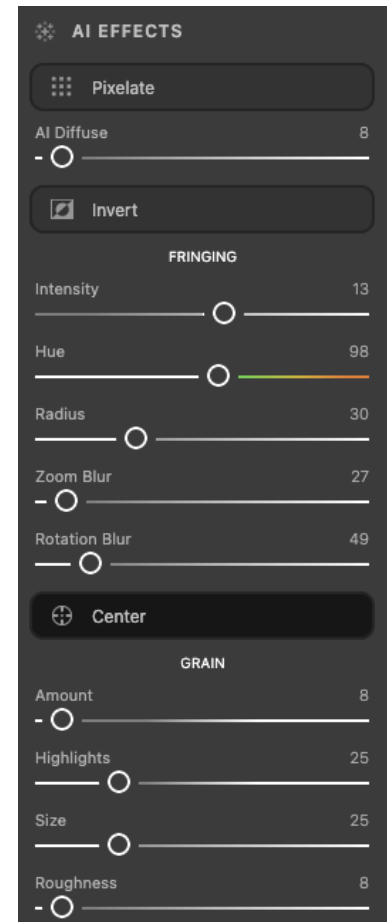
Invert

Click on Invert button [🔄] to invert the colors.

Fringing

To add Fringing effect to the image, vary the fringing intensity slider to get positive or negative fringing.

- You can change the hue of the fringe by using the Hue slider
- You can change the fringe radius using the radius slider
- To add fringe blur effect, either use zoom blur or rotation blur. For changing the center of the blur effect, click on the Center button and pan the control point to mark the new center. Click on centre button to remove the control point.





Grain

You can vary the amount of the grain through the Grain Amount Slider

To vary the brightness of the grain effect, use the Highlights slider

For changing the grain size, use the Size slider

For changing the grain intensity, use the Roughness slider

LUT - Look Up Table

These are presets that can be imported into the editor for faster editing workflows, with direct integration with XDR Adjustment sliders

Supported LUT formats- .CUBE, .VF, .3DL


To import a LUT

1. Click on Choose File in the LUT menu in XDR Adjustments
2. Select the file and click Open, or simply double click the file to open in the editor. You may drag & drop the LUT file in the image area and apply the LUT to the image being edited.
3. Modify the LUT effect as needed

To export a set of global XDR adjustments as LUT, click on Export button in the LUT menu in XDR Adjustments

The menu offers a preview of before / after edits. The 'Included adjustments' button indicates attributes edited

Default file format for exporting the LUT is .CUBE


Reset  at the bottom of the sidebar - resets all adjustments.



Masks and Brushes


Irix Pro HDR offers multiple masks and brush tool which can be accessed from the right toolbar.

XDR Color Mask 

AI Brush 

Radial Mask 

Gradient Mask 

Luminance Mask 

Depth Mask 

Masks and Brushes consist of multiple tools for editing the image. The adjustments are made using sliders for precise control and a numerical value is indicated for the extent of adjustment. As the sliders are moved, corresponding change is shown in the image in real time.



Sliders

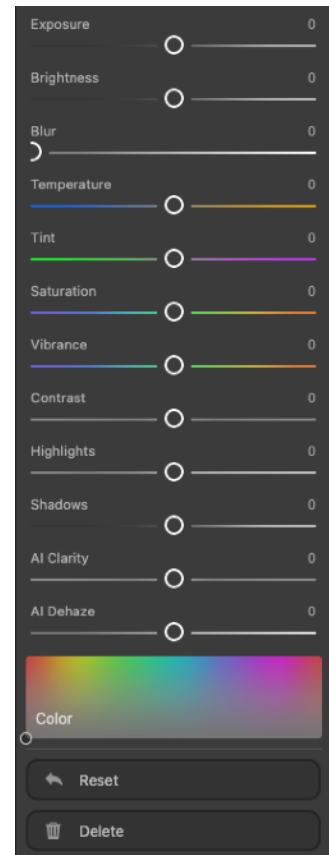
The tools contain sliders in the right sidebar and buttons in the bottom context toolbar. Sliders range from -100 to 100, with value at 0 being original.

Following sliders are provided to make the desired edits;

- Exposure
- Brightness
- Blur
- Temperature
- Tint
- Saturation
- Vibrance
- Contrast
- Highlights
- Shadows
- Clarity
- Dehaze
- Color (Palette)

The adjustments can be made by moving the sliders with the mouse or by using the right & left arrow keys on the keyboard after the slider is selected with the mouse. The arrow keys increment or decrement the slider value by 1 unit, providing precise control.

Live edits are displayed as you move the slider, thanks to the powerful Spitfire® Graphics Engine.



Exposure - Sets overall image brightness. Move the slider between -100 to +100 until desired result is achieved. The range between -100 to -40 and between +40 to +100 is in the XDR color space

Brightness - Adjusts image brightness, mainly affecting mid-tones. Move the slider between -100 to +100 until desired result is achieved. The range between -100 to -40 and between +40 to +100 is in the XDR color space

Blur - Applies gaussian blur from 0 to 150. Blur removes fine image detail and noise leaving larger scale changes

Temperature - Fine-tunes the white balance using the Kelvin color temperature scale, ranging between -100 to + 100. Move the slider to the left to make the photo appear cooler, and right to warm the photo colors

Tint - Fine-tunes the white balance to compensate for a green or magenta tint. Changes the color tint of the image between -100 to 100

Saturation - Color saturation refers to how rich, vivid, or intense a color is. Changes saturation in the range of -100 to +100. The range between -100 to -50 and between +50 to +100 is in the XDR color space



Vibrance – Preferentially adjusts saturation of pixels that are less saturated than other pixels. Changes vibrance in the range of -100 to +100. The range between -100 to -50 and between +50 to +100 is in the XDR color space

Contrast - Contrast is the difference in brightness between objects in the image. Increasing the contrast makes light areas lighter and dark area in the frame becomes much darker. Decreasing the contrast inversely affects the image tones. Changes contrast in the range of -100 to +100. The range between -100 to -40 and between +40 to +100 is in the XDR color space

Highlights - Adjusts the details in brighter parts of the photo. Changes highlights from -100 to +100

Shadows - Adjusts the details in darker parts of the photo. Changes shadows from -100 to +100.

AI Clarity – Increases the contrast between dark and light pixels along the edges of objects in an image picture. Not that it does not correct blurred photos. Uses artificial intelligence to change clarity of an image from -100 to 100.

AI Dehaze –Adjusts the amount of haze in a photograph. Uses artificial intelligence to dehaze an image from -100 to 100.

Color - Provides a palette to pick up the color you wish to edit

Reset [↶] - Resets all adjustments made in the active layer

Delete [🗑] – Deletes the active layer

Context Tools - These tools are specific to the mask selected and provide mask specific controls. More on this in the description of Masks & Brush below.



Layer Management

Irix Pro HDR handles layers separately for Masks and Brushes. Whenever a new instance of a mask or a brush is initiated, a new layer is created which can be accessed directly by clicking on the tool.

All layers have no mutual dependencies and completely Non Destructive to the original image as imported.

The layers you create appear in the same chronological order as created and numbered accordingly. If a layer is deleted, all following layers are shifted up and renumbered.

For managing individual layer;

Create layer

1. Click on the tool button in the right sidebar
2. In the sidebar, to create a new layer/instance for the tool, click on the Plus icon [+]
3. Make desired adjustments and click on the Check icon on top [✓]
4. A layer is added in the right sidebar with the name of the mask and sequence number.

Delete layer

1. Select the layer by clicking on the layer tab in the right sidebar
2. Click on the Delete icon [✖] in the context toolbar at the bottom
3. Click on the Delete button in the sidebar on the right
4. Right click to delete the layer from the layers tab

Note: All layers are shown in order of creation from top to bottom.



XDR Color Mask


XDR Color Mask enables you to individually pick up colors of certain frequency and apply local adjustments to the selected color.


With XDR Color Mask, you can make local adjustments to the picked color from the color picker. The mask can be used for interpolating values of color range using available sliders and tools.

The color picker appears on the image and can be moved with the mouse. Just move the picker and place it on desired color on the image. All areas in the image with the picked color frequency are displayed while the mouse key is kept pressed.

Context tools;

Hue Selector  – provides precise control on the color you wish to pick for editing

Feather  – varies the applied area based on color frequency spread from the color picker


Radial Mask  – limits the affected area of the applied tools and its adjustments. This can be used as a cut-off mask for limiting the spread/affected area of the tools

Invert  - inverts affected area of the tool

Pan  – Pan the image

Before/After  – Toggle between images with current edits applied and the original

Delete  – Delete the current layer

Overlays  – Irix Pro HDR supports Overlays on the elected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.

Being an XDR tool, this can be used for applying XDR color space effects to the image and in order to interpolate colors beyond HDR color-space.




AI Brush


AI Brush tool enables you to apply local adjustments by selecting the area using freehand area picker. Selected area is highlighted in semi-transparent red ink.


Values of selected pixels can be interpolated using available tools and sliders.


To select the area, place the cursor at the desired spot on the image, press the mouse button and drag to select area. You can select multiple areas by releasing the mouse button and move the cursor to another location on the image and repeat the previous step. Edits made will be applied to all the selected areas simultaneously, and saved as one layer.


Context tools;

Brush Eraser  – removes undesired areas of the selection made by the brush

Brush Size  – changes the brush size of the icon. When using a mouse, right click and pan mouse in horizontal direction to increase/decrease the brush size


Brush Opacity  – changes the opacity of applied adjustments to the selected area

Brush Hardness  – changes the hardness of the brush. This is used for changing the spread of the brush selection tool

AI Edge Detect  – uses artificial intelligence to identify and differentiate between objects when selecting any area using a brush. This helps reduce wash-over of the brush and undesired pixels.


Invert  - to invert affected area of the tool

Pan  – Pan the image

View/Hide Selection  – Shows the area selected

Before/After  – Toggle between images with current edits applied and the original

Delete  – Delete the current layer

Overlays  – Irix Pro HDR supports Overlays on the selected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.

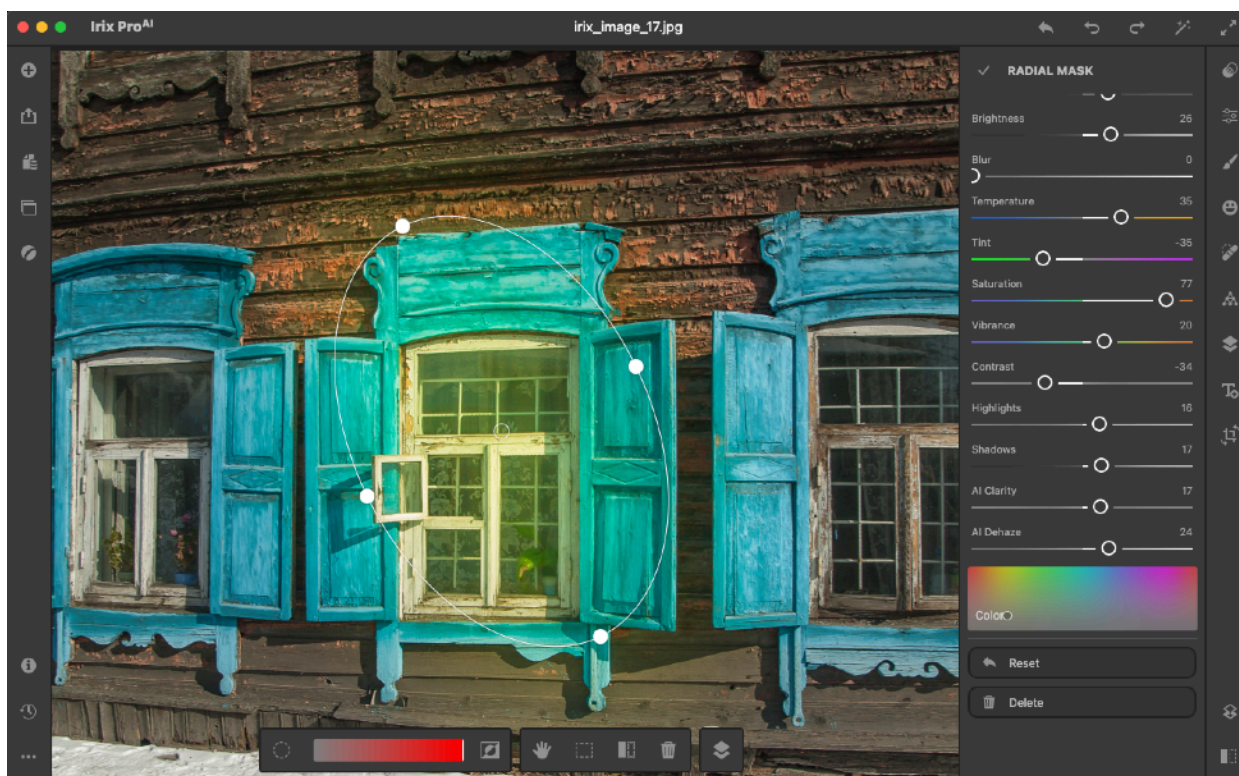


Radial Mask



Radial Mask enables you to create multiple, vignetted areas to edit specific portions of an image.

With the Radial Mask, you can select specific area in the image with an elliptical marker and make local adjustments inside or outside of the selection.


The Mask can be resized proportionally by click & hold and dragging any of the 4 control points on the ellipse. The Mask can be moved to any position by click & hold and dragging the center point. To rotate the ellipse, click & hold and drag any of the 4 control points on the ellipse.




Context tools;


Feather  – varies the applied area based on color frequency spread from the color picker
Invert  – inverts affected area of the tool

Pan  – Pan the image

View/Hide Selection  – Shows the area selected

Before/After  – Toggle between images with current edits applied and the original

Delete  – Delete the current layer

Overlays  – Irix Pro HDR supports Overlays on the selected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.

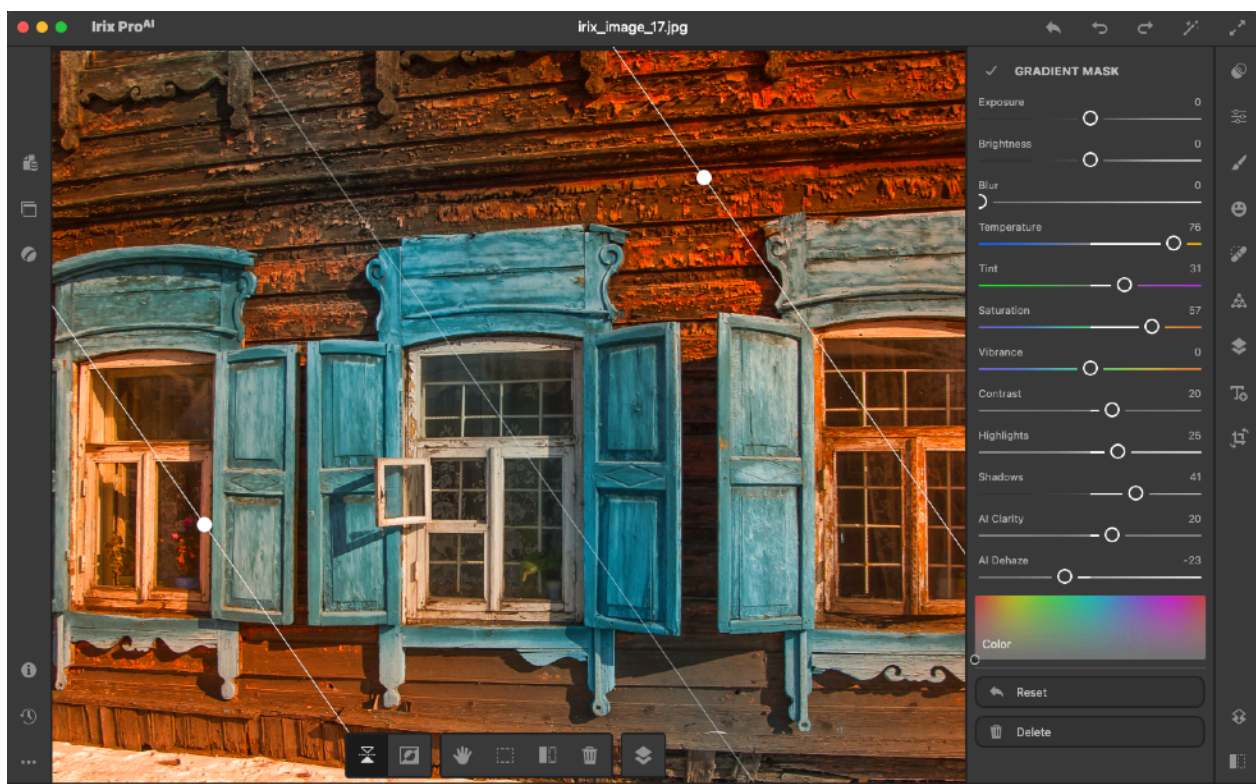


Gradient Mask

Gradient Mask enables you to create multiple, rectangular areas to edit specific portions of an image.

With the Gradient Mask, you can select specific area in the image with parallel lines and make local adjustments. The mask extends endlessly in both directions of the gradient stops and is generally used for applying a smooth gradient effect in the image.

The Mask can be resized by click & hold and dragging any of the 2 control points on the lines. The Mask can be moved to any position by click & hold and dragging the center point. To rotate the lines, click & hold and drag any of the 2 control points.





Context tools;

Reflect [] – Mirrors the edits along the gradient lines


Invert [] – inverts affected area of the tool

Pan [] – Pan the image

View/Hide Selection [] – Shows the area selected

Before/After [] – Toggle between images with current edits applied and the original

Delete [] – Delete the current layer


Overlays [] – Irix Pro HDR supports Overlays on the selected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.




Luminance Mask


Luminance affects the brightness of the color range.

With Luminance Mask, you can make adjustments to the targeted luminance, ranging from 0-100.


To select target luminance, click icon  and adjust the slider as required. The mask can be used for interpolating values of selected luminance using the sliders.

Context tools;

Luminance Selector  – provides precise control on the color you wish to pick for editing


Feather  – varies the applied area based on color frequency spread from the color picker

Invert  - inverts affected area of the tool

View/Hide Selection  – Shows the area selected

Before/After  – Toggle between images with current edits applied and the original

Delete  – Delete the current layer

Overlays  – Irix Pro HDR supports Overlays on the selected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.





AI Depth Mask

AI Depth Mask enables you to apply local adjustments into images with depth information.

Note - This mask will work only if the image has depth information. Otherwise, AI cannot differentiate between the depths.

With AI Depth Mask, you can apply effects to individual depth layer of the image. Powered by AI, depth tool can analyze depth information accurately in steps of 1% over full range of 100%.

Selecting Depth


- Depth Selector slider  from the bottom context toolbar
- Depth Selector Pin  to select where the plus [+] is positioned on the image

Once the layer is selected, you choose to increase or decrease the exposure, saturation, and sharpness of the portions of the selected mask.

Context tools;

Invert  - to invert affected area of the tool


Depth Selector  – used for selecting the depth layer in the background

Depth Picker  – used for individually selecting the layers wherever clicked or touched on the image

Feather  – to select the spread of the applied adjustments

Before/After  – Toggle between images with current edits applied and the original

Delete  – Delete the current layer

Overlays  – Irix Pro HDR supports Overlays on the selected mask. You may import a custom overlay or pick one from the overlays provided in the editor. Scroll down to access the overlays.



Face Retouch ☹

Face Retouch provides dedicated tools for face and body. The tool provides skin enhance, blemish removal (or add) and body sculpting.

Skin Enhance ☹

- AI Skin Enhance [🔍]
- Smoothing
- Tone
- Shadows
- Highlights
- Hue
- Saturation

Reset [↶] – Resets all adjustments made in the active layer

Delete [🗑] – Deletes the active layer

Blemish Removal 🖋

Remove unwanted spots (or add) by controlled replacement with another texture in the image.

Select area to duplicate by click & hold and drag the circle. This circle can be identified with a control dot. Use the dot to resize the area. Similarly, move the other circle to the area where blemish needs to be removed.

Heal [🖋] – Softer effect

Clone [👤] – Harder effect

Feather – Expanse of the replacement effect

Opacity – Intensity of the replacement effect

Add Spot [⊕] – Adds the layer

Delete Spot [🗑] – Deletes the layer

Body Sculpting ✎

Sculpt any part to look appealing, reduce deformities etc.

A control circle appears when the tool is selected, which moves as the cursor. Place the tool in the desired area, click & hold the mouse button. You may keep the mouse static or sweep along the lines / area you wish to edit.

Four functions are provided;

- Warp
- Pinch
- Bulge
- Restore - Helps controlled restoring of edited area

Size – Adjust brush size


Strength – Adjust extent of effect


Reset [↶] – Resets all adjustments made in the active layer



Spot Removal

Removes spots and other undesired objects from the images. The Spot removal tool has two modes;

Heal  – Softer effect to provide precise control

Clone  – Stronger form of heal which can be used for completely replacing area(s) with sampled area(s)

To create a new layer, click on the Plus icon  in the top of the sidebar.

Select between heal or clone mode.

Feather Slider can be used for selecting the threshold of the area where the tool is applied. Opacity Slider can be used for varying the opacity of the sampled region being applied to another region.

For changing the Sample and Apply tool locations;


Sample tool - this is the tool with single control point on the circle. Area inside the circle will be sampled and pasted over the Apply circle.

To rotate the tool, click & hold on the control point and adjust to desired angle

To change position of the tool, click & hold and drag the tool from the center


To change size of the tool, click & hold and drag the control point in/out

Apply tool - this is the tool without any control point and sampled area will be applied in this location. To change position of the tool, drag the tool from the center.

To delete the spot removal layer, right click on the layer and click on Delete, or click on the Delete Spot icon  in the bottom context toolbar or the sidebar on the right.

Context toolbar

Pan  – Pan the image

Delete  – Delete the current layer



Warp

Warp tool provides controlled deformation effects to an image.

A control circle appears when the tool is selected, which moves as the cursor. Place the tool in the desired area, click & hold the mouse button. You may keep the mouse static or sweep along the lines / area you wish to edit.

The tool ships with 4 different modes;

1. Warp tool - shifts the vertices of the image based on direction of brush movement. Click & hold and drag to warp
2. Pinch tool - applies pinch-in effect on the vertices based on location of brush. Click & hold to pinch. Release to stop pinching.
3. Bulge tool - applies bulge-out effect on the vertices based on location of brush. Click & hold to bulge. Release to stop bulging.
4. Restore tool - for controlled restoring of the warp effects applied on the image. Click & hold and drag over the edited area



For all of the above tools, use the Size Slider to change the size of the warp brush. The Strength Slider is used for adjusting the intensity of warping effect.

Reset  – Resets all adjustments made in the active layer



Overlays

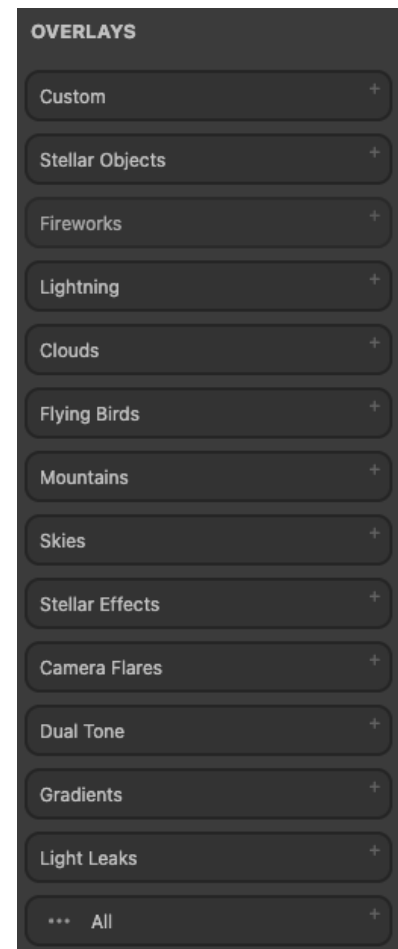
Overlay is used to combine two separate images into a single image. The overlays are added as non destructive layers.

Irix Pro HDR ships with a suite of overlays and supports custom overlays. You can import an external image of your choice as an overlay.



All the overlays are customizable with multiple tools for additional effects as detailed below.

Following Overlays are provided in the application;

- Custom - import external image as an overlay. Supported file formats are JPG, JPEG, PNG, BMP, GIF and GRAY.
- Stellar Objects
- Fireworks
- Lightening
- Clouds
- Flying Birds
- Mountains
- Skies
- Stellar Effects
- Camera Flares - simulate camera flares when taking images of very high brightness light sources and display bokeh effect
- Dual Tone - switch highlight and shadow regions to a 2-tone color by replacing pixel color values with the 2-tone color set
- Gradients - apply a 2-color gradient effect to an image as overlay
- Light Leaks - simulate light leakages when the camera lens gets external light due to bad camera sensor, or lens curvature
- All - Browse and apply all available overlays or add a custom overlay



To start using overlays;

- Click on the Overlays icon  or open overlays using keyboard shortcut [⌘ + ⌥ + L]
- Select the type by clicking on the overlay tabs. To add a custom overlay, click on Add  and choose the file from the folder.
- A new instance/layer of the tool will be created. All layers will be displayed in order of creation from top to bottom

Overlay Resizing;

- The overlay can be resized by click & hold and dragging any of the 8 control points. The aspect ration can be maintained by pressing the shift key when dragging the control point.
- To rotate the overlay, click anywhere outside the layer and drag to rotate.
- To pan the layer, click & hold and drag the layer from the center.

Context Toolbar - Overlay Edits;

Multiple tools are provided in the context tool bar for varying how the overlay is applied to the base image.

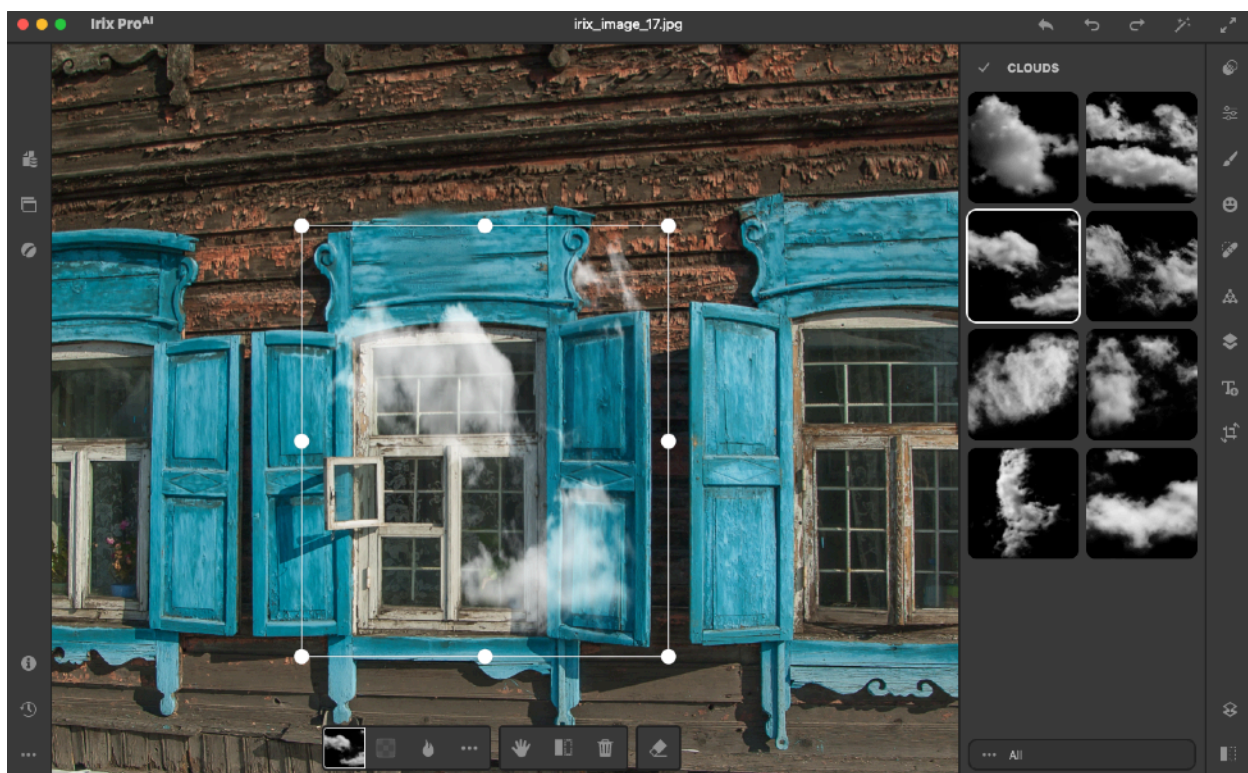


The selected overlay is displayed as a thumbnail in the context tool bar at the bottom.

Brush Opacity [☼] – to vary the opacity of the layer

Blend Mode [🔥] – Following modes are provided;

- Normal
- Brighten - Screen, Lighten, Add, Dodge
- Darken - Multiply, Darken, Subtract, Burn
- Contrast - Overlay, Soft Light Vivid Light, Hard Light, Linear Light
- Transfer - Hue, Saturation, Color, Luminosity
- AI Effects - Difference, Exclusion, Divide



Menu [⋮]

- Flip horizontally
- Flip vertically
- Rotate CCW [Counter-Clockwise]
- Rotate CW [Clockwise]
- Reset

Pan [🖐️] – Pan the image

Before/After [🔄] – Toggle between images with current edits applied and the original

Delete [🗑️] – Delete the current layer

**Brush Eraser [E]**

- Eraser
- Brush
- Radial
- Gradient
- Color
- Luminance
- Depth

Masks and Brushes – all masks and brushes available in the editor can be used for highlighting the areas of the overlay you wish to use, with multiple internal operations.

To delete an overlay, right click on the layer and click on Delete, or click on the Delete icon [X] in the bottom context toolbar.




Text

Irix Pro HDR provides a dedicated tool to create text based layers.

Text layers are added by clicking on the Add Text tab. The layers are arranged and numbered in order of creation from top to bottom.

The editor comes with a selection of Serif and Sans-Serif fonts. In addition to the provided fonts, custom fonts can be imported.

To start using the Text Tool;

Click on the Text Tool icon  or access the tool using the keyboard shortcut [⌘+T]
To create a new text layer, click on Add Text tab

Text Properties;

Font


To select the font, click on the top tab, showing the name of the font currently selected. By default, Sans Serif font is selected.





To import a new font, click on the Import font tab on the top of the sidebar. From the dialog box, select the font you want to import, and click Open, or simply double click on the font you want to include

The imported font will be placed on the top, in order of import.

Supported font file-format for custom fonts;

- TrueType Fonts (TTF),
- OpenType Fonts (OTF),
- The Web Open Font Format (WOFF and WOFF 2.0)
- Embedded OpenType Fonts (EOT)

Alignment  - To change the alignment of the text, click on the Alignment button

- Left-align 
- Right-align 
- Center-align 
- Justify 
- To change the spacing in-between lines of text, you can use the line spacing slider
- To change inter-character spacing, you can use the letter spacing
- To change the rotation angle of the text layer, you can use the Angle slider or the right/left arrow keys. Note that arrow keys change the angle with two decimal places

Bold [B] - Click on the tab to toggle

Italic [I] - Click on the tab to toggle

Color -

- The left color picker is for the varying shades of colors from greyscale to selected hue



- The middle color picker is for different hues
- The right color picker is for varying the opacity or the alpha-channel values of the text

Shadow -

- To change the color of the shadow, click on Color button
 - The left color picker is for the varying shades of colors from greyscale to selected hue
 - The middle color picker is for different hues
 - The right color picker is for varying the opacity or the alpha-channel values of the text
- Blur - Slider to blur the shadow
- Remove shadow by clicking on Remove button

Outline -

- To change the color of the outline, click on Color button
 - The left color picker is for the varying shades of colors from greyscale to selected hue
 - The middle color picker is for different hues
 - The right color picker is for varying the opacity or the alpha-channel values of the text
- Remove the outline by clicking on Remove button

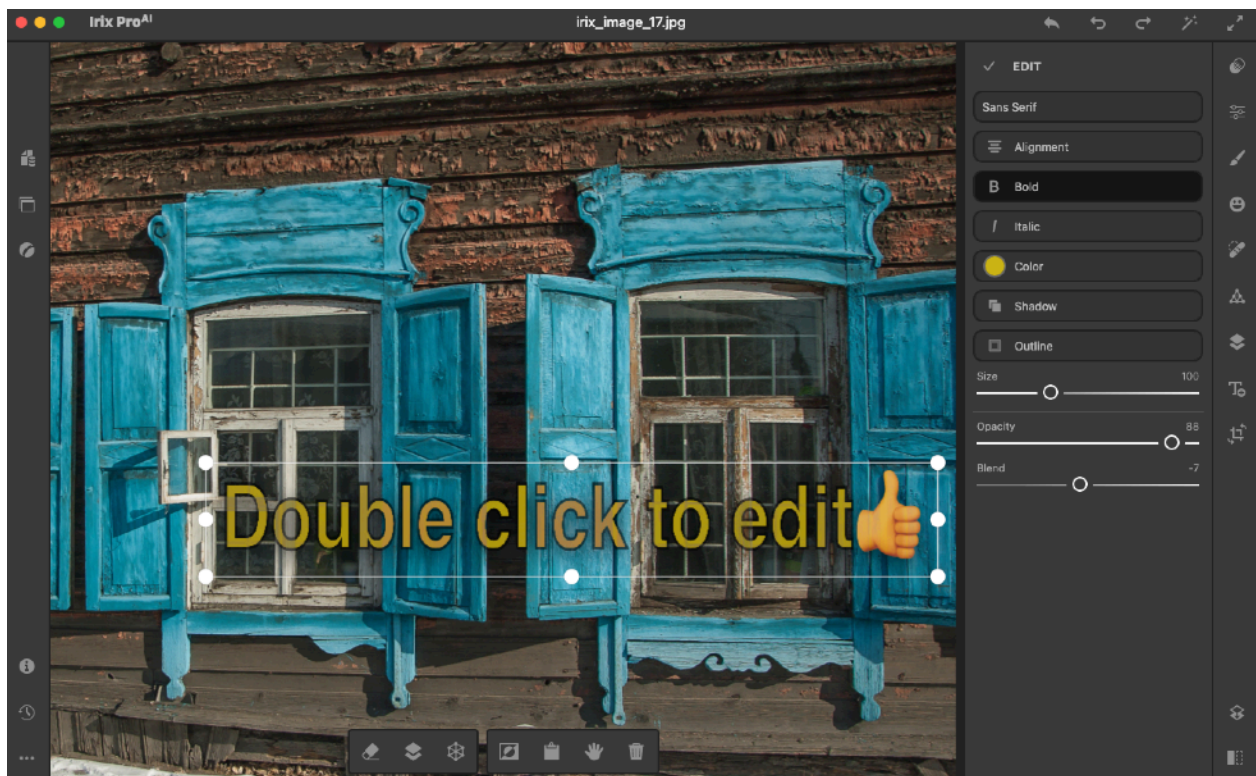
Resize text - click & hold and drag any of the 8 control points. You can also change the size of the layer proportionally using the Size slider

Rotate text - click & hold anywhere outside the layer and drag to rotate.

Pan text - click & hold and drag the layer from the center.

Opacity - change opacity of the text layer

Blend - blend the text layer



**Emojis -**

Insert Emojis in the text box.

1. Open text box
2. Click Edit in the Application Menu
3. Select Emoji & Symbols
4. Simply click on the Emoji to select. The Emoji will appear in the Text box.

Context toolbar -**Brush Eraser [🖌️]**

- Eraser
- Brush
- Radial
- Gradient
- Color
- Luminance
- Depth

Overlays [👁️]

Multiple tools are provided in the context tool bar for varying how the overlay is applied to the text.

The selected overlay is displayed as a thumbnail in the context tool bar at the bottom.

Brush Opacity [🔍] – to vary the opacity of the layer

Blend Mode [🔥] - Following modes are provided;

- Normal
- Brighten - Screen, Lighten, Add, Dodge
- Darken - Multiply, Darken, Subtract, Burn
- Contrast - Overlay, Soft Light Vivid Light, Hard Light, Linear Light
- Transfer - Hue, Saturation, Color, Luminosity
- AI Effects - Difference, Exclusion, Divide

Menu [⋮]

- Flip horizontally
- Flip vertically
- Rotate CCW [Counter-Clockwise]
- Rotate CW [Clockwise]
- Reset

Pan [🖱️] – Pan the image


Before/After [🔄] – Toggle between images with current edits applied and the original



Delete [🗑️] – Delete the current layer

Distortion [🌀] - Skews the text layer by click & hold and dragging the yellow control points




Invert - the image will be masked to the text, and the text color will be applied to the unmasked region

Duplicate layer  - Duplicate a text layer with all adjustments and settings. Click on the duplicate text box and drag to the desired location.

Delete  - Right click on the layer and click on Delete, or click on the Delete icon  in the bottom context toolbar



Sizing and Cropping

Click on the Crop icon  or access the tool via the keyboard shortcut **[⌘+R]**

Manual Crop & Rotate

- Adjust the crop rectangle by click & hold and dragging the the vertices and edges.
- Rotate the image for horizon correction, click & hold and drag the dial on the right side of the image.





Aspect

17 Preset crop aspect ratios are provided;

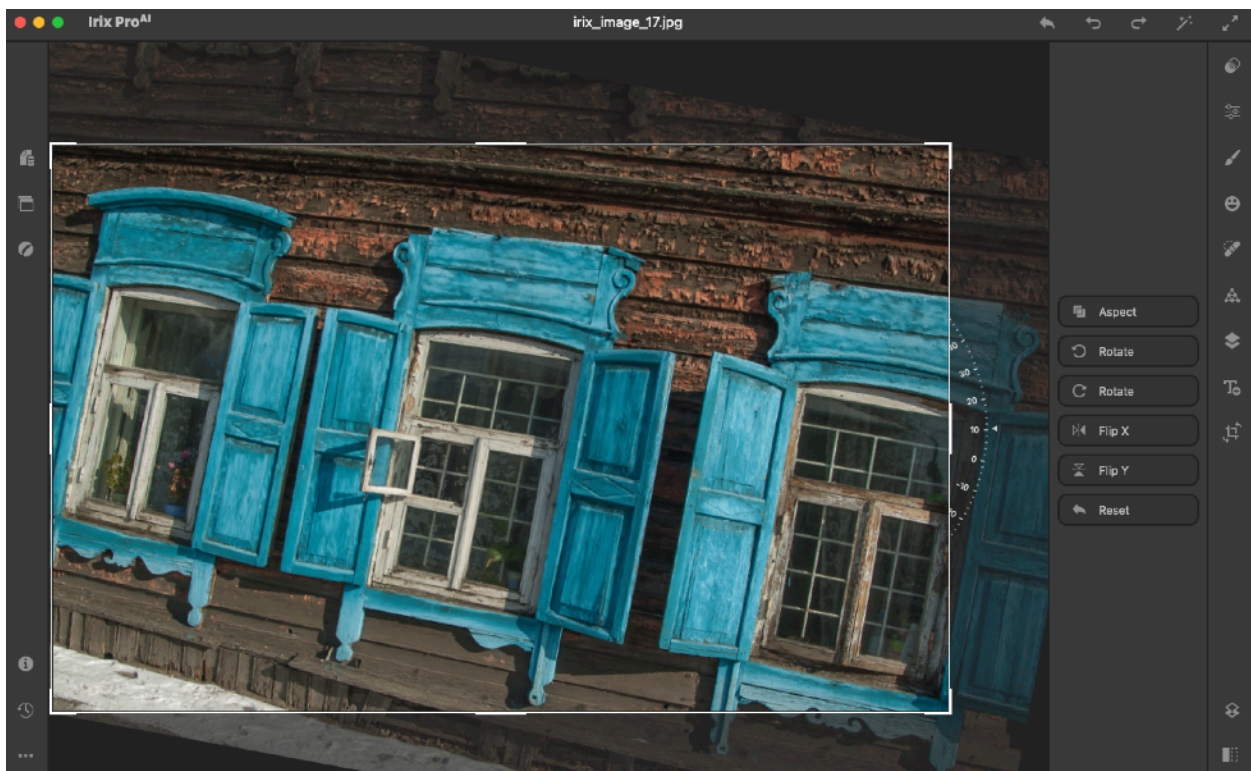
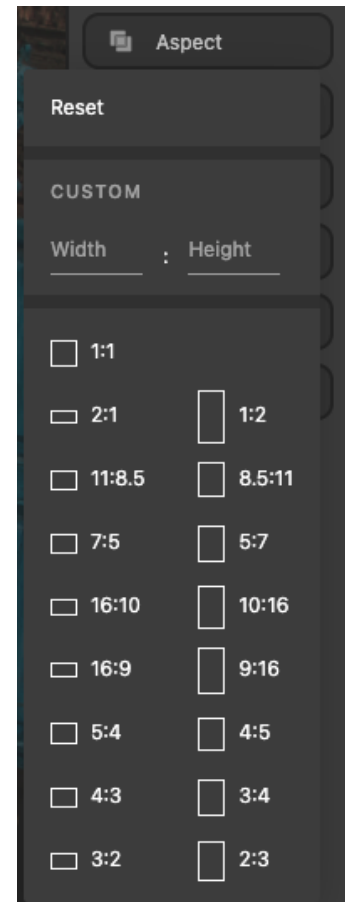
Width:Height :: 1:1, 2:1, 11:8.5, 5:4, 7:5, 16:10, 16:9, 4:3, 3:2

Height:Width :: 1:2, 8.5:11, 4:5, 5:7, 10:16, 9:16, 3:4, 2:3

Rotate & Flip

- Rotate CCW 
- Rotate CW 
- Flip X  - Flip the image horizontally or along the Y axis
- Flip Y  - Flip the image vertically or along the X axis

Reset  – Resets all adjustments made in the active layer





Rasterize

Coalesce all layers into one image.

Before / After

Toggle between images with current edits applied and the original.



Import Image +

1. Click on Import icon [+]
2. Select the image from the file explorer
3. Drag-and-drop images from your storage directly to the editor workspace. The image will also appear in the filmstrip.

NOTE - Images that were previously imported to the editor, if re-selected for import, will open with all previous edits applied.

If you need to remove the edits and start afresh, you can choose any of the following options;
Remove image from filmstrip - Right click on the image in the bottom filmstrip and select Remove Photo. Now you can re-import the image by following the steps above.

Revert to original - Open history tab, scroll to the bottom and click on Original. Or click Reset [↶] on the top toolbar.



Export Image

Irix Pro HDR supports multiple image file formats for exporting images.

Compressed image file formats supported;

- Image imported in JPG or JPEG can be exported as JPEG
- Image imported as PNG can be exported as PNG
- Image imported as BMP, GIF, GRAY or RAW format can be exported as JPEG

Camera RAW Images supported;

Raw images can be exported in multiple formats, different from their original format. There are five available export formats - JPEG, PNG, HEIF, WEBP, TIFF.

Each file format has its own quality settings.

JPEG and WEBP support multiple image qualities;


- Medium (70% quality)
- High (90% quality)
- Best (100% quality)
- Custom quality – Can be varied between 1 to 100 using the up/down arrow buttons with a quality indicator. Estimated image size (data) is indicated

To change name of image to be exported, click on the name field and change the name.

Images to be exported can be resized in four ways. Except Presets, other methods require you to enter the width and height in pixels, centimeters or inches.

- Resize – this will resize the image, with/without keeping the aspect ratio
- Fit – this will export image with Fit sizing, so based on required output dimensions, the image will introduce white space to fill up the missing pixel information
- Crop – this will crop the image based on required image resolution from center and eliminate remaining pixel data/information
- Presets – select the required image export preset for social media distribution or other applications

To export the image or the batch with required adjustments

Click on Export icon  in the left toolbar

Click on Image tab or the 'BATCH' tab in the EXPORT dialog box

Click on 'Export' button or the Batch Export button

NOTE - Estimated file size is indicated in KB upon selection of file format and image size



Manage Catalog

IRX Catalog is a chronological compilation of all the edits made to an image or a batch of images.

Image or batch of images exported as IRX catalogue are exported in .IRX file format.

When importing an .IRX file, note that the catalogue can be opened on Irix Pro HDR or Irix Pro XDR only for further editing. IRX catalogue saves the original image with all edits which can be undone, thanks to non-destructive editing.

IRX Catalog has two personas;

-Edits only


Export the IRX Catalog in case you need to save or share only the edits without images. When the IRX Catalog is imported, the editor will apply edits to the image. Edits will be applied to the image already present in the editor with the same file name as was at the point of origin.

-Edits with images


Export IRX Catalog in case you need to save or share the image(s) along with the edits. When IRX Catalog is imported, the editor will import all the images and their respective edits

Note - This action will remove all images already imported into the editor along with their edits. Make sure to save your current work.

To import an IRX catalog;

1. Click on Manage Catalog icon  in the left toolbar
2. Click on 'Import IRX catalog' tab in the MANAGE CATALOG dialog box.
3. Browse and Import catalog from the folder.

To export an IRX catalog;

1. Click on Manage Catalog icon  in the left toolbar
2. Click on 'Export IRX catalog' tab in the MANAGE CATALOG dialog box.
3. EXPORT IRIX CATALOG dialog box opens
4. Select if you wish to include 'images + edits' in the catalog or 'only the edits'
5. Click on Export Catalog tab
6. Type in the file name and file save location. A .IRX file will be generated and saved.




Reference Image Viewer

Provision for opening another image as a reference while you edit another or same image.

Note: Reference Image Viewer does not support viewing of RAW images.

Panorama/360° Image Viewer

Import & view Panorama and 360° Images. The images edited in Irix Pro HDR can be viewed in the Panorama/360° Image viewer  in the left tool bar.

Note: Panorama/360° Image Viewer does not support viewing of RAW images.

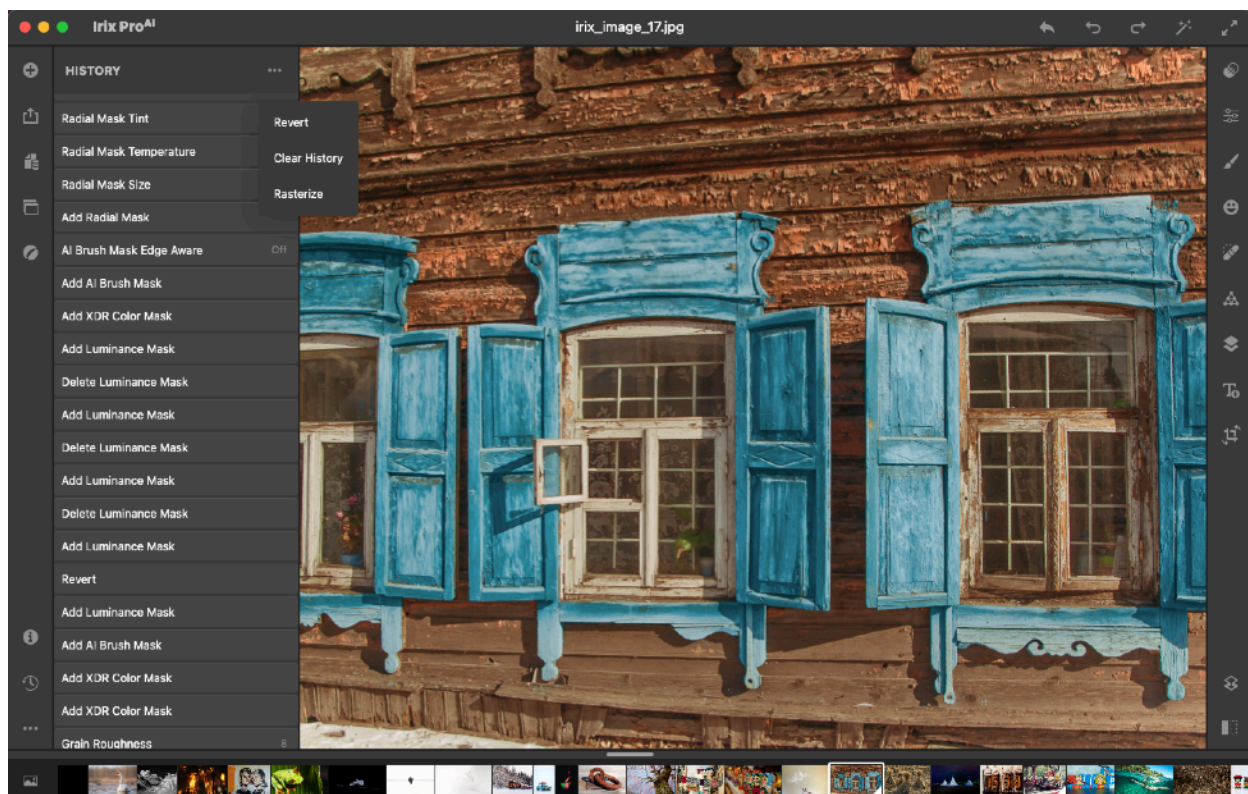
Image Information

View EXIF and metadata of the image currently opened or being edited.

History and Undo

Irix Pro HDR maintains infinite editing history. The history can be maintained for all images until removed from the editor.

Left Toolbar



History appears in the chronological order in which edits are made. The edit history tabs also indicate the set value of the sliders, where applicable.

The history module saves all the editing history during editing. Thus, history is not lost if the editor gets accidentally closed and you can resume your work from the point you left off.



To access editing history, click on the History icon [📖] or access the sidebar via keyboard shortcut [⌘+H]

Note - the history will be lost if the filename is changed

Other functions [...]

- Revert [↶]- Undo entire history and revert to image as imported. Note that the editing history is still saved and can be restored from the history sidebar.
- Clear History
- Rasterize [🔗] - Coalesce layers into a single image. Edit history is maintained and previous edits can be restored.

Note that the original image can be obtained by scrolling to the bottom of the history and clicking on Original.



More Options ...

Keyboard Shortcuts

[⌘+,]



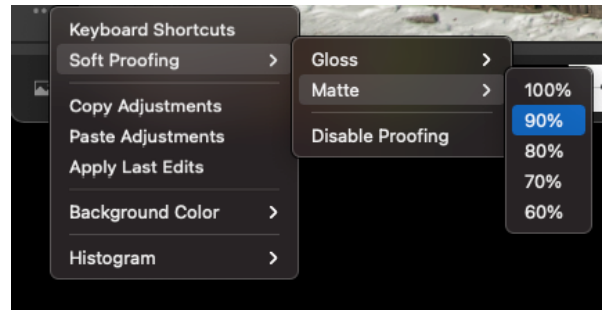
Soft Proofing

Irix Pro HDR provides a simulation of how the image will look when output to the printer.

Soft proofing is provided with following simulations;

- Gloss - 100%, 90%, 80%, 70%, 60%
- Matt - 100%, 90%, 80%, 70%, 60%

Disable Soft Proofing



Copy/Paste Adjustments

Copy Adjustments - Copy edits made on the current image

Paste Adjustments - Paste copied edits on the current image

Apply Last Edits - Apply edits made in the last image to the current image

Background Color

Same as canvas color. Irix Pro HDR provides a choice of background colors to make your editing experience free of ambient screen distraction.

- Default
- Grey - Black, White, Very Light Grey, Very Dark Grey, Light Grey, Dark Grey
- Red - Light Red, Dark Red
- Green - Light green, Dark Green
- Blue - Light Blue, Dark Blue



Histogram

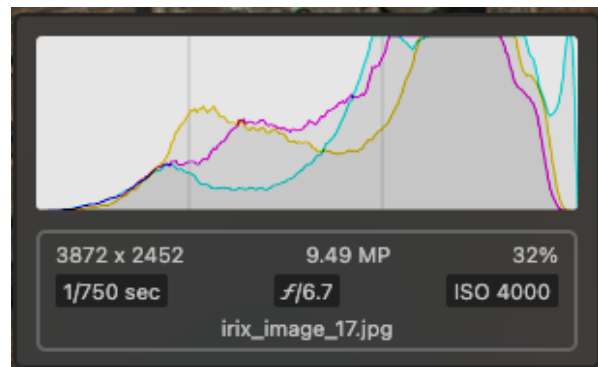
Displays the tonal range of an image. It shows how the pixels are distributed by plotting the number of pixels at each of the 256 brightness levels in an image.

Irix Pro HDR provides histogram in RGB and CMYK color spaces. It also provides basic image metadata for quick reference.

The histogram can be displayed or hidden and positioned by click & hold and dragging to the desired location on the canvas.

Histogram Controls

- Toggle Histogram - Show/hide histogram
- Switch to RGB
- Switch to CMYK





Top Toolbar

Mac OS Window Controls - Close, Minimize and Full Screen

Image Filename - The filename of the image under editing is displayed in the top toolbar.

Revert [↶]

Undo entire history and revert to image as imported. The editing history is maintained and can be restored from the history sidebar.

You can view the edits made by AI Auto Enhance in the XDR Color Grading Sidebar.

Undo Edit [↶]

Redo Edit [↷]

AI Auto Enhance [🔍]

Irix Pro HDR provides an AI powered single click auto enhance for quick results. The AI model is trained on 12+ million images and provides a quick one touch image enhancement.

Toggle UI [⌘ ⌘]

Show/Hide UI to reduce ambient distraction when viewing the finished image.



Filmstrip


Filmstrip allows easier viewing and access to the images imported into the editor. Images appear in the same order as imported.

The images in the filmstrip are not proxies and images are displayed with live edits in realtime.



To open the filmstrip;

- Use the keyboard shortcut [⇧+F]
- Drag the handle at the bottom centre upwards
- Single Click on the handle at the bottom centre

The filmstrip can be used for removing either a single image, or all images at once. To do so, Filmstrip icon  offers following functions;

- Import Photos
- Remove selected Photos
- Remove all photos

Note - to remove a single image, right click on any image in the filmstrip and select 'Remove photo'

The filmstrip has dynamic resizing for comfortable viewing. Use the floating handle on top of the filmstrip for changing the height of the filmstrip.



Appendix

Supported File Formats

IMPORT

Compressed Image Formats:

JPG, JPEG, PNG, BMP, GIF, GRAY

Raw Image Formats:

TIFF, TIF, 3FR, ARI, ARW, BAY, CRW, CR2, DCS, DCR, DNG, DRF, EIP, ERF, FFF, IIQ, K25, KDC, MEF, MOS, MRW, NEF, NRW, OBM, ORF, PEF, PTX, PXN, R3D, RAF, RAW, RWL, RW2, RWZ, SR2, SRF, SRW, X3F

Custom Overlay - to import custom images as layers in any of these formats:

JPG, JPEG, PNG, BMP, GIF, GRAY

Supported File formats for Watermark:

JPG, JPEG, PNG, BMP, GIF, GRAY

Supported LUT formats:

.CUBE, .VF, .3DL

Font Formats:

TTF, OTF, WOFF, WOFF 2.0, EOT

EXPORT

Project File format:

.IRX

Supported LUT format:

.CUBE

Export options:

Raw images can be exported in multiple formats, different from their original format. There are five available export formats - JPEG, PNG, HEIF, WEBP, TIFF.

Each file format has its own quality settings. JPEG and WEBP support multiple image qualities;

- Medium (70% quality)
- High (90% quality)
- Best (100% quality)
- Custom quality – ranging from 1 to 100, based on quality required. Image size (data) gets bigger in proportion to quality

Default Save options:

- Image imported in JPG or JPEG can be exported as JPEG
- Image imported as PNG can be exported as PNG
- Image imported as BMP, GIF, GRAY or RAW format will be exported as JPEG



System Specifications

Irix Pro HDR requires macOS 10.14 Mojave or later and works especially well on the new M1-powered Macs.

macOS Integration

- Full, native support for the Apple M1 chip
- Integrated and dedicated GPU switching
- Afterburner card support (supported Mac Pro models only)
- Designed and built for Retina displays
- Irix Pro HDR runs natively on both M1-powered and Intel-based Macs
- Built for Retina displays
- Sidecar & Apple Pencil support
- Open Portrait photos with masks
- SF Symbols support
- Support for macOS continuity features like Handoff, Universal Clipboard, and AirDrop
- iCloud integration
- Apple Photos
- Multi-window support
- Support for Magic Mouse and Magic Trackpad, including gestures and Force Touch
- Default macOS menus and shortcuts
- Versions
- Autosave
- Full Screen mode & Split View
- Use FaceTime camera to add pictures to your compositions
- Extensive AppleScript support
- Spotlight support
- Quick Look support
- Import images from camera or scanner with Image Capture
- Drag & drop support
- Share images using the native Share interface to Mail, Messages, AirDrop, Notes and Photos

Technologies

- Irix Pro HDR is built using Native tools and languages
- Spitfire[®] Graphics Engine powered by OpenCL, Metal, Core Image and Grand Central Dispatch
- MyND[®] Artificial Intelligence engine powered by CoreML
- ML features are accelerated using the Apple Neural Engine for up to 20x faster processing speed
- 64-bit architecture, HDR and XDR
- ColorSync color management

-----ooOO-X-OOoo-----