CREACEED'S

Hydra Express / Pro 3

JUNE 2012

Chapter 1

Quick Look

Looking forward to start with HDR photography? This chapter was made for you! It deals with the main steps for processing images in Hydra without getting too deep in the details.

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SECTION 1

Installing and registering Hydra

IN A NUTSHELL

1. A free demo version is available for download on Creaceed's website.
2. Hydra Express and Hydra Pro 3 are available for sale through the Mac App Store℠ and Creaceed's website.
3. Mac App Store copies don't need to be registered. Apple® automatically register the application when purchasing.
4. Copies downloaded from Creaceed's website need a license key to be registered.

I. From the Mac App Store

Hydra 3 is available in Express and Pro versions on the Mac App Store in the Photography category.

On the page below you can find a short description (1) and several screenshots (2) presenting the application and its main features.

Additional information about the application is available in the right column (3): version and date of the last update, size in Mb, UI localizations, Mac OS X® minimum requirements.

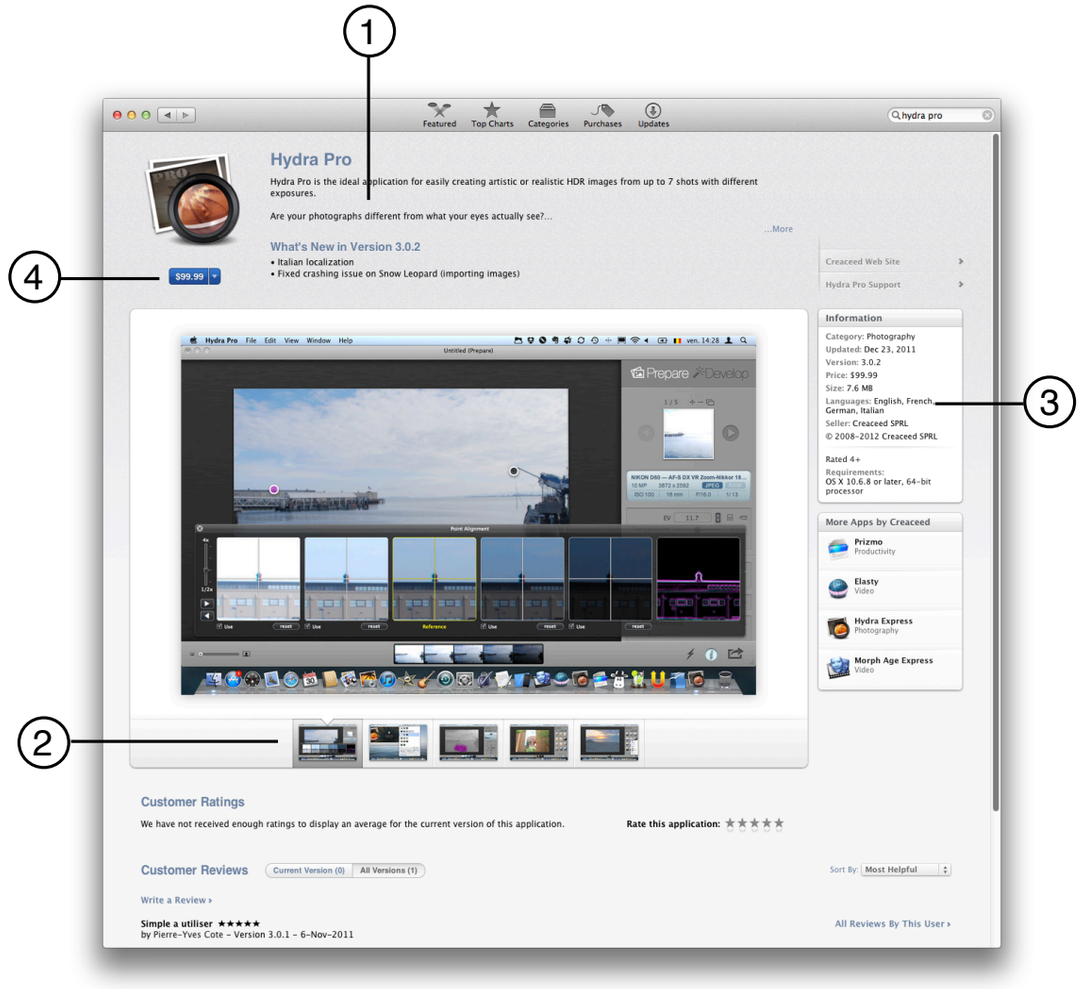

IMAGE 1.1 Hydra Pro on the Mac App Store

In order to purchase the application, click the blue button which shows the price, and which is located below the application icon (4). The button turns green, and now shows «Buy the app». Click again to confirm the purchase, and fill in the fields about your iTunes® account. Confirming automatically starts downloading the application, and its icon will appear in the Dock.

Once the download is complete, click the icon to launch Hydra.

Apple use a licensing system relying on neither license key nor activation code. It means that Hydra is fully functional as soon as it is purchased through the Mac App Store. No need to register it once again.

Apple will email you a receipt stating you purchased Hydra. Make sure to keep this email. It could be useful sooner or later (for instance, if you want to upgrade from the Express to the Pro version). We need it as Apple don't disclose any information about Mac App Store customers.

II.From Creaceed's Website

A demo version of Hydra 3 is available on our website. This version enables you to evaluate the application before actually purchasing it. Therefore, it is neither time-limited, nor feature-limited, nor limited to a fixed number of projects. The only limitation of the demo version is a watermark on the rendered HDR image.

You can find the downloaded application in the Downloads folder on your Mac. Move it to the Applications folder.

If you are satisfied with the application, you can purchase a license for it in our online store. Several payment methods are available depending on your country of residence: credit card, wire transfer, check...

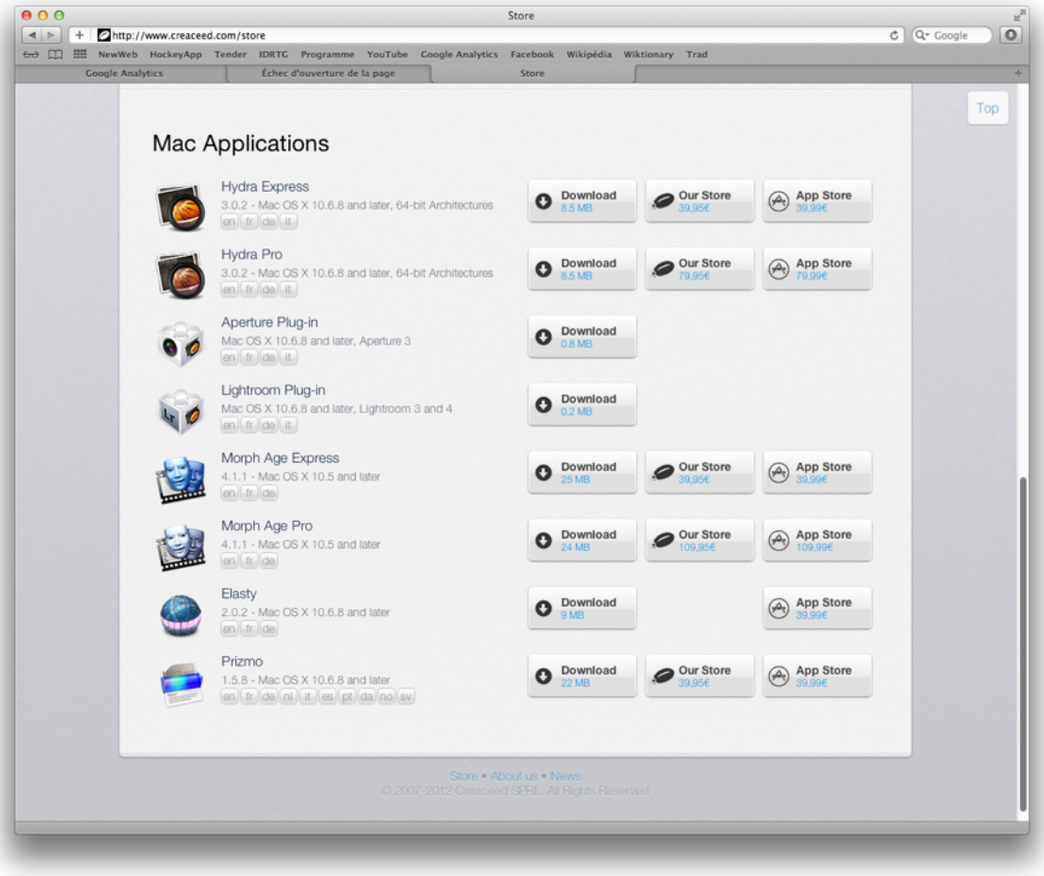

IMAGE 1.2 Creaceed's Online Store

As soon as payment is processed, you'll get your personal activation code by email. Keep it for later use (for instance if you have to reinstall Mac OS X).

The code gives you the right to use both the stand-alone version of Hydra and the plug-ins. As you like it.

And now, let's register your copy of Hydra. Click «Hydra» in the application menu, and choose «Register / Buy a License...». Fill in the following information in the registration window: your name, email address, and activation code. Make sure your Mac has Internet access as the system will connect to our database to complete activation.

IMAGE 1.3 Registration Window

Section 2

Render an HDR image from several pictures

In a Nutshell

1. You can create a High Dynamic Range image or HDR image from several Low Dynamic Range pictures (LDR) of the same scene.
2. Hydra automatically aligns the imported pictures, even if they were shot using no tripod.
3. For developing the HDR image, you can use several presets to get you started on the one hand, and advanced settings to express your creativity on the other hand.
4. You can export directly to 8 online services or applications (Facebook, Twitter, Mail, iPhoto...).

I. Introduction

Human eyes are much more sensitive than any camera sensors. Therefore, cameras are technically prevented from taking pictures showing the full gamut of light as we see it in real life. Nevertheless, you should expect better from your shots...

High Dynamic Range Imaging (or «HDR») is a method which fixes this issue by allowing a greater dynamic range between the lightest and darkest areas of an image.

Here is how it works: you take several shots (Low Dynamic Range pictures or LDR) of the same subject successively while modifying the exposure value after each shot. The subject to be photographed will determine how many shots are required for HDR processing.

The typical example is to take a picture which is correctly exposed, an overexposed picture (+2 EV) and an underexposed picture (-2 EV). There will be interesting details in each picture. The overexposed shot will have sharp details in the dark areas whereas the underexposed shot will have sharp details in the bright areas.

You can then import these 3 shots into Hydra which analyzes them, and selects the best areas in each shot. Hydra's super effective algorithm combines these areas, and creates a new image which is closer to what can be observed in the real world: a High Dynamic Range image or HDR image.

Finally, Hydra applies a processing called «tone mapping» to the HDR image so that it can printed or viewed on a screen.

II.Importing pictures

There are several ways to import pictures into Hydra:

- locate them with the Finder®
- select them in your iPhoto®, Aperture® or Lightroom® library
- drag and drop them into Hydra's start window
- choose «File» in the application menu, then «Import Photos...», and locate them with the Finder.

You can import up to 3 pictures in Hydra Express, and up to 7 pictures in Hydra Pro for a single project.

IMAGE 1.4 Welcome Window

III.Aligning pictures

Hydra automatically aligns pictures by detecting similar details across all shots. Hydra relies on a state-of-the-art technology which can handle handheld pictures. Therefore, using a tripod for taking pictures is not mandatory. Aligning pictures is nevertheless required if you want to render a sharp HDR image.

4 points (i.e. roughly 1 point in each corner) are enough to get pictures correctly aligned.

If Hydra didn't manage to detect 4 alignment points, you can fix this manually:

- Add a point with the «+» button in the «Align images» section.
- Select the point which appeared in the preview, and move it to a distinctive detail in the picture.
- Open the alignment pane below, and if need be, drag each picture for moving the target to the same location as on the reference image (center pane). The purpose is to locate the alignment point correctly on all shots of the series.
- The right pane (X-ray preview) shows the object outline for optimizing alignment.

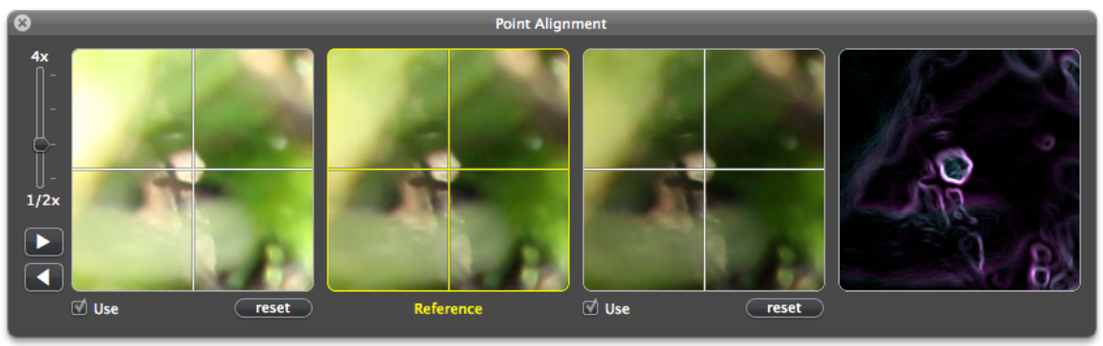

IMAGE 1.5 Alignment Pane

IV.Rendering the HDR image

Click «Develop» in the top right corner of the application.

Hydra combines the pictures in a single HDR image which is previewed within the application. The preview can be at full resolution if you want (checkbox available in Preferences).

Hydra gives you access to 12 presets. Click each miniature to preview the related HDR image in real time.

- ***Photorealistic***: flattens the dynamic range by pushing shadows and pulling highlights
- ***Artistic Black & White***: produces a detail-enhanced black and white photo
- ***Contrasted Surrealism***: boosts details and saturation
- ***Soft Surrealism***: makes image softer and boosts saturation
- ***Arabesque Silhouettes***: splits highlights and shadows to make dual tone (bright/dark) photo
- ***Crispy Clouds***: detail-enhanced in bright areas (typically clouds)
- ***Tinted Sky***: shifts the blue tint in original photo to red for artistic effect
- ***Reds Only***: makes image black & white, except for reds which are preserved
- ***Sepia Tones***: decreases color saturation and tints to sepia color, also adds vignetting at corners
- ***Retro***: decreases saturation and dynamic range to resemble old cameras
- ***Cyanotype***: Cyan-blue rendering or blueprint inspired by the so-called printing process.

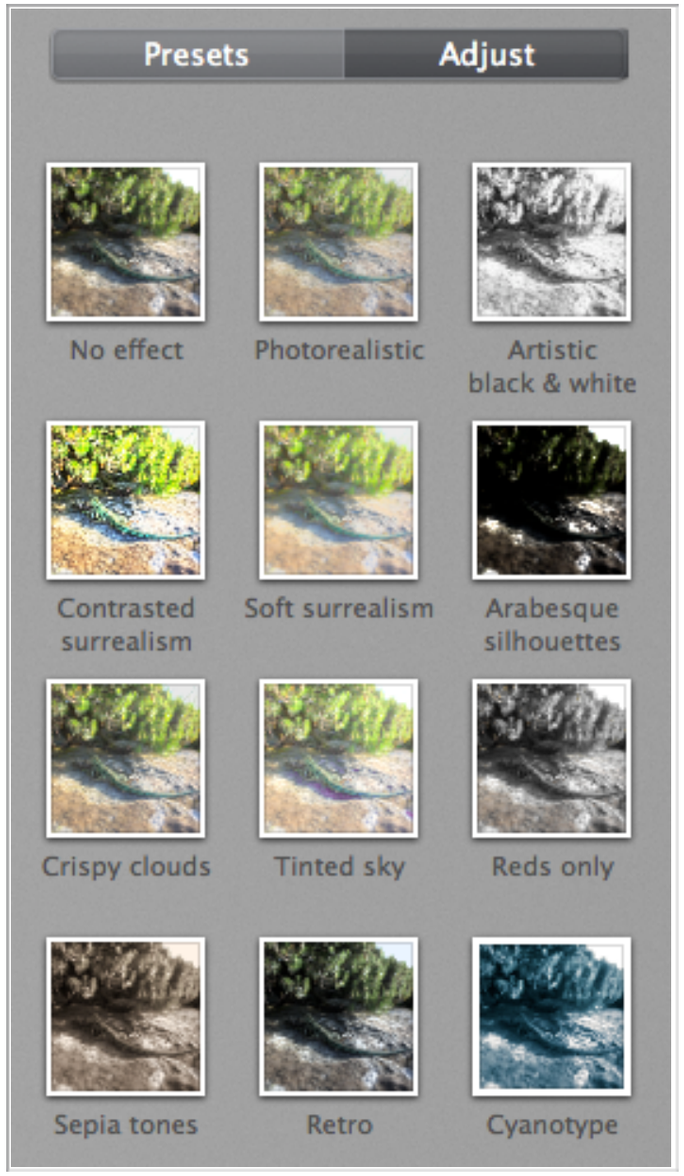

IMAGE 1.6 12 Presets Available

You now have 2 options:

- You are fully satisfied with the image created using the selected preset, and you want to finish your HDR image. Go to number V.
- You think the selected preset is a good start for rendering the perfect HDR image but you want to fine-tune it first. Click the «Adjust» tab to show advanced settings:
    - ✦ Increase or decrease overall ***image exposure***
    - ✦ Activate or deactivate ***tone mapping***
    - ✦ Darken or lighten ***shadows*** only
    - ✦ Darken or lighten ***highlights*** only
    - ✦ Add a ***glow effect*** to the image
    - ✦ ***Vignetting***: darken the image corners to give the image a retro look
    - ✦ Add a white ***frame*** around the image
    - ✦ Select a ***probe*** (among the 6 probes available: overall, dark tones, bright tones, red tones, green tones, blue tones), and change following settings:
        - ✳ Increase or decrease the level of ***image details***
        - ✳ Increase or decrease ***brightness***
        - ✳ Increase or decrease ***contrast***
        - ✳ Select a ***hue*** to apply to the image
        - ✳ Increase or decrease ***saturation***

Remark: you can work on several probes simultaneously in a single project to create a specific effect. For instance, you can increase red tones brightness while decreasing green tones brightness.

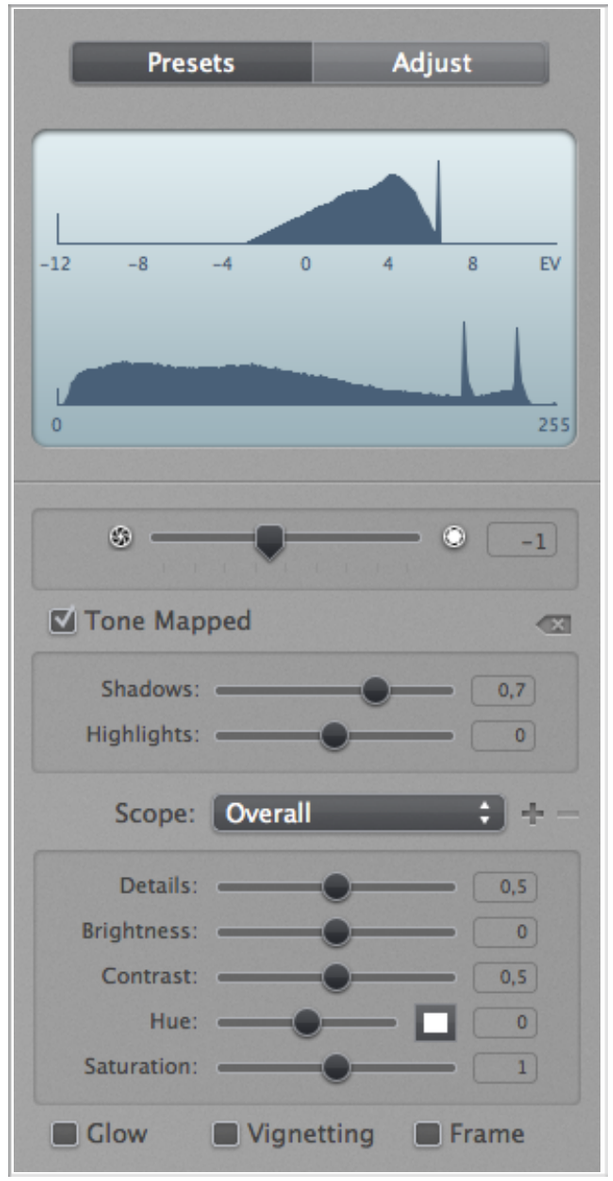

IMAGE 1.7 Advanced Settings

V.Exporting the HDR image

Click  for choosing how to export the HDR image.

To help you share your HDR images, and therefore to help you save some time, Hydra makes it easy to export directly to several services or applications:

- ***Facebook***®: connect to your Facebook account, and post an image in the dedicated folder called «Hydra Photos». If you want, you can also add a copyright label in the EXIF data and a caption. Besides, you can select the image size (small, medium, large, original dimensions).
- ***Flickr***®: connect to your Flickr account, and post an image. If you want, you can also add a copyright label in the EXIF data and a caption. Besides, you can select the image size (small, medium, large, original dimensions), and choose if the image is to be made public or not.
- ***Twitter***™: connect to your Twitter account, and post a message with your image. If you want, you can also add a copyright label in the EXIF data. Besides, you can select the image size (small, medium, large, original dimensions).
- ***Mail***: choose the image format (JPEG, 8-bit TIFF, 16-bit TIFF or 32-bit OpenEXR). If you want, you can also add a copyright label in the EXIF data. The HDR image is automatically enclosed in a new mail.
- ***iPhoto***: choose the image format (JPEG, 8-bit TIFF, 16-bit TIFF or 32-bit OpenEXR). If you want, you can also add a copyright label in the EXIF data. You can find the image in the «Last Import» album in iPhoto.
- ***Aperture***: choose the image format (JPEG, 8-bit TIFF or 16-bit TIFF). If you want, you can also add a copyright label in the EXIF data. A window opens where you can select in which Aperture project you want to save the HDR image.
- ***Lightroom***: choose the image format (JPEG, 8-bit TIFF or 16-bit TIFF). If you want, you can also add a copyright label in the EXIF data. After confirming the import into Lightroom, you can find the image in the «Previous Import» catalog.
- **Picture file**: choose the image name, the location where to save it on your Mac, and the image format (JPEG, 8-bit TIFF, 16-bit TIFF or 32-bit OpenEXR). If you want, you can also add a copyright label in the EXIF data, and select the application for opening the output image (Preview for instance).

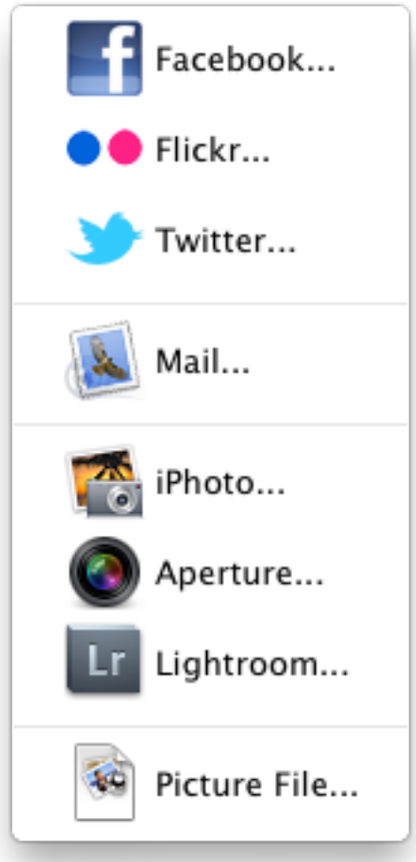

IMAGE 1.8 Export Options

Click «Save». Hydra renders the HDR image, and exports it as requested.

Congratulations! Your HDR image is ready.

SECTION 3

Render an HDR image from a single picture

IN A NUTSHELL

1. Yes, you can render an HDR image from a single RAW picture as Hydra is able to reveal information which is hidden inside RAW.
2. Rendering an HDR image from a single JPEG is impossible from a technical point of view. Don't mix up high saturation or contrast and HDR processing.
3. In a few clicks, you can improve those pictures which didn't suit bracketing, and therefore didn't suit HDR processing from several pictures either.

I. RAW is the key

Opting for RAW files over JPEGs when taking pictures is definitely an asset as RAW files contain more information even if it is not fully available as such on your shots.

Hydra now comes into play. Import a RAW picture, and Hydra will look for the precious hidden information in order to reveal it, and render an image which is closer to what you saw. Working from 3 RAW pictures of the same subject would of course be even better. If you can, we advise you to do so.

However, you can't take pictures of anything in bracketing mode (for instance, when people are moving really fast). In such circumstances, you should use a single RAW for rendering HDR images. It enables you to go beyond the limits of standard HDR photography, famous for improving landscape and building pictures.

II.HDR Processing

Open Hydra, and import your RAW picture. In this example, we used a .NEF picture (Nikon's RAW format).

As there's only one input picture, features related to the processing of several shots are deactivated. In other words, image alignment and ghost removal are not visible in the interface if the Hydra project features a single picture.

You can crop the picture if you want.

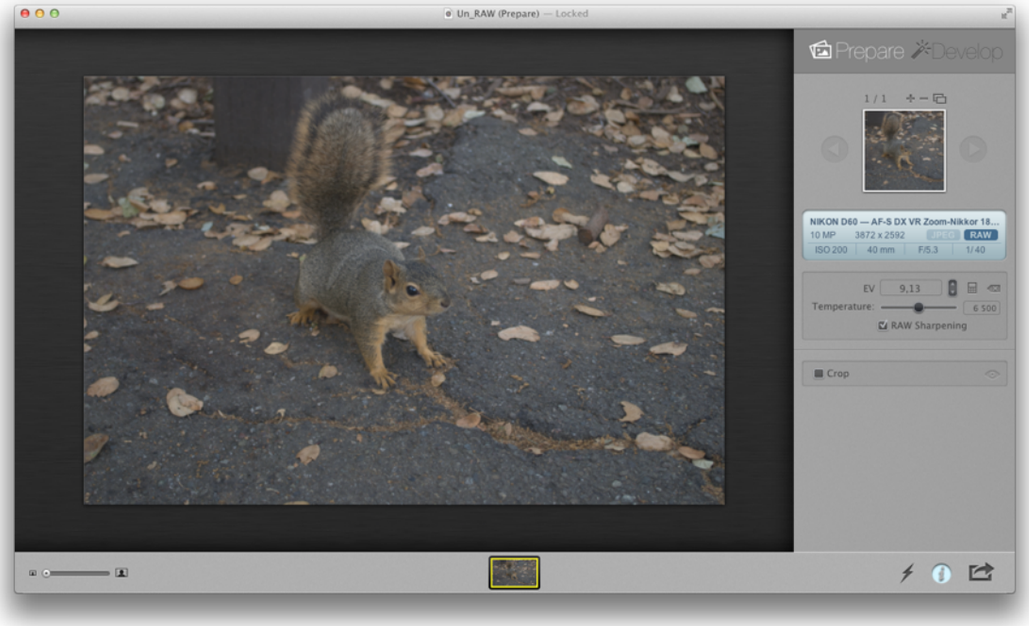

IMAGE 1.9 RAW Picture before HDR Processing

IMAGE 1.10 Same Picture after HDR Processing

When you switch to Develop mode, Hydra automatically applies HDR processing. Then, you can choose a preset, or even opt for adjusting the image using advanced settings.

When satisfied, export the HDR image to the usual services and applications (Facebook, Twitter, iPhoto...).

CHAPTER 2

Under the loupe

You already know the basics of HDR photography. Now, you would like to go further and master Hydra's advanced features. You are at the right place. This chapter will show you how to cope with some issues when preparing or developing HDR images.

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SECTION 1

Prepare Mode

IN A NUTSHELL

1. View picture information, and correct it if need be.
2. Align pictures to cope with shifted input pictures when rendering HDR images.
3. Crop to avoid unsightly black borders on the HDR image.
4. If some things happened to move between shots, select the shot(s) to use locally in order to avoid ghost effects.
5. View picture areas which are too bright or too dark. It'll help you locate useful information on each shot.

I. How to correct an exposure value?

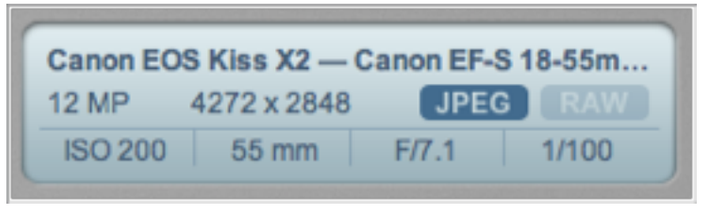
Hydra will be able to successfully mix input pictures only if the exposure values of these pictures are correct.

The exposure value (EV), which reflects how much light is in the shot, is defined by 3 camera settings:

- exposure duration expressed in seconds (Exp (s))
- aperture (F/n)
- sensitivity (ISO).

However, this information might be incorrect or missing from the picture EXIF data. Hydra enables you to add or correct them manually.

For each shot, a blue frame shows major EXIF data (camera model, resolution in pixels, dimensions, focal length, exposure duration...).



The frame below the blue frame shows the exposure value (EV). This field can be edited as follows:

- either accurately by taping a new value,
- or more approximately by clicking the arrows for increasing or decreasing the value by 0.25 (as you can do on a camera).

When clicking the calculator icon, you open a window where you can type the setting values you applied when taking the picture series. This information enables Hydra to compute the right exposure value.

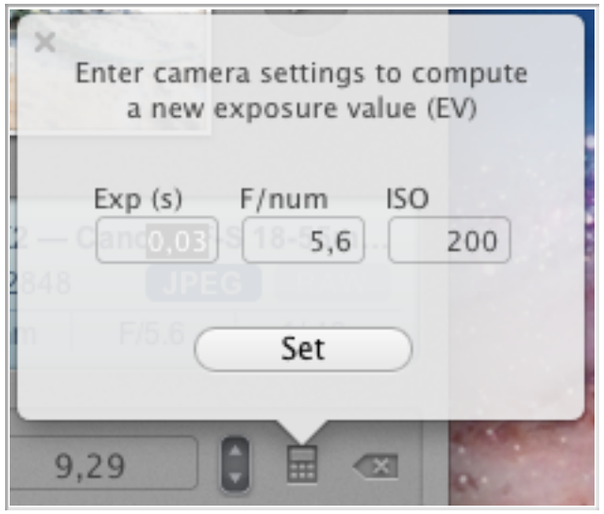


IMAGE 2.1 Type the Camera Settings in this Window

II.How to use shifted images in your HDR project?

As Hydra enables you to use handheld shots as input, working with shifted pictures is quite common. It's the reason why Hydra includes a feature for **aligning pictures**.

Remark: Hydra's alignment feature can't fix parallax artifacts (i.e. foreground and background both visible on a single picture). That's why it works best with landscapes and far away scenes.

1.Activate the feature.

2.Click the wand icon, and Hydra looks for 4 identical details, called «alignment points», on the pictures. These points enable Hydra to put the pictures on each other correctly.

3.If Hydra didn't manage to detect 4 alignment points, you can add some manually. Click the «+» button in front of «Alignment point».

4.Hydra adds a colored alignment point in the middle of the image. Select it, and move it to a detail which is visible and distinctive enough so that you'll be able to locate it on all shots.

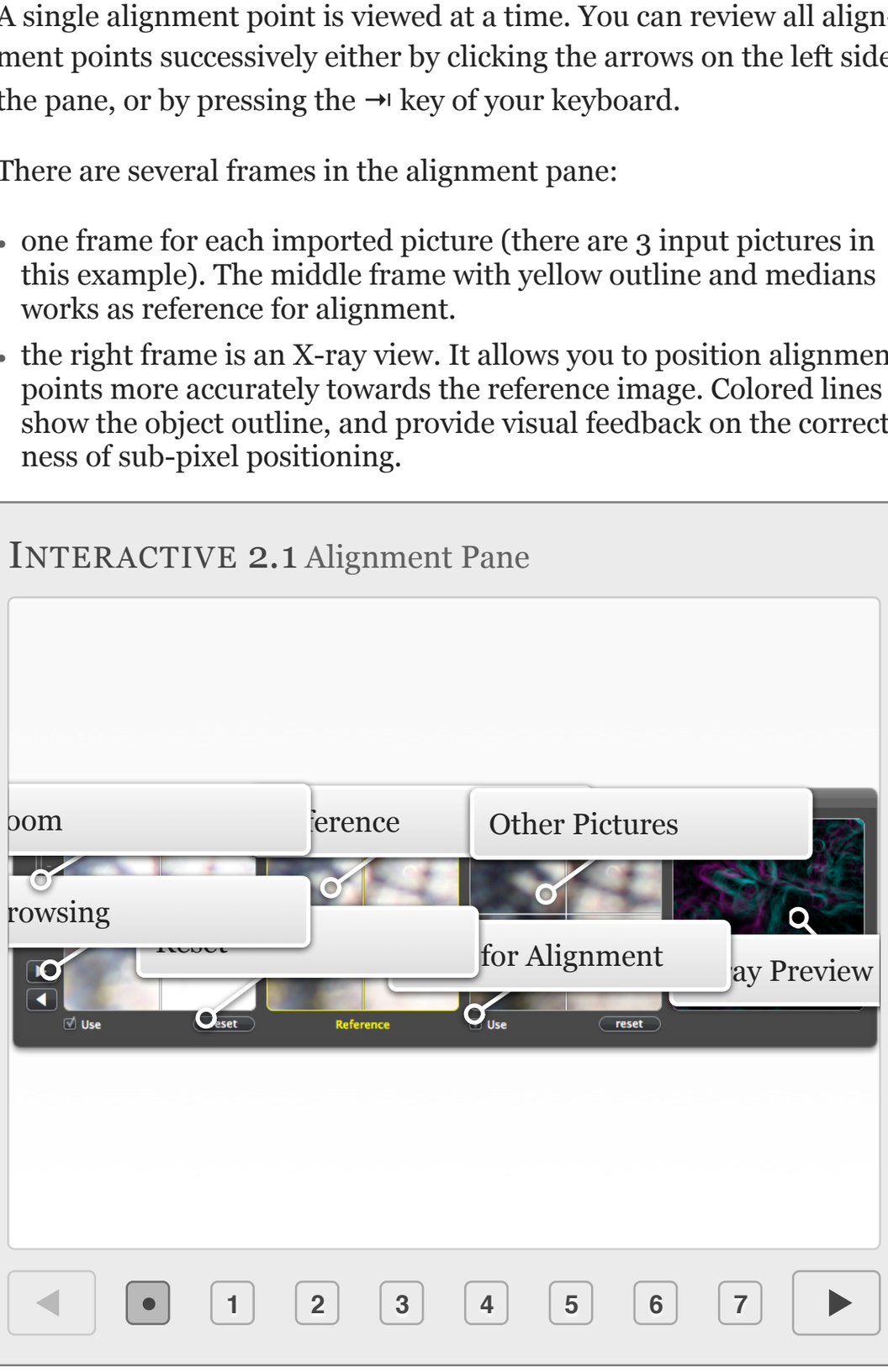
5.Click the «Quick Look» icon to show the alignment pane.

A single alignment point is viewed at a time. You can review all alignment points successively either by clicking the arrows on the left side of the pane, or by pressing the ⇥ key of your keyboard.

There are several frames in the alignment pane:

- one frame for each imported picture (there are 3 input pictures in this example). The middle frame with yellow outline and medians works as reference for alignment.
- the right frame is an X-ray view. It allows you to position alignment points more accurately towards the reference image. Colored lines show the object outline, and provide visual feedback on the correctness of sub-pixel positioning.

INTERACTIVE 2.1 Alignment Pane



6.Check the target in each frame is at the exact same location as in the reference frame.

7.If not, click the frame where you noticed a difference, keep pressed, and move the mouse slowly until this shot and the reference shot are correctly aligned. The X-ray view will make this process easier: lines for the reference shot are blue, and those for the other shot are pink. The X-ray view is updated in real time as you are moving the picture. Images are perfectly aligned when colored lines are on each other.

8.If one of the frames happens to be black, it means Hydra was not able to detect the distinctive detail on this shot. If you are able to locate the target correctly by yourself, check the «Use» box below the related frame, and move the image.

You can see the impact of processing alignment points on the output image in real time in Hydra's main window.

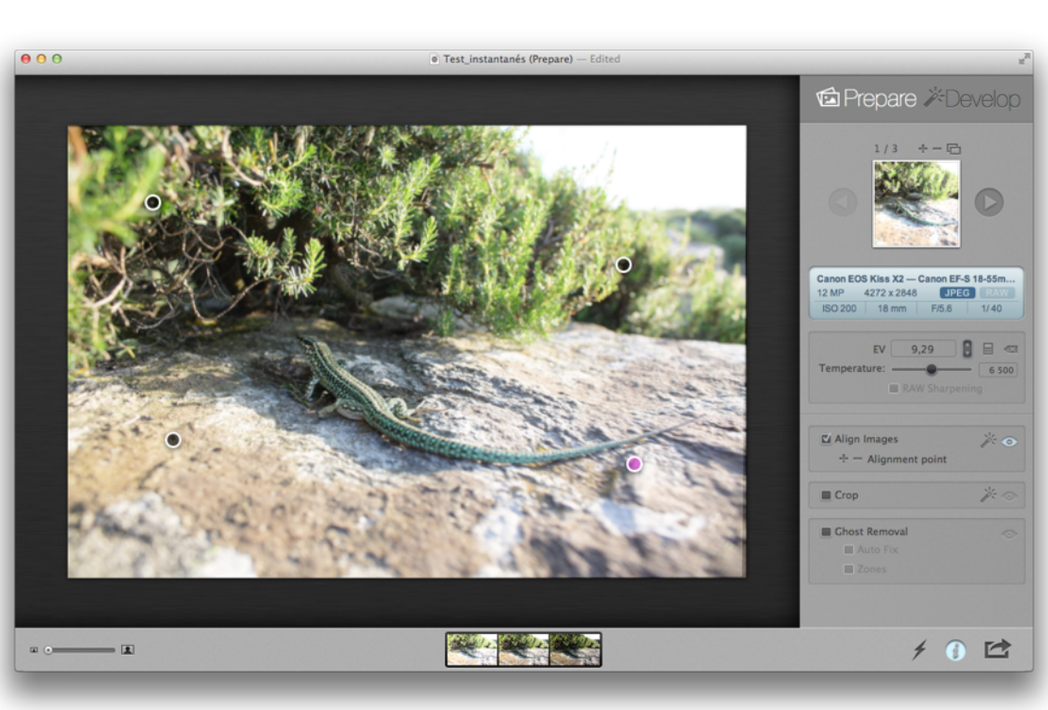
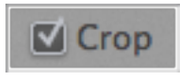


IMAGE 2.2 Alignment Points are Visible in the Preview

III.How to remove black borders?

Taking pictures using no tripod might have another drawback: there could be black uneven borders around the HDR image. There's an easy way to fix this: **crop the image** so that the output image will have flat borders.

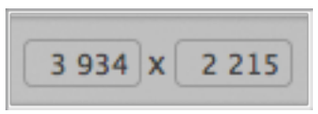
1.Activate the feature.



2.Click the wand, and Hydra automatically optimizes cropping (i.e. by removing all unsightly black borders around the HDR image).

3.If you are not satisfied with the image proportions resulting from the automatic method, you can fine-tune this manually:

- either by taping new values in pixels in the related fields (the bottom left image corner is fixed).



- or by moving the white corners in the window (tip: if you keep the ⇧ key pressed, you can change the picture dimensions while keeping the original proportions).

4.When finished, click the «Quick Look» icon to hide the crop tools.

Even if you can't view the cropped image in Develop mode, the image will be cropped when rendering the HDR image.

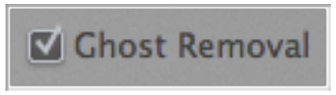
IMAGE 2.3 Move the Corners to Crop the Image

IV.How to prevent ghost effects?

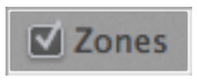
A common issue with HDR images rendered from several exposure shots is that some things (people, animals, trees...) can move between shots, which results in «ghosts» being visible on the output. These ghosts actually show motion across shots (unlike a building which is static by definition).

Some ghost effects are barely visible but some others might truly over-shadow your creation. Once more, Hydra gives you the opportunity to fix this in a few minutes.

1.Activate the feature.



2.Select the method: either automatic correction, or correction relying on zones (as we do for this example).



3.Click the «Quick Look» icon to show the tools.

4.Use the mouse to draw a line around the zone where something moved across shots. The line is pink, and the zone shape is not restricted.

5.As soon as the zone is closed, the line turns white automatically. All pictures used in the project by default remains selected for the zone.

6.Unselect the picture(s) not to be used during HDR processing for the zone you've just drawn.

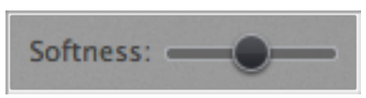
IMAGE 2.4 Draw a Line where a Ghost Effect would Appear

IMAGE 2.5 Select which Picture to Use for the Zone

If the ghost effect is located in a bright picture area, we advise you to keep the underexposed shot for processing this zone, as the useful information for bright areas is actually contained in the underexposed shot. Choosing the overexposed shot instead wouldn't help you much as bright areas are burnt obviously. The output would have been burnt as well.

7.Move the slider below to browse image exposure. It's an easy way for checking that ghost effects were successfully fixed at various exposure levels. This will help you save time as you can make the right decision before moving to Develop mode. Besides, you can make sure you selected the right picture(s) for local HDR processing.

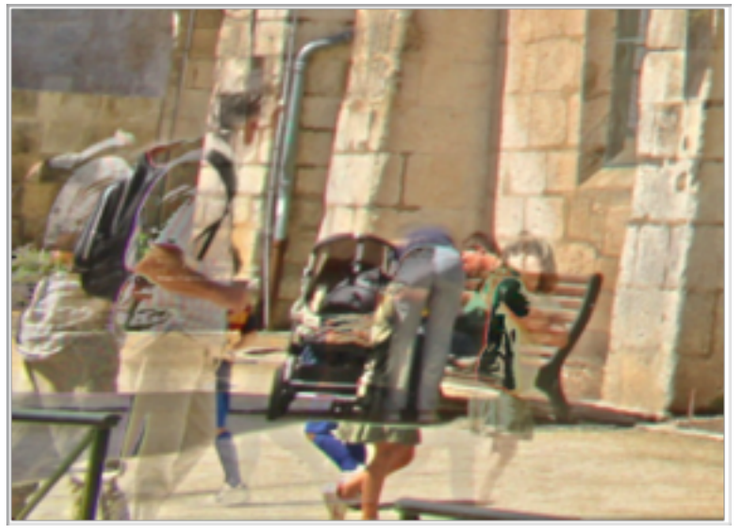
8.Move the «Softness» slider for making the zone edges smoother. As the zone is made of a single picture whereas the image as a whole is made of several pictures, some color variations could be noticed. The «Softness» setting will help you make the transition between the zone and the other part of the image softer, which will give a more natural look to the output.



There can be several zones for correcting several ghost effects in a single project. Each zone has its own settings, and you can select the input picture to be used for processing each zone separately.

But does it work? Judge by yourself.

Detail of an HDR image with no ghost correction



Detail of the same HDR image after correcting ghost effect

V.How to identify too bright or too dark regions in your pictures?

Using several exposure shots for rendering an HDR image requires you to realize which zones can be used in each shot, i.e. the zones where Hydra can find useful details to be integrated in the output. Follow the guide, follow Hydra!

1.Activate the «Flash» feature.

2.Click the miniatures in the bottom toolbar to view all pictures.

3.Hydra shows you which zones in the picture are lacking useful information (due to the physical limit of camera sensor).

- In overexposed shots: burnt zones, i.e. zones which are too bright, are black flashing. In this example, you can notice the white wooden window shutters and door in the foreground.

- In underexposed shots: zones which are too dark are white flashing. Plants and benches in the foreground, as well as some stained-glass windows and some regular windows of the church are too dark in the example below, and therefore lack information.

SECTION 2

Develop Mode

IN A NUTSHELL

1. In Hydra, you can make several variants of an HDR image in a single project, and you can compare these variants in a few clicks using snapshots.
2. There's no limit to your creativity. Probes enable you to process images locally to create a particular effect. This feature is only available in Hydra Pro.

I. How to experiment and compare variants of an HDR image?

Imagine you took a series of pictures, but you didn't know exactly at the time which kind of HDR image you intended to process. No problem, you can freely experiment within Hydra, and compare the image variants in a single project through the use of **snapshots**.

Snapshots are accessible from the «Presets» and «Adjust» tabs in Hydra's «Develop» mode.

1.Create your 1st project: you can select a preset if you want, and click «Adjust» to access the advanced settings.

2. When satisfied with the 1st project, click the «+» button next to «Snapshots». A white dot appears in the 1st circle of the row. If you click the 1st white dot later, Hydra will automatically show the 1st snapshot you saved.

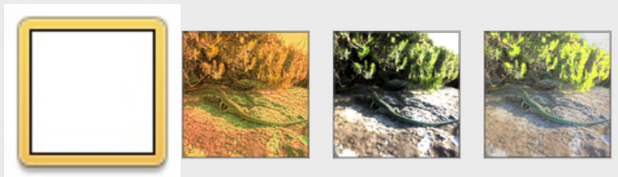
3.Go on experimenting, and update the settings as you like it. Every time you click the «+» button, Hydra creates a new snapshot (5 snapshots in a project at most).

4.View the snapshots you saved to compare the variants you created. In a second, you can switch from a photorealistic image to a surrealistic one without updating any setting. The snapshot which is currently selected and viewed in Hydra can be easily identified by a darker circle.

5.Do you want to get rid of an image variant? Click the «-» button next to «Snapshots» to remove the snapshot which is currently selected (shown by a darker circle).

GALLERY 2.1 Snapshot Examples

1st Snapshot: Artistic black & white preset with vignetting and white frame.



II.How to locally process an image?

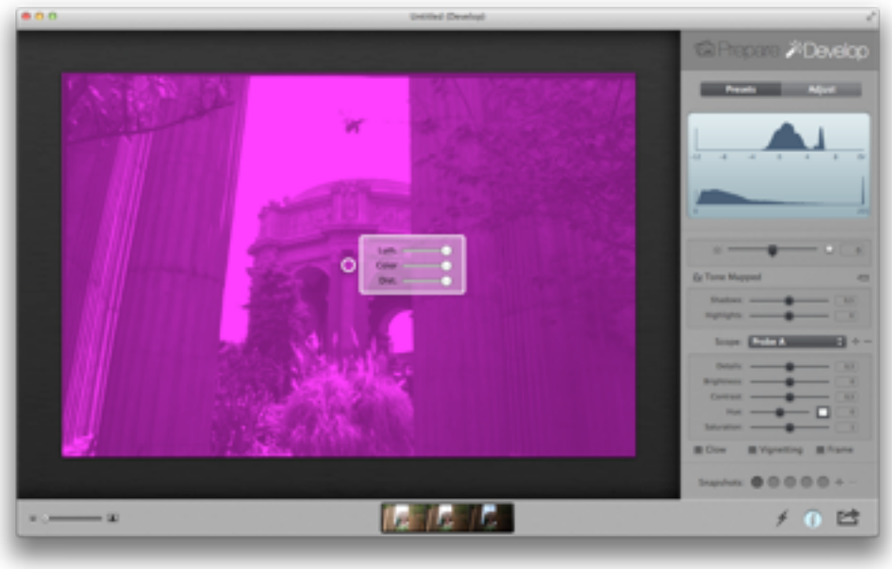
With Hydra Pro, you can locally process the image for adding a specific effect, or for giving it a particular look. Here are a few examples of what you could do:

- change a color into another one on the whole image
- update a circular area of any size
- modify the image areas characterized by the same brightness level.

Here are the settings you can update for local processing: «Details», «Brightness», «Contrast», «Hue» and «Saturation».

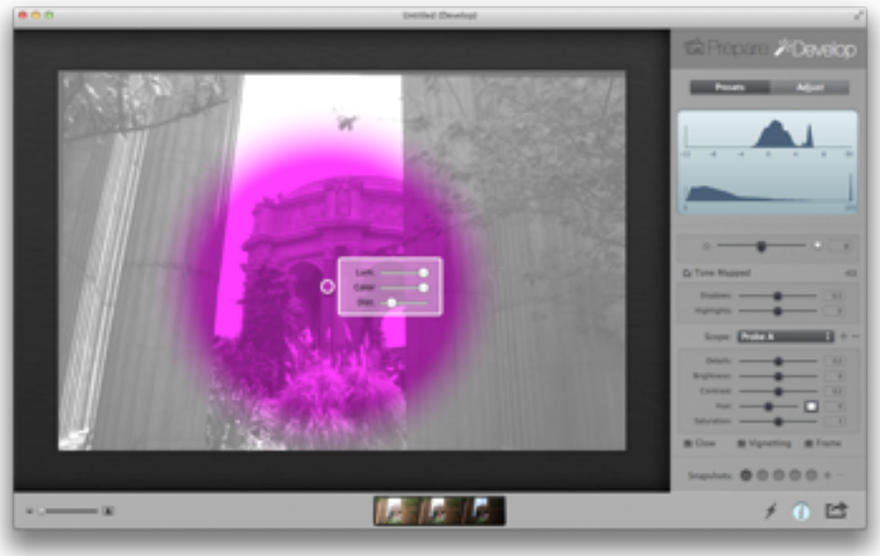
To enable local processing, you have to add **probes** within Hydra. There can be 3 probes at most in a Hydra project.

1.In the «Adjust» tab of the inspector, click the «+» button next to «Scope». Hydra automatically adds a probe in the middle of the image preview. The probe also appears in the Scope drop-down menu.



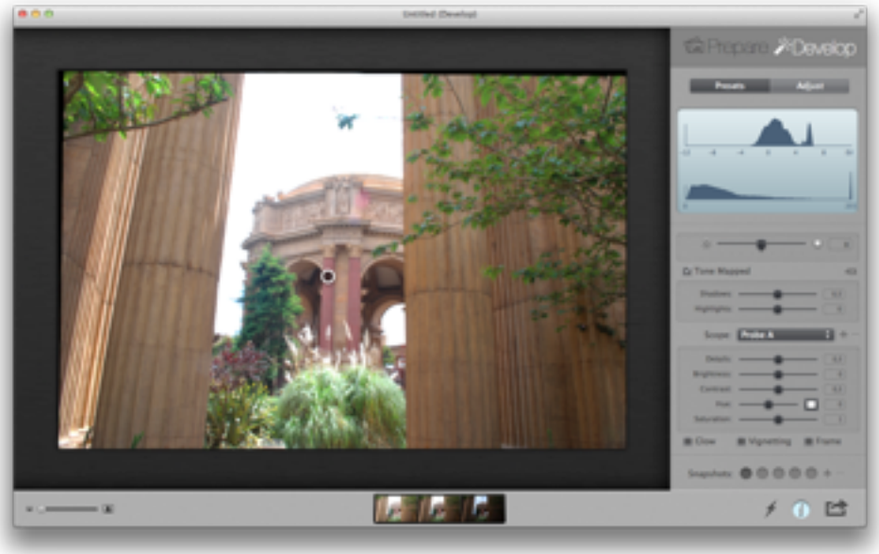
2.Move the probe with the mouse to wherever you want on the image.

3.Move the sliders in order to select the image area you want to process. The 1st step in this example is to determine the distance. As you move the slider, the radius of the effect to be created decreases.



4.Move the sliders for color and brightness now. We can select the center building columns in the background accurately and fast.

5.Click outside the image to exit the probe edition window. The probe is deactivated (it is now black) but remains visible.



6.Check Probe A is selected in the Scope menu. Then, update the settings available under the menu. In this example, we increased details, contrast and saturation to make the columns more visible.

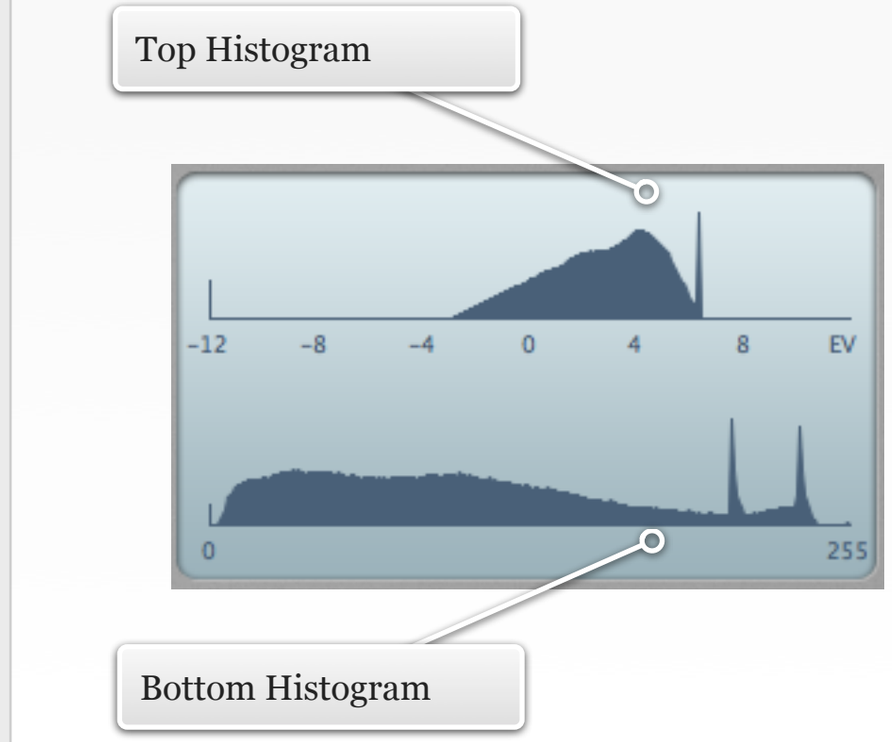
III.What are histograms used for?

Under the Adjust section, Hydra displays a dual histogram representation.

The top histogram shows the repartition of light levels of the merged HDR image on a logarithmic scale (EV), with no tone mapping applied. A scene with both dark areas and bright ones will expand more (left & right) than a scene with constant luminosity. Its logarithmic nature allows to cope with wide light range, in a way similar to eye sensitivity. This histogram gives you a precise idea of the scene content.

The bottom histogram shows the 8-bit levels of the tone mapped image (which is, actually, the preview image that is displayed on screen), after all tone mapping settings have been applied. Changing settings will thus induce a change in that histogram. Values that hit the left (right) border are respectively clipped to black (white), as with any regular 8-bit histogram. This histogram reflects contents of the final, processed image.

INTERACTIVE 2.2 Histograms



IV.What is tone mapping?

The process of tone mapping consists of (1) choosing the central exposure level, then (2) bringing back shadows and highlights to the visible levels in the image, and eventually (3) applying some more specific image adjustments.

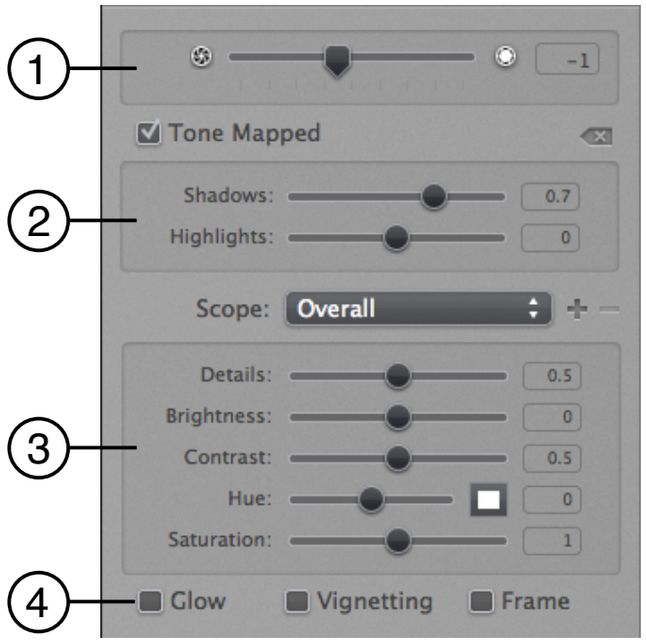
(1) The overall exposure slider lets you walk through light levels. It is a bit like choosing the best shot (EV) that represents the scene, but, in this case, you are not limited to the actual input pictures: you can choose any intermediate value in a continuous fashion. Pick a value that best represents the mean luminosity level of what you want to show.

(2) After adjusting the central exposure, lowlights and highlights may remain respectively black and burned. The Shadows and Highlights sliders allow to bring back levels that are outside of the range into the visible range.

(3) A number of other adjustments are available. These allow to fine-tune the tone mapped image appearance. Furthermore, these final adjustments can be made selectively for specific scopes, like increasing contrast in the blue tones. The Details slider allows to push (or pull) local contrasts like edges or creases. Brightness and Contrast adjustments are also available. Hue allows to change the tint (blue to red, for instance). All these settings can be applied overall or for the following specific scopes: Highlights, Shadows, Red, Green, or Blue Tones. You can increase details selectively in the shadows areas for instance.

(4) Glow, Vignetting, and Frame are further artistic effects. Glow adds halo around bright objects. Vignetting simulates darker corners that are typically caused by the optical system. Frame adds a white border around the image.

IMAGE 2.6 Tone Mapping Settings



1. Choosing the Central Exposure Level
2. Making Shadows and Highlights visible
3. Applying Image Adjustments
4. Artistic Effects

Section 3

Batch Processing

In a Nutshell

1. Hydra Pro has a special feature for batch processing HDR images. Useful for HDR lovers!
2. Imported shots are automatically sorted in photo sets. If sorting is mistaken, you can remove a picture, split or merge a set.
3. Batch processing doesn't mean random processing: settings can be customized for each photo set. You can choose the tone mapping preset, the image format and location, if pictures should be aligned, if ghost effects should be removed... Efficiency guaranteed!

Hydra Pro includes a batch processing feature made specially for HDR experts. You can automate the HDR process for rendering several HDR images in a few minutes.

1.Click «File» in Hydra's menu and choose «Batch Processing...». A new window opens.

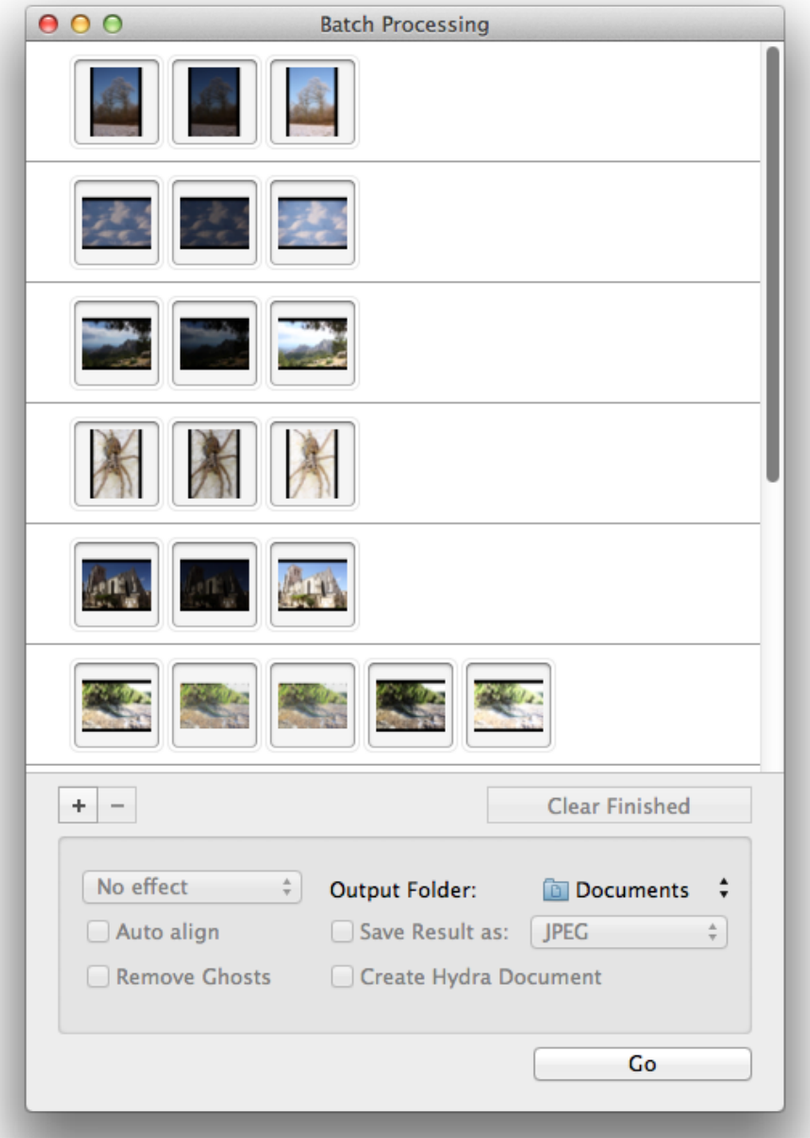


Image 2.7 Batch Processing Window

2.You can import your pictures or picture folders in 2 ways:

- drag them from the Finder or Desktop, and drop them in the «Batch Processing» window
- select them using the «+» button.

3.Hydra analyzes the EXIF data from all pictures in order to sort them in sets. Sorting relies on picture dates and camera model.

4.If a picture or picture set wasn't meant to be included in batch processing, you can correct this very easily:

- Remove a whole set of pictures: select the set using the mouse, and click the «-» button.
- Remove a single picture from a set: move the mouse over the picture, click the arrow which has just appeared, and select «Remove Photo» in the menu.

5.If sorting happens to be mistaken, you can fix this:

- by splitting a set: the selected picture (and the following picture(s) in the set if applicable) are removed from the original set, and are included in a new set.
- by merging a set with the previous set: all pictures in the selected set are automatically added to the previous photo set in the list.

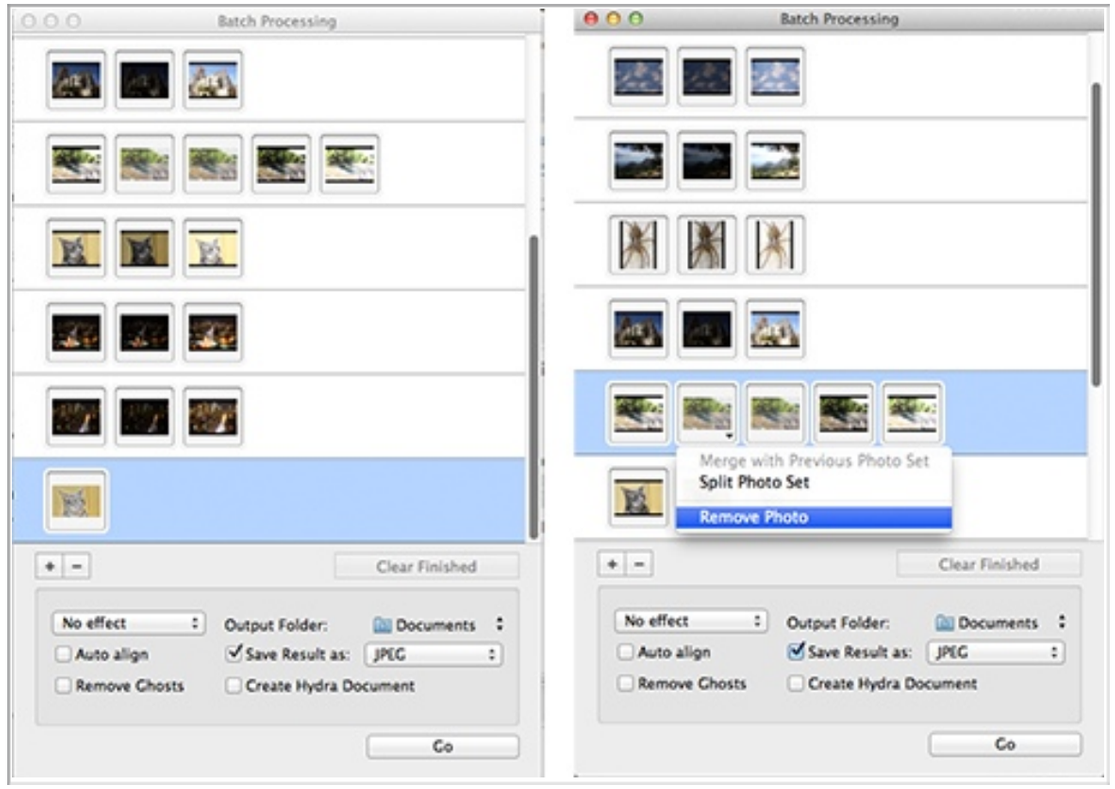


IMAGE 2.8 You can Delete Some Pictures if Need Be

6.For each set individually, you can choose several settings before launching batch processing:

- which preset to apply from the 12 presets available
- automatic image alignment
- automatic ghost removal
- the location where to save the HDR image on your Mac
- the HDR image format (JPEG, 8-bit TIFF, 16-bit TIFF, 32-bit OpenEXR)
- create a .hydradoc project for fine-tuning the settings (required if you want to access advanced settings). This way, you can post-process only the photo sets which actually require your intervention.

7.Click «Go» to start batch processing, and have a coffee break.

Hydra takes care of everything!

8.Hydra processes photo sets successively starting from the 1st one in the list. You can see the progress next to the miniatures:

shows Hydra is currently processing the set.

shows processing is over for the set.

9.If need be, you can interrupt batch processing by clicking the «Stop» button.

10.After a break, click «Clear Finished» for removing all already processed sets from the list. This will give you a better idea of what Hydra has left to do.

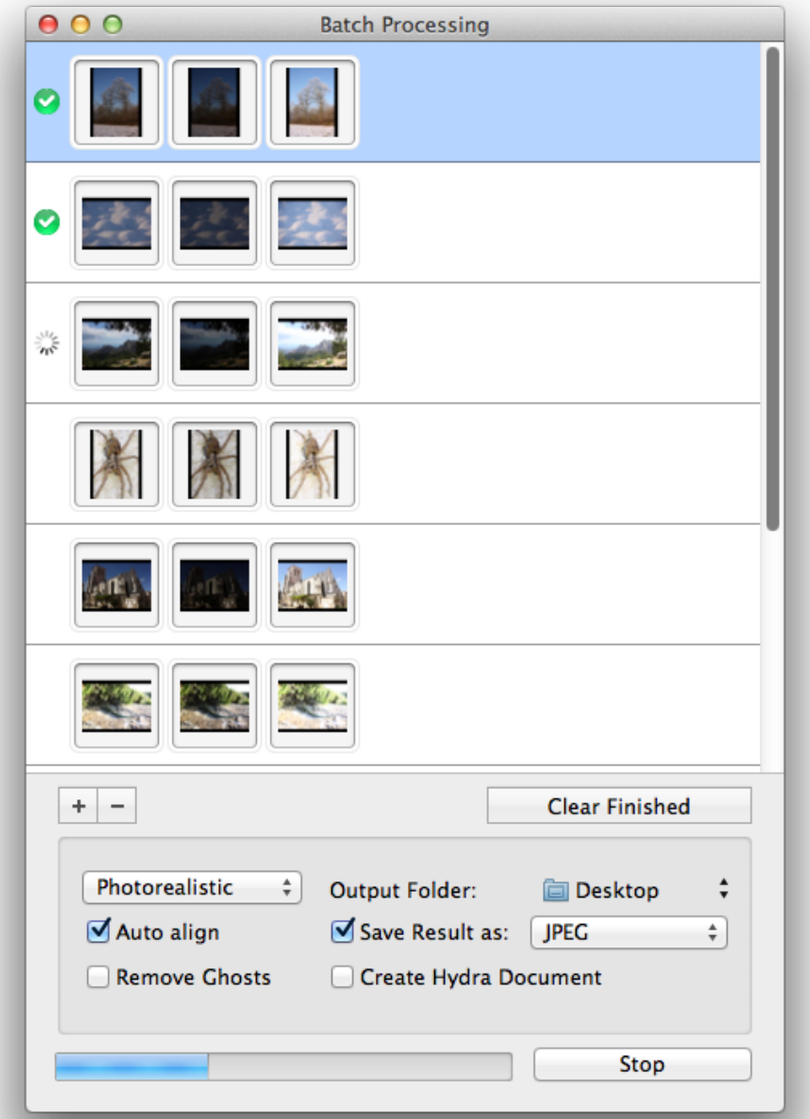


IMAGE 2.9 Choose Settings for Each Set

Chapter 3

Plug-ins

Do you use Apple's Aperture or Adobe's Lightroom for managing your picture collection? You can also create HDR images right within these dedicated applications: Hydra's smart plug-ins give you access to all the features of the stand-alone version.

© Zion National Park in Utah, Jim Kirk

SECTION 1

Plug-in for Aperture 3

IN A NUTSHELL

1. Hydra 3's plug-in is compatible with Aperture 3.
2. There must be a registered copy of the stand-alone version of Hydra 3 on your Mac in order to use the plug-in.
3. Features available in the plug-in are exactly the same as those in the stand-alone version. The HDR image processing pipeline too is exactly the same.
4. You can stack the HDR image with the originals.

I. Installing the plug-in

The Aperture plug-in is available for download as a .zip file from our website.

Once the download is complete, you can find the plug-in called «Hydra Plug-In for Aperture.pkg» in the Downloads folder.

Double-click the file to launch installation. Follow instructions carefully.

You can find Hydra's Aperture plug-in «HydraPlugIn.ApertureExport» at the following location on your Mac: Macintosh HD/Library/Application Support/Aperture/Plug-Ins/

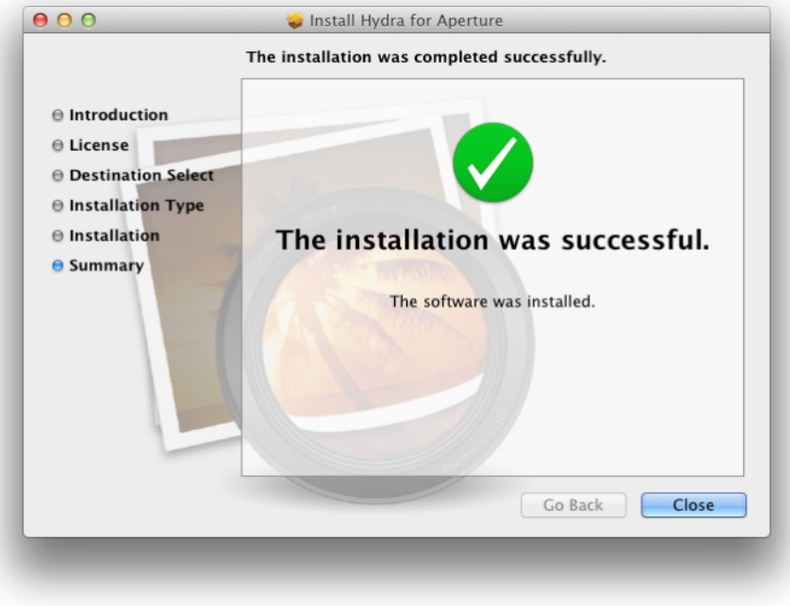


IMAGE 3.1 Plug-in Installation Window

II.Registering the plug-in

The plug-in itself don't need to be registered, but the stand-alone version of Hydra Express or Hydra Pro does.

- If you purchased Hydra through the Mac App Store, the application is automatically «registered» after installation.
- If you purchased Hydra through Creaceed's store or another website, you have to register your copy using an activation code.

Important notice! The Aperture plug-in only works if the stand-alone version of Hydra is installed on your Mac.

III.Launching the plug-in

Within Aperture, select the pictures to be used for rendering the HDR image. Right-click, select «Edit with Plug-in» in the menu, and then «Hydra HDR Processing...».

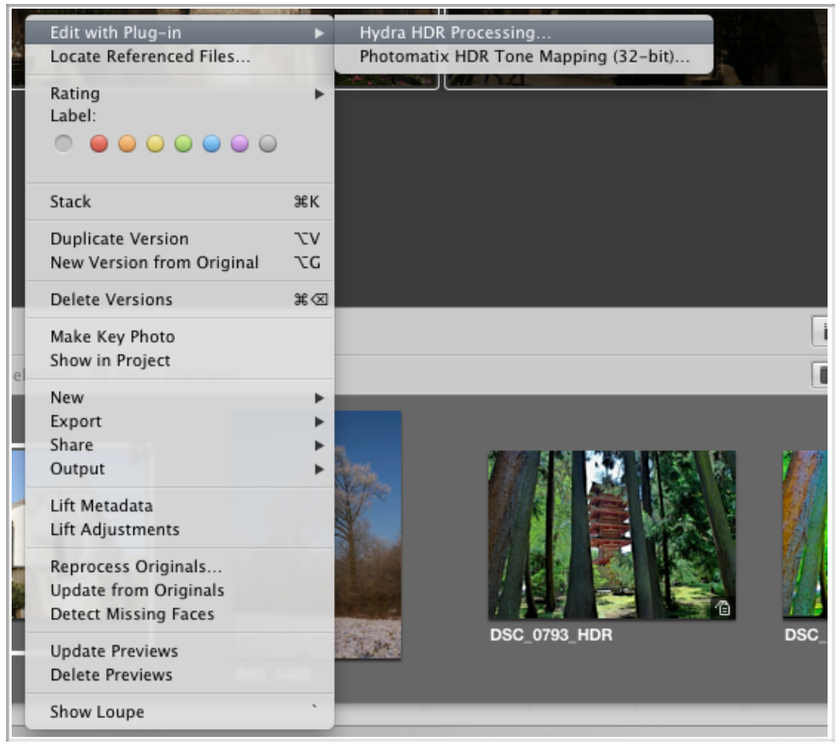


IMAGE 3.2 Launching the Plug-in

A window opens where you can choose:

- the format of the image to be rendered (JPEG, 8-bit TIFF or 16-bit TIFF)
- the tag to add to this image
- if you want to stack the HDR image with the input pictures.

It's the only place where you can make these choices. Click «Process» for entering the plug-in.

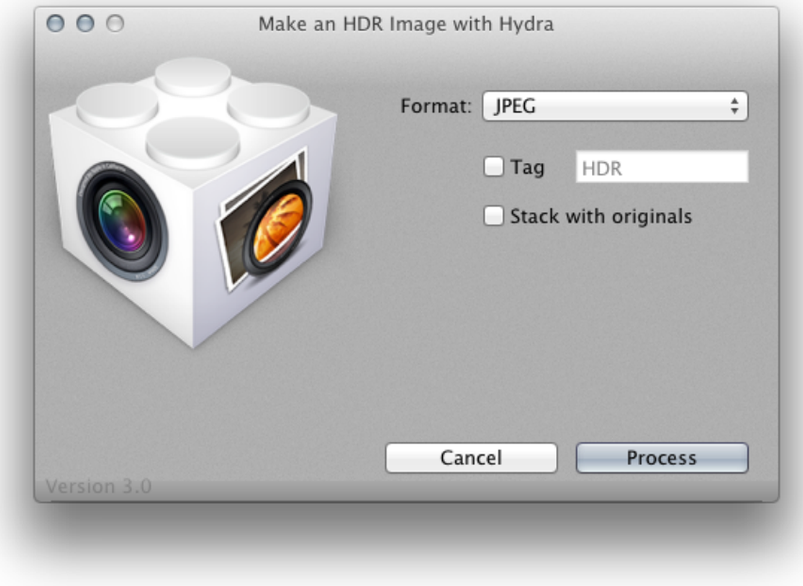


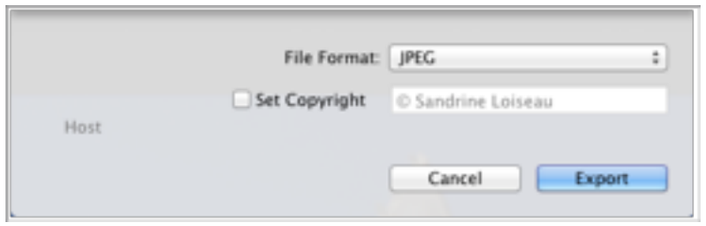
IMAGE 3.3 Aperture Import Window

IV.Rendering the HDR image

Please refer to the previous chapters for more information about the settings available in Hydra. The stand-alone version and the Aperture plug-in include exactly the same features.

V.Importing back into Aperture

When satisfied with the project, click  to import the HDR image back into Aperture.



If you want, you can add a copyright label. Click «Export».

Hydra automatically adds «_HDR» at the end of the reference picture name (i.e. the picture which is correctly exposed).

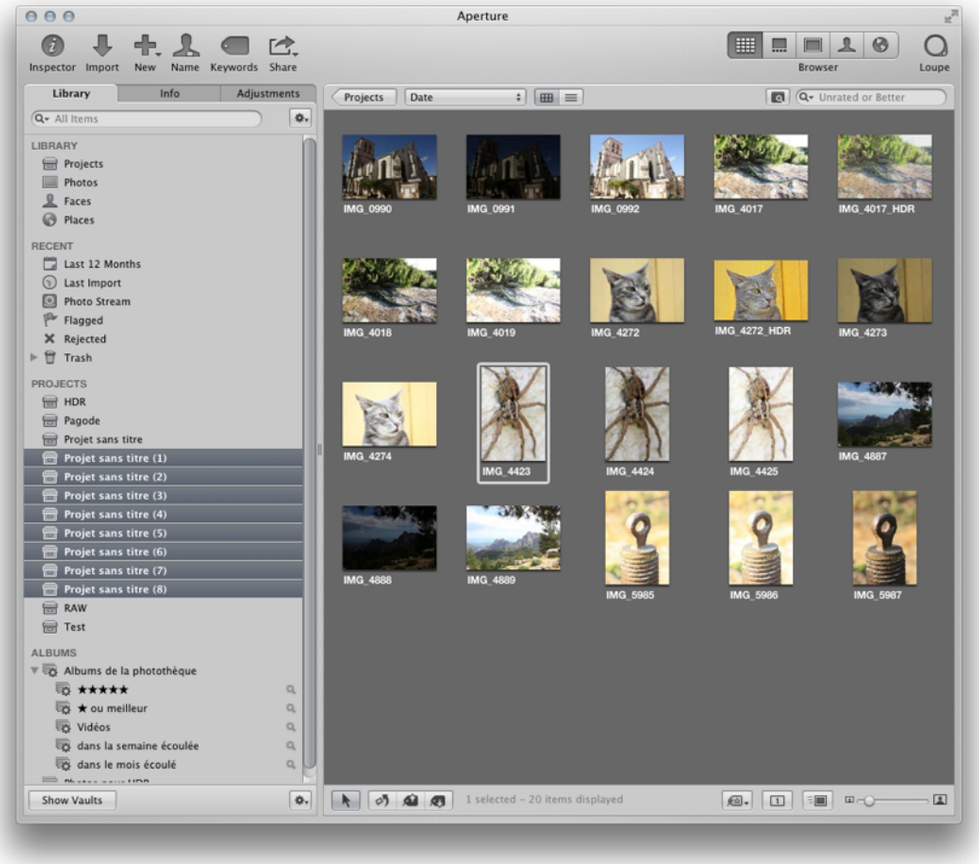


IMAGE 3.4 HDR Projet Library

Section 2

Plug-in for Lightroom 3

In a Nutshell

1. Hydra 3's plug-in is compatible with Lightroom 3.
2. There must be a registered copy of the stand-alone version of Hydra 3 on your Mac in order to use the plug-in.
3. Features available in the plug-in are exactly the same as those in the stand-alone version. The HDR image processing pipeline too is exactly the same.
4. You can stack the HDR image with the originals to make sorting photos easier.

I. Installing the plug-in

The Lightroom plug-in is available for download as a .zip file from our website.

Once the download is complete, you can find the plug-in called «Hydra Plug-In for Lightroom.pkg» in the Downloads folder.

Double-click the file to launch installation. Follow instructions carefully.

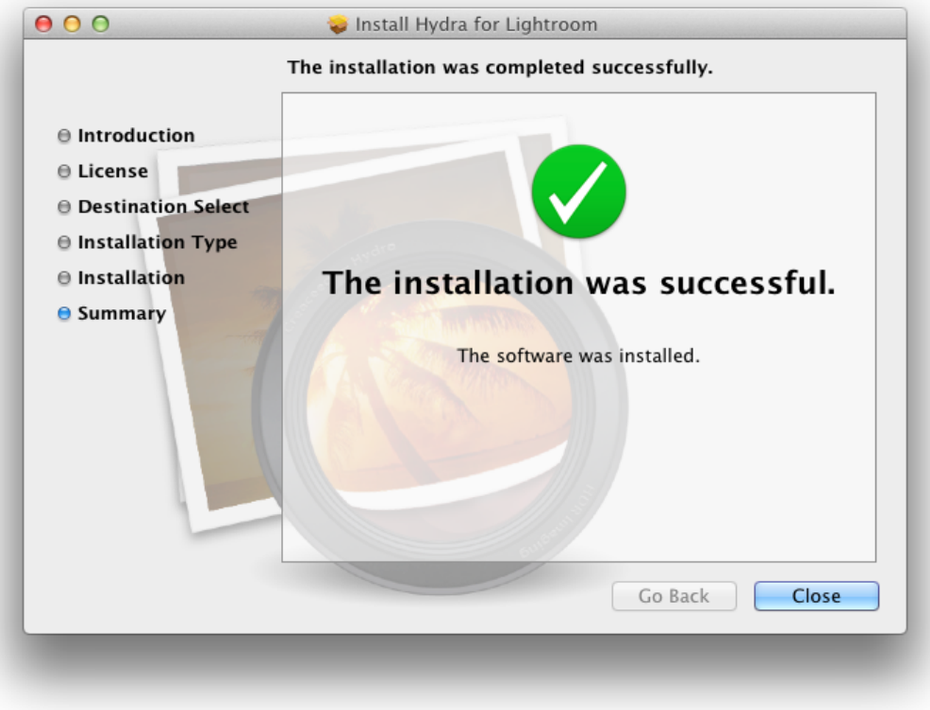


Image 3.5 Plug-in Installation Window

You can find Hydra's Lightroom plug-in «hydra.lrplugin» at the following location on your Mac: Macintosh HD/Library/Application Support/Adobe/Lightroom/Modules/

II.Registering the plug-in

The plug-in itself don't need to be registered, but the stand-alone version of Hydra Express or Hydra Pro does.

- If you purchased Hydra through the Mac App Store, the application is automatically «registered» after installation.
- If you purchased Hydra through Creaceed's store or another website, you have to register your copy using an activation code.

Important notice! The Lightroom plug-in only works if the stand-alone version of Hydra is installed on your Mac.

III.Launching the plug-in

Within Lightroom, select the pictures to be used for rendering the HDR image.

Click «Export...» in the bottom left corner of Lightroom's main window.

A window opens where you can choose several settings for Hydra:

- the format of the image to be rendered (JPEG, 8-bit TIFF or 16-bit TIFF)
- the location where you want to save the HDR image on your Mac (if at another location than the default one)
- if you want to import the HDR image back into Lightroom
- if you want to stack the HDR image with the input pictures.

It's the only place where you can make these choices. Click «Export» for entering the plug-in.

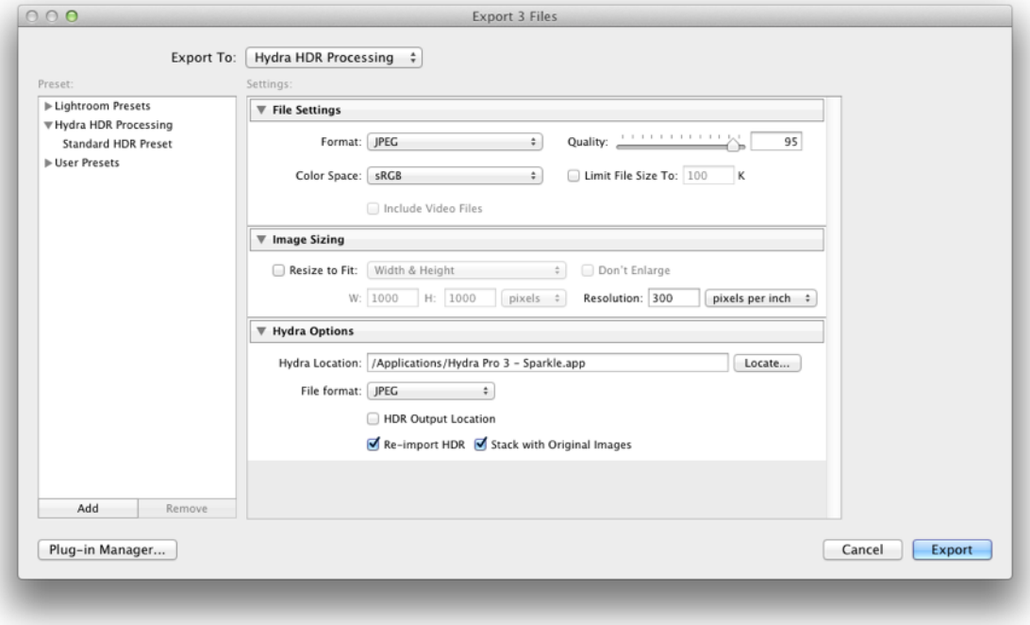


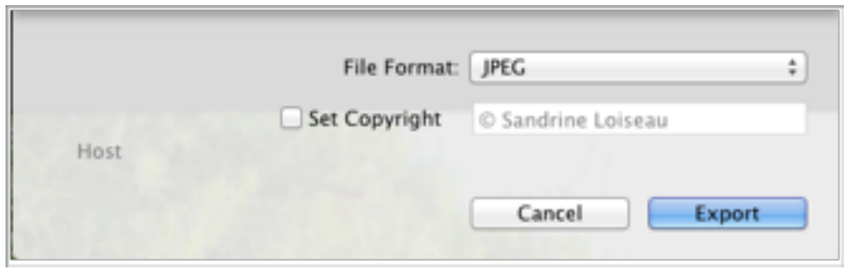
IMAGE 3.6 Lightroom Import Window

IV.Rendering the HDR image

Please refer to the previous chapters for more information about the settings available in Hydra. The stand-alone version and the Lightroom plug-in include exactly the same features.

V.Importing back into Lightroom

When satisfied with the project, click  to import the HDR image back into Lightroom.



If you want, you can add a copyright label. Click «Export».

Hydra automatically adds «_HDR» at the end of the input picture names.

IMAGE 3.7 Project with 3 originals and the HDR image

User Guide - Hydra 3

Responsible Editor: Sandrine Loiseau