



ON1 HDR 2020

From A to Z



The Official ON1 HDR 2020 User Guidebook

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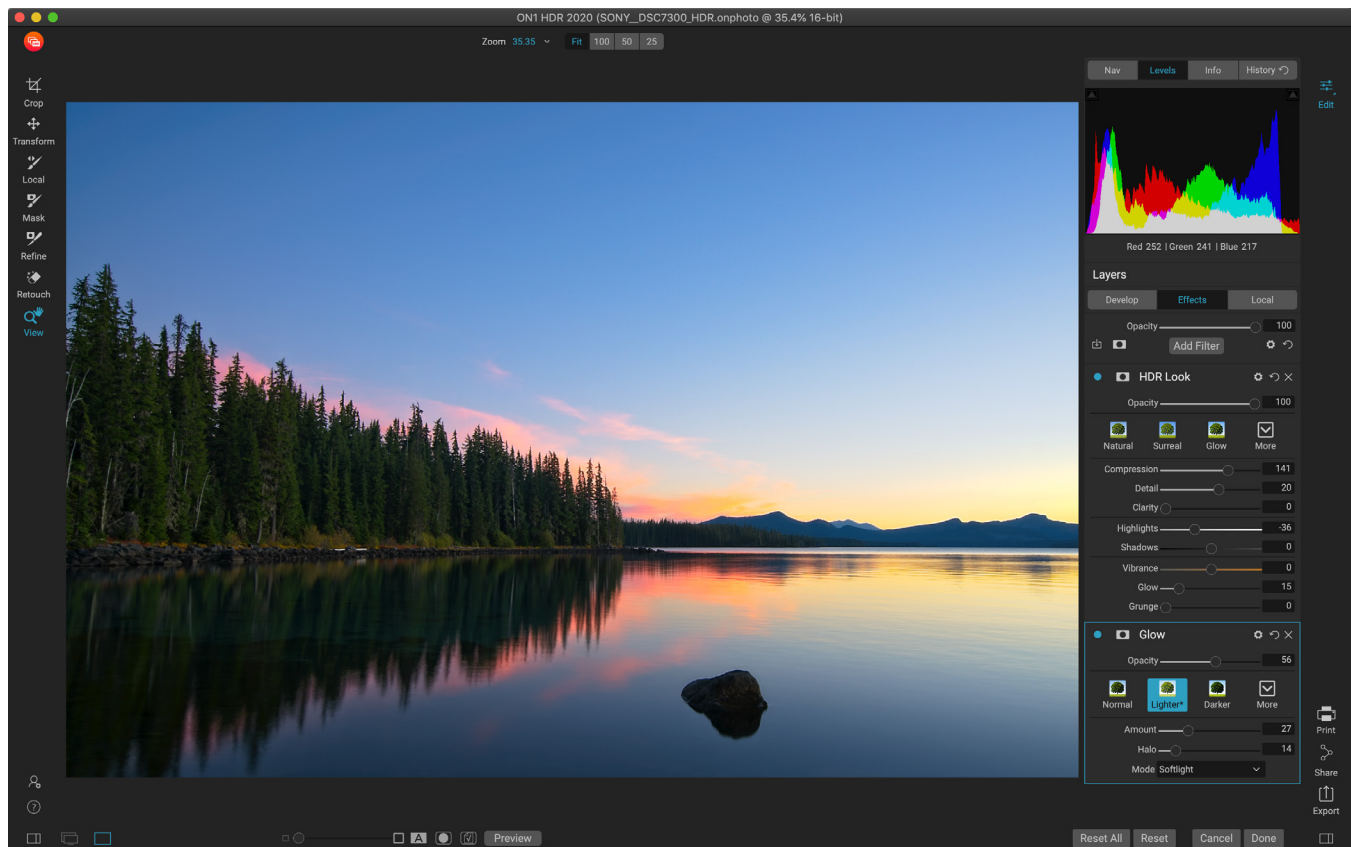
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PART 1: ON1 HDR 2020 OVERVIEW



ON1 HDR 2020 is a full-featured photo editor designed to create rich, detailed high-dynamic-range (HDR) images from two to 13 bracketed photos. With HDR 2020, you can take multiple shots of a scene, at varying exposure levels—accurately capturing shadows, midtones and highlights in different frames across the series—and then blend them together to create a final image that has a much wider tonal range than a single shot could do.

When using ON1 HDR 2020 as a standalone app, there are two primary components, one for the creation of an HDR image from a bracketed set of photos, and an editing module for finishing your photos. You can also use the batch-processing feature to create multiple HDR photos from a group of brackets taken at different times. To get started with a series of bracketed photos, see [“Creating HDR Images” on page 10](#).

The Edit module has three tabs—Develop, Effects, and Local—each with a specific area of functionality: Develop for basic tonal editing, Effects for stylization, and Local for targeted editing of specific areas in your images. Information on using the Edit module starts on [page 14](#).

The Edit module also supports a layered workflow, letting you create perfectly blended composites from multiple images. You can use the Layers feature to fine tune your HDR photos even further. For more on Layers, see [page 69](#).

Once you’ve completed your finished HDR photos, you can print, export and share them directly from within ON1 HDR. See [page 76](#) for complete information on these features.

ON1 HDR also works as a plug-in for Adobe Lightroom Classic, giving you full access to all of the tools found in the standalone app.

Using the Help System

You can find and watch free video tutorials at the ON1 HDR 2020 Product Training site, available at ON1.com. This is the best and quickest way to dig into the ON1 workflow and discover new techniques that will help you with your photo editing and organizing. There, you can search our Knowledge Base for frequently asked questions, common issues and more.

The Help menu in ON1 HDR 2020 includes links to the training site, as well as our extensive library of video tutorials and more.

System Requirements

	MINIMUM	RECOMMENDED
OPERATING SYSTEM	macOS 10.12 through 10.15; Windows 7, 8 or 10 releases, 64-bit only	macOS 10.14 or 10.15; Windows 10 current releases, 64-bit only
PROCESSOR	Intel Core i5, Xeon or better processor	4-core Intel Core i5, Xeon or better processor
RAM	8 GB	16 GB
HARD DRIVE	1.5 GB for installation	1.5 GB for installation Fast (7200 RPM) or SSD drives
DISPLAY	OpenGL 3.3 compatible video card with 512 MB video RAM, 1280x720 resolution	OpenGL 4.2 compatible video card with 2 GB dedicated video RAM, 1920x1080 resolution
THIRD-PARTY APPS SUPPORTED (PLUG-IN)	Lightroom Classic 6	Lightroom Classic CC
OTHER	Internet connection for activation and auto update checking.	Internet connection for activation and auto update checking; Wacom tablet for pressure-sensitive input; hardware display calibration tool

Installation

To install ON1 HDR 2020, double-click the installer icon and allow the installer to guide you. If you wish to use ON1 HDR as a plug-on for Adobe Lightroom Classic, make sure you close any open installations before installing or updating.

MACOS

The application is installed in the ON1 HDR 2020 folder in the Applications folder. Plug-in files for Lightroom Classic found during the installation process will be installed automatically.

Support files are installed into /Library/Application Support/ and ~/Library/Application Support/ folders.

WINDOWS

The application is installed in the ON1 HDR 2020 folder in the \Program Files\ON1\ directory. Plug-in files for Lightroom Classic will be installed automatically; if found, it will be noted in the summary displayed at the end of installation.

Support files are installed into \ProgramData\ON1\.

Launching ON1 HDR 2020

To launch HDR 2020 as a standalone app, with access to all modules, follow these steps:

MACOS

1. Open your Finder.
2. Navigate to the Applications folder.
3. Navigate to the ON1 HDR 2020 folder.
4. Double-click on the ON1 HDR 2020 application icon.

You can add ON1 HDR 2020 to your dock for easy access by clicking and holding the icon in the dock and selecting the Keep In Dock option. If you use Launchpad it can be found there as well.

WINDOWS 7

1. Go to your Start Menu.
2. Select the ON1 group.
3. Select ON1 HDR 2020.
4. If you selected the “Add Icon to Desktop” option during installation you can also access ON1 HDR 2020 from there.

WINDOWS 8.1 AND WINDOWS 10

1. Open the Start screen by pressing the Window key.
2. Select ON1 HDR 2020.
3. If you selected the “Add Icon to Desktop” option during installation you can also access ON1 HDR 2020 from there.

NOTE: For information about running ON1 HDR 2020 as a plug-in to Adobe Lightroom, see [page 6](#).

Licensing and Registration

When you first launch ON1 HDR 2020, the upper left side of the main window will have two buttons, Buy Now and Sign-In.

IF YOU HAVE PURCHASED ON1 HDR 2020:

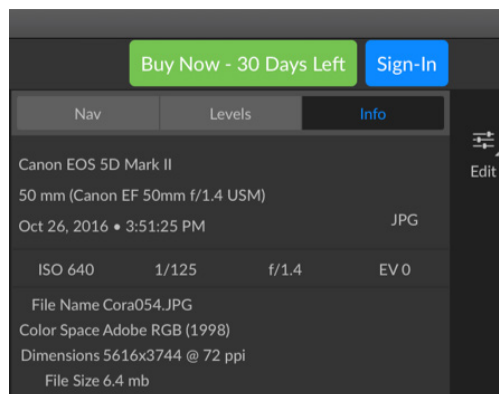
Click on the “Sign-in” button and fill in your ON1 account information (email and password) to register the app with us. (You should have set up an account when you purchased the software.) If the computer you are signing in with does not have access to the internet, you can manually register your software by clicking on the “No Internet connection” link in the license dialog.

Your license lets you install ON1 HDR 2020 on five computers. When you enter your ON1 account info, the app communicates with the ON1 activation server and registers your software for that computer.

If you wish to move your copy of HDR from one registered computer to a new one, and you are not going to be using the older machine, it is best to sign out of the old computer first. Open HDR and select Sign Out from the Help menu. This will deactivate HDR 2020 on the current machine, and you can install and sign in on another machine.

You can log into your ON1 user account area (<https://www.on1.com/login/>) at any time to download the software, see the number of computers you have registered, and make basic changes to your account information, including your email address, password, and notifications.

If you have issues related to installing or activating HDR, please contact ON1 customer support, which can be reached by clicking on the ON1 website's Support tab (<https://on1help.zendesk.com>).



When you first launch ON1 HDR, sign in with your ON1 User ID (which you set up when you purchased the software) If you downloaded the app to try out, you can see how many days are left in your free trial.

TRIAL VERSION

ON1 HDR 2020 can also operate as a fully featured trial version for 30 days from when you first launch it. This gives you time to evaluate the product and see if it fits your needs. Each time you launch HDR during the trial period, the Buy Now button will tell you how many days remain in the trial.

You can purchase ON1 HDR 2020 at any time by clicking on the Buy Now button. Once you do that, click the Sign-In button the next time you launch the product and enter your ON1 account information. If your trial period has ended, HDR will present you with an activation window when you launch the app. There, you can enter your ON1 account info to activate the app.

PRODUCT IMPROVEMENT PROGRAM

We believe that the best products are made by listening to our customers. We use many methods to gather your ideas and feedback including: emails, surveys, direct conversations, market analysis and the Product Improvement Program. The Product Improvement Program is built into our software and gathers

information about how our software is used. It is the most accurate way for us learn what features are important to you and how our products fit into your workflow.

Enrollment in the program is voluntary. When you participate, we collect basic information about how you use our programs and basic information about your computer. This information helps us learn what features are important to you and how we can make our software easier to use. No personal information is collected and you will not be contacted.

You can choose to participate in the Product Improvement Program the first time you launch ON1 HDR 2020. You can change your participation later, just click the Help menu, then Help Improve ON1 Products.

To learn more about the Product Improvement Program, go to the Support area of the ON1.com website.

Uninstalling ON1 HDR 2020

To uninstall ON1 HDR 2020, follow these instructions:

First, deactivate your product: open ON1 HDR 2020 and select Sign Out... from the Help menu. (This will allow you to transfer your license to another computer.)

MACOS

1. Go to the Applications/ON1 HDR 2020/Documentation folder.
2. Double-click on the Remove ON1 HDR 2020 application.

WINDOWS

1. Go to Control Panels.
2. Under Programs select Uninstall a program.
3. In the list that comes up select ON1 HDR 2020 and then click on the Uninstall button.

Working with Files

ON1 HDR 2020 can view and open the following file types, in RGB color, at either 8 or 16 bits per pixel:

- Raw files from most major camera manufacturers (file extension varies by manufacturer)
- Digital Negative (DNG)
- Photoshop (PSD)
- Photoshop Large Document (PSB)
- Tagged Image File Format (TIFF)
- Joint Photographic Experts Group (JPEG)
- Portable Network Graphic (PNG)
- High Efficiency Image Format (HEIC)
- ON1 Photo format (ONPHOTO)

When you are finished editing your photo in ON1 HDR, the app will save your merged image as a master .onphoto file, which you can use to re-edit it at any time. You will also be prompted to save your version in PSD, PSB, TIFF, JPEG, or PNG format.

Using ON1 HDR with Adobe® Lightroom® Classic

While it is designed to be a fully standalone app, ON1 HDR 2020 can also be accessed from within Lightroom Classic CC, providing an integrated, round-trip workflow for creating HDR images.

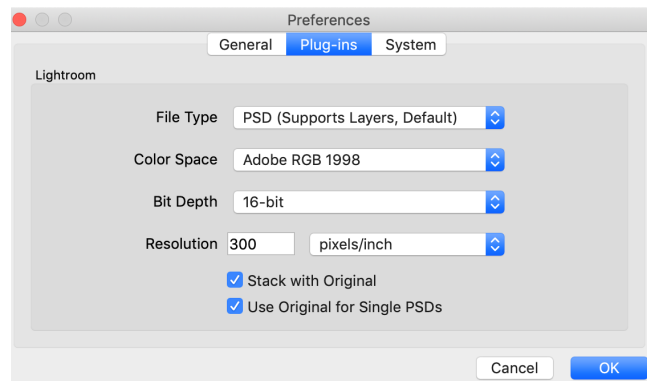
To send a set of bracketed files to Lightroom for HDR processing, select two or more photos in Lightroom's Library module, and choose Merge with HDR Standalone 2020 from the File > Plug-in Extras menu.



The Plug-In Extras submenu is found in Lightroom Classic's File menu.

When you access ON1 HDR 2020 through the Plug-In Extras menu there are important file-handling options that are controlled in the Plug-ins tab of the HDR Preferences window. These need to be configured in advance, based on your desired workflow. Once these have been set, all images sent to HDR 2020 via the Plug-In Extras submenu will use these characteristics:

- **File Type:** The file type drop-down menu determines what type of file will be created. The default is PSD, which maintains layers. You can also select JPG or TIFF, if you prefer those formats.
- **Color Space:** The color space drop-down menu determines what RGB working color space is used; Adobe RGB 1998, sRGB or ProPhoto RGB.
- **Bit Depth:** The bit-depth drop-down menu determines the bit depth, either 8 or 16 bits per pixel.
- **Resolution:** The resolution drop-down menu determines the resolution of the file.



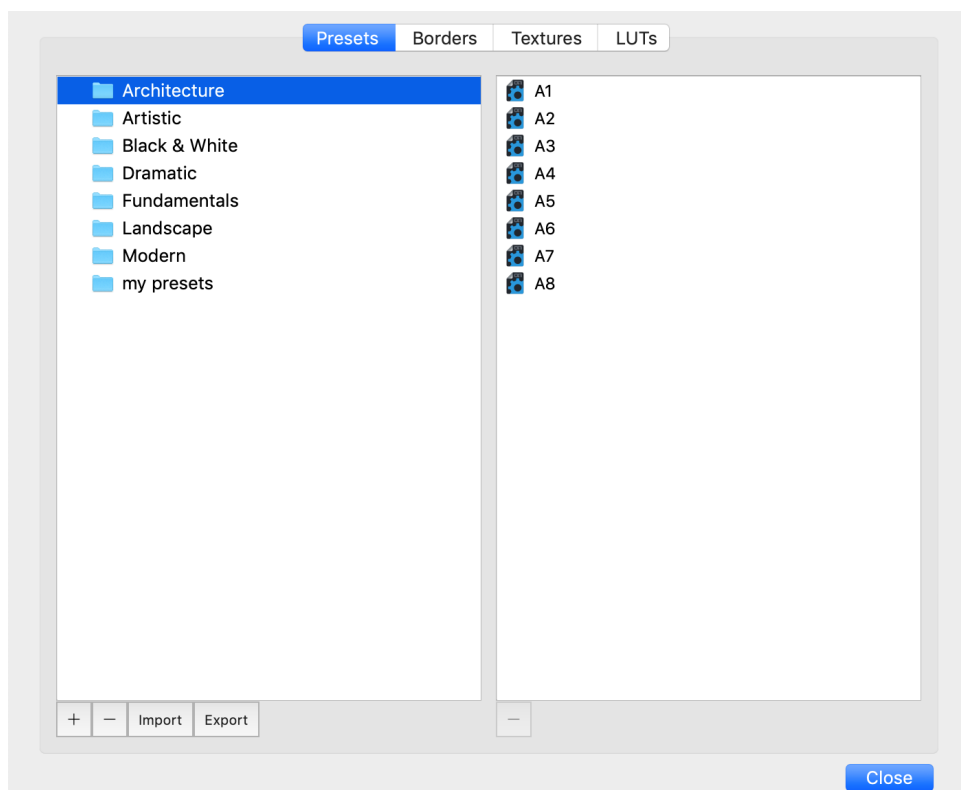
NOTE: If you use ON1 HDR 2020 as a plug-in from Lightroom, we recommend using the Photoshop format (.PSD) as the exchange file format for maximum compatibility.

Extras

ON1 HDR 2020 supports a number of additional file types that can be used in the Edit module. These files are called Extras, and the file types include:

- Presets for use within the Edit module.
- Borders that can be imported and used in Layers.
- Textures that can be imported and used in Layers.
- Look-up tables (LUTs) for use with Effects' LUTs filter.

ON1 includes a number of extras in the product when you install HDR, and you can create your own, or add extras downloaded from the ON1 website. You can use the Extras Manager to import and manage your own extras, creating categories for each type, and deleting extras that you no longer want.



The Extras Manager lets you import presets, textures, backgrounds, borders, and look-up tables (LUTs) for use with the different modules in ON1 HDR 2020.

HOW TO IMPORT EXTRAS

To import extras, choose Manage Extras from the File menu, then follow these steps:

1. Select the type of extras you wish to import from the list of tabs at the top (Presets, Borders, Textures, LUTs) You can only import extras of one type at a time.
2. Click on the Import button in the footer of the left column. A dialog box will appear where you can select the files to import. If you want to import an entire folder, open the folder, select the first file, then shift-click on the last file. Click Import when your selection is complete.

3. Select a category for your extras to live in. This is where you will be able to find it inside of the ON1 HDR 2020. You can select from an existing category or create a new one.

When your extras have been imported you will see them in the Extras Manager in the category you selected, in the type of extra they belong to.

Organizing Presets

The Presets tab of the Extras Manager gives you additional options for working with large groups of presets inside Develop and Effects. When you are using the Presets tab, you'll see '+' and '-' buttons, which let you add or delete categories to the list of your presets.

You can also add subfolders to any of the Presets categories, which can help organize and manage large collections of presets. You can use drag-and-drop to move existing categories into another, or you can add a category subfolder to an existing category by clicking on the category and then clicking on the '+' button in the Extras Manager window. (When you are importing presets, HDR gives you the opportunity to add presets to any category folder or subfolder.)

In addition to the Import option, the Presets section of the Extras Manager will also let you export presets, for sharing with other users, or to save seldom used presets for archiving purposes. To export a complete category, click on the category in the list on the left side of the window and click on the Export button. This will export a folder that contains a single .ONpreset file, which includes all of the presets from that category. To export a single preset, click on the preset from the list and click on the Export button.

What Type of Images Can I Import as Extras?

Backgrounds and textures may be any image file that HDR can open, including JPEG, TIFF, raw or Photoshop files. Border files must have a large central area that is transparent, so only files that support transparency, such as PNG, can be imported as borders. LUTs can be in either .3DL or .CUBE format.

NOTE: If you download an .ONPreset or .ONP file (for use with Develop or Effects), you can simply double-click on it to install it. For more information, see the Presets section of this guide, starting on [page 35](#).

USING EXTRAS WITH LAYERS IN THE EDIT MODULE

You can view and add extras to any open document in the Edit module by adding a new layer. Just click Layer > Add Layer from the File menu to open up a file browser window on-screen, where you can choose installed extras or any file from your computer. For more on this, see [page 69](#).

HOW TO DELETE EXTRAS

You can remove imported extras using the Extras Manager. Follow these steps:

1. Open the Extras Manager in any module (File > Manage Extras).
2. Click on the extras type that contains the content you wish to remove. This will display

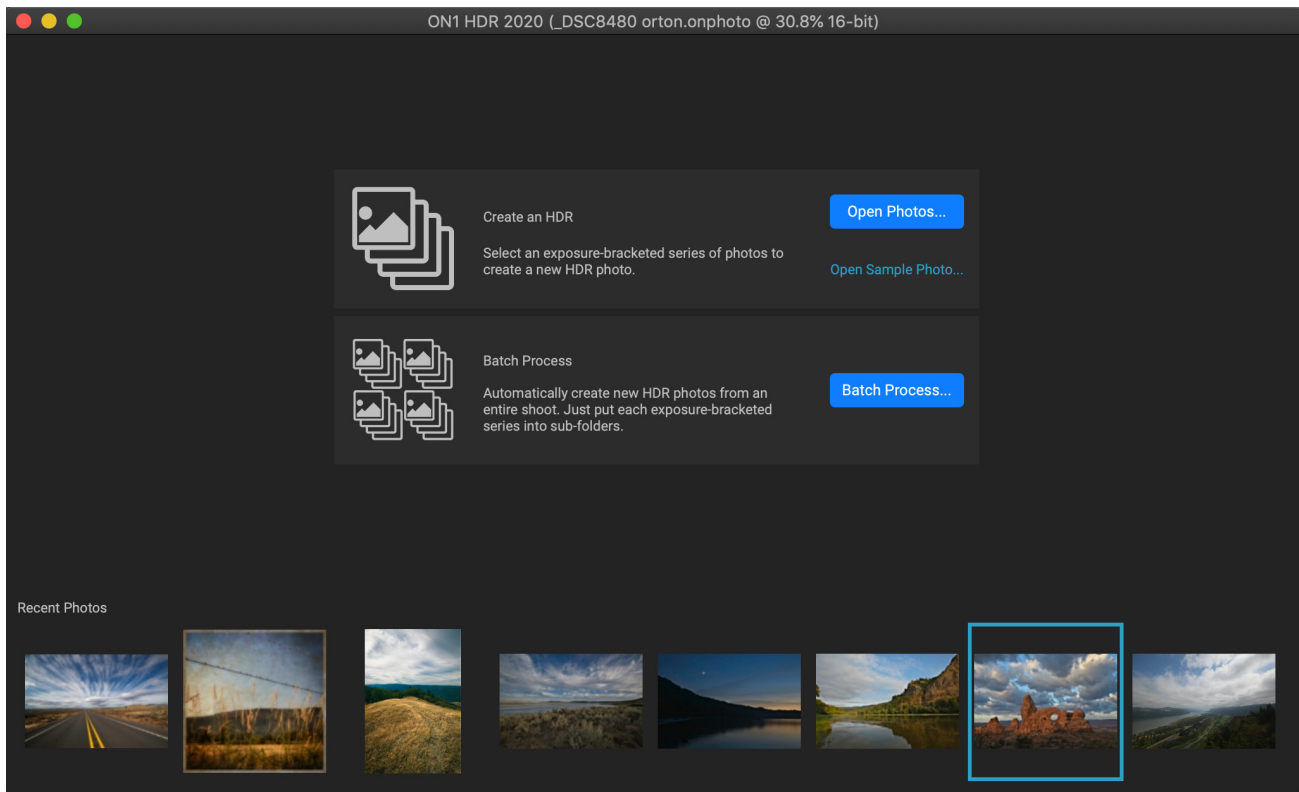
categories within that type.

3. To delete an entire category, select in the left column and click on the Delete button in the footer of the left column.
4. To delete individual extras, select them in the right column and click on the Delete ('-' in the Presets tab) button in the footer of the right column.

Deleting extras is permanent and cannot be undone.

PART 2: CREATING HDR IMAGES

When you first launch ON1 HDR 2020, the main window will have two buttons in the center of the screen: Open Photos, which lets you open a set of bracketed photos for processing, and Batch Process, which you can use to perform an HDR operation on a folder full of bracketed image sets.



NOTE: Once you have created HDR photos with ON1 HDR, the bottom of the main startup screen will display a filmstrip of your most recently generated images; double-clicking on one of those files will open the image in HDR's Edit module.

Creating a Single HDR photo

If you wish to create a single HDR photo from a bracketed series of files, click on the Open Photos button. Locate the set of images and select all of the items you wish to merge. To select a group of contiguous photos (ones next to each other in order), click on the first one you wish to select, then hold down the Shift key and click on the last photo. If you want to add noncontiguous photos (ones not next to each other), click on the first photo, then use the Command (Mac) or Control (Windows) key and click on each photo you wish to compare. When you have your selected photos, choose Open.

Once you've selected your bracketed set, the Create HDR window will open, giving you a simple set of controls for building your final HDR images.

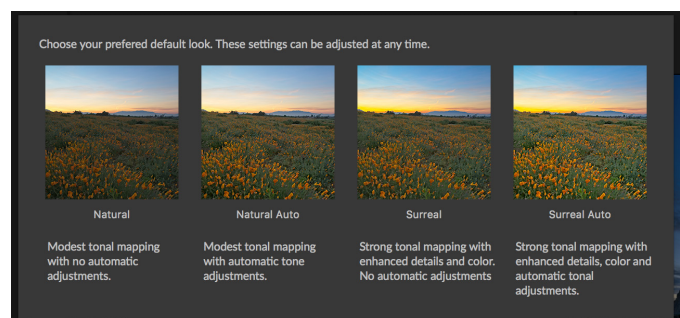
The Create HDR window has the following options:



- A. The **Preview** window displays a rendition of your merged HDR image (and is resizable).
- B. The **Options bar** has settings for adjusting ghosting, choosing a default look, and which module you wish the resultant image to open in.
- C. The **Reference panel** includes the images used to build the HDR, with their exposure values relative to the base image. The image with the outline is the base version used for deghosting; the base image for exposure is represented by the lens aperture icon next to the checkmark.
- D. **Save/Cancel buttons.**

Once the Create HDR window is open, you can use the various options to tune your image. You can adjust the base image: clicking on the different frames in the Reference panel will choose a different base image for deghosting; to select a different base exposure image, click on the small lens aperture icon in a different image of the series. (By default, HDR chooses the image it felt was closest to the middle of the series for both exposure and deghosting.)

The Default Look options are also designed to help get you started, corresponding to style options in the Tone and HDR Look panes in the Edit module. Natural and Surreal use those styles from the HDR Look pane, and the Natural



The four options in the Options Bar's Default Look popup correspond to settings found in the Tone and HDR Look panes in the Edit module. Once you've built your HDR file, you can go into the Edit module and edit any of the settings, add other filters and more.

Auto and Surreal Auto options also add the Auto Tone option from the Tone & Color pane. They are only designed to be a starting point: You can override any of the options by adjusting the settings in the two editing panes.

The deghosting section of the Options bar has options to blend portions of the frame that might have shifted during the image series (things such as clouds, flowing water or moving branches). Depending upon the amount of ghosting, you can choose from four levels of deghosting (or none). If you wish to see those areas in your image that will need deghosting applied to them, click the Show Ghosting button. Those areas that have ghosting issues will be shown with a red overlay. Depending upon how much movement there was in your scene, you can then choose the appropriate level of deghosting, or, in some instances, cancel and choose a different set of images to blend into an HDR.



With the Show Ghosting option turned on, areas that have ghosting issues will be shown with a red overlay.

The Align button in the Options bar is on by default, which means that, during the HDR generation process, HDR will attempt to automatically align the images, based on their contents. Turn the Align button off when the alignment process results in a bad composite, or when you don't want HDR to align the images (when working with star photography, for example). With the Align feature off, HDR will use the selected base image for the HDR process.

Once you have your settings adjusted to the way you'd like them, you can click Save and ON1 HDR will build your HDR, saving it in the .onphoto file format (in the same folder as the original bracketed files) and opening it in the Edit module.

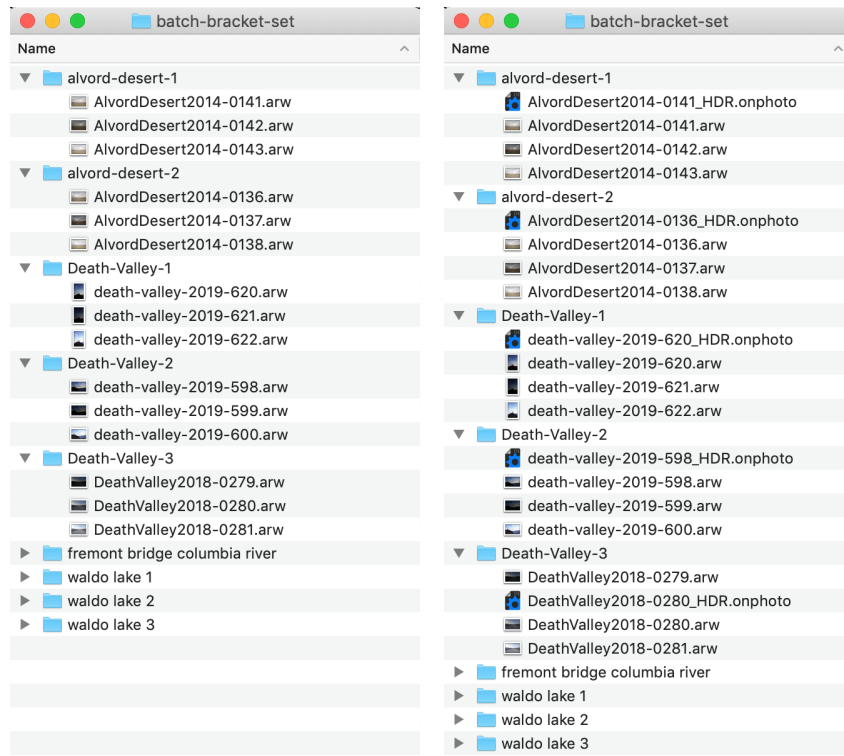
NOTE: The .onphoto format is proprietary to ON1, and saves your edits as you work, which means you can re-edit your HDR at a later time, and export a new file with your changes. If you decide that you wish to use a different HDR Look style, or want to add additional effects to your photo, open the .onphoto file in HDR and your previous edits will be present.

Using the Batch Processor to Build Multiple HDRs

The Batch Process option in ON1 HDR 2020 lets you take a folder containing multiple sets of bracketed shots from a shoot, and automatically turn them into HDR photos ready for editing. The process creates separate .onphoto files that can be opened directly in ON1 HDR via the Open Photos option.

To set up your shoot for batch processing, create a master folder, with subfolders that contain each individual bracket set inside them. Then, click the Batch Process button and select your master folder and choose Open. ON1 HDR will go through the subfolders, building each bracketed set using the default settings for the Create HDR window, and saving the merged HDR image as an .onphoto file in each subfolder.

After the batch operation is complete, you can open any of the merged HDRs via the Open Photos button in ON1 HDR, or by double-clicking the .onphoto file in Windows Explorer or the MacOS Finder. The photo will open in the Edit module, ready for further editing.



To set up your brackets for batch processing in ON1 HDR, create a master folder, then add subfolders to it, creating each subfolder as an individual set of bracketed photos, as shown in the MacOS screenshot on the left side, above. When you run the Batch Process option, the app will go through each folder, and create an .onphoto file with the default Create HDR settings (see the screenshot above right). Double-clicking on the .onphoto file will open it in the Edit module, where you can further to refine or stylize your photo.

PART 3: EDIT MODULE BASICS

ON1 HDR 2020's photo-editing power is found in the Edit module, which consists of three distinct editing functions, separated into tabs:

- **Develop** is where you perform basic, global editing operations—adjusting tone and color, removing noise, sharpening and more.
- **Effects** is the stylization center of HDR, with nine filters—offering such operations as black and white conversion, HDR stylizing, dynamic contrast, glows, sharpening, curves and more—that can be stacked in any order, all with extensive blending and masking options.
- **Local Adjustments** are designed to apply targeted edits to parts of your photos, letting you perform traditional photo-editing tasks—like dodging and burning—with ease.

Switching between the different tabs in the Edit module is as simple as clicking on the appropriate tab. While you work on an image, all of your settings in each tab are saved while you edit.

HDR 2020's Edit module also includes a Layers pane, which lets you stack multiple images together to achieve sophisticated composites that aren't available in many standalone photo editors.

When using HDR as a plug-in from Lightroom Classic, you can still move from tab to tab in the Edit module (and use the Layers functionality), but your photos will not be re-editable once you leave HDR.

To help you save time and create the looks that you love best, ON1 HDR 2020 also includes a robust preset system that lets you save settings made in any of the editing tabs—including local adjustments and masks—for applying to other photos. Editing presets can be applied in the Edit module, and in Browse, and, like all other elements of HDR 2020, are re-editable. (Presets are discussed in detail starting on [page 35](#).)

ON1 HDR Edit Module Overview

Edit provides you with an easy-to-use workspace for editing your photos. Below is an overview of the main window sections of the Edit module:



- A. **Tool Well:** Tools for working within the Edit module.
- B. **Preferences/Help:** Shortcuts to app preferences and help; bottom icon opens and closes the Presets/Filters panel.
- C. **Preset panel:** List of all installed presets (by category). When working in the Effects tab, a Filters panel is visible as well.
- D. **Search:** Searches presets (and filters, when working in Effects) by name.
- E. **Preview Window:** Displays the current photo in detail view.
- F. **Preview option toggles:** Magnification slider for current image, compare (before/after) mode, show/hide mask, turn soft proofing and preview on or off.
- G. **Tool Options bar:** Options and settings for currently selected tool.
- H. **Photo Information pane:** Navigator, levels (histogram) and general photo information.
- I. **Layers pane:** Add, edit and manage layers here.
- J. **Edit tabs:** Tabs for accessing Develop, Effects and Local Adjustments. Clicking on a tab brings up the settings for that tab.
- K. **Reset bar:** Reset all (all Edit module settings), Reset (resets the current tab's settings), Sync settings with previously edited photo (when in Filmstrip view)

- L. **Output:** Shortcuts for printing, exporting and sharing the current photo. (Bottom icon opens and closes the right panel).

The left side of the window contains a Tool Well and a Presets pane (when using the Effects tab, you will also see a Filters tab alongside Presets).

The right side of the screen contains some photo informational panes at the top—Navigator, Levels/Histogram, Info and a History pane—the Layers panel, and tabs for the three editing areas inside Edit: Develop, Effects, and Local. Clicking on a tab will bring up the options and settings for that area.

ON1 HDR provides several ways to navigate and view your image in the Preview window:

- By default, your image is presented in Fit view, which displays the image within the preview area, and the Zoom tool is selected. Clicking on the image with the Zoom tool will zoom in to 100%, and the cursor will change to the Hand tool. You can move around your image by clicking and dragging in the preview area. Clicking once will take you back to Fit view.
- You can also zoom in and out via the View menu and the Navigator pane. The Navigator pane displays a bounding box around the area currently on-screen, and you can reposition what is displayed in the preview area by clicking and dragging the box around the pane. Clicking on one of the buttons at the bottom of the Navigator pane will automatically zoom to Fit, 100%, 50% or 25% views. (The buttons are visible in the Zoom tool's Options bar.)
- When the preview zoom is larger than the viewable area, holding down the spacebar will display the Hand tool if any editing tool is selected. Clicking and dragging while holding the spacebar will reposition your image at the current view level.

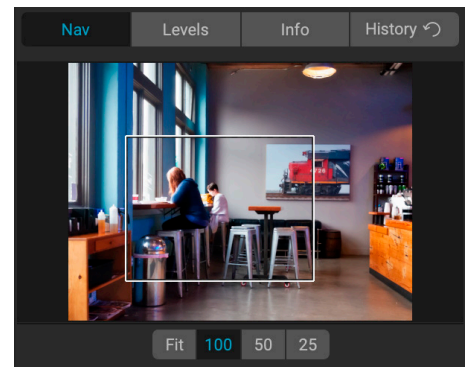
Navigator, Levels, Info and History Panes

At the top of the control panel on the right of the main window are the Navigator, Histogram, Info and History panes. These tools can be useful for inspecting and viewing details of your image, as well as for looking at all of the Edit module adjustments made during a session.

THE NAVIGATOR PANE

This gives you a thumbnail view of your image. The white square region marks the image area that is visible in the preview pane. You can pan your image by clicking and dragging inside the square.

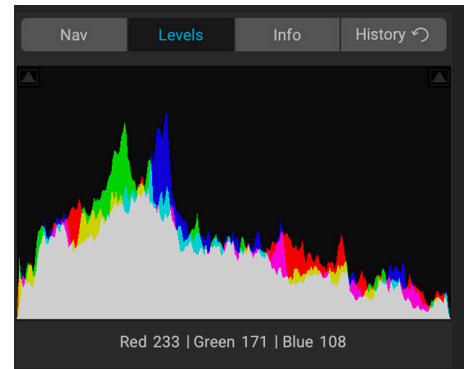
At the bottom of the Navigator pane are several zoom buttons representing percentage zoom views (100%, 50% and 25%). Click on one of the buttons to change the view. Fit zooms to fit the current canvas size, while 100 zooms to 100%, displaying the actual pixels.



THE LEVELS PANE

This gives you a color chart of the shadow, midtone and highlight areas based on the image RGB values (commonly known as a histogram). This is useful to show areas within the image that may be clipping. Clipping is when your image contains pure blacks or white and can signify loss of highlight or shadow detail.

The left side of the histogram represents the shadows, while the right represents the highlights. At the top of each end is a triangle. If the triangle is lit, there is clipping on that side of the histogram. If you click on the arrows, you will activate the clipping overlay on your image, which displays the areas that are clipped. Those areas with a blue overlay are pure black, while the areas with the red overlay are pure white. You can turn the clipping view off again by clicking on one of the triangles. You can also temporarily enable clipping view by holding down the J key at any time. The clipping view is useful when you are making adjusts to the brightness and contrast of your image. (See [page 43](#) for more information about using the clipping view.)

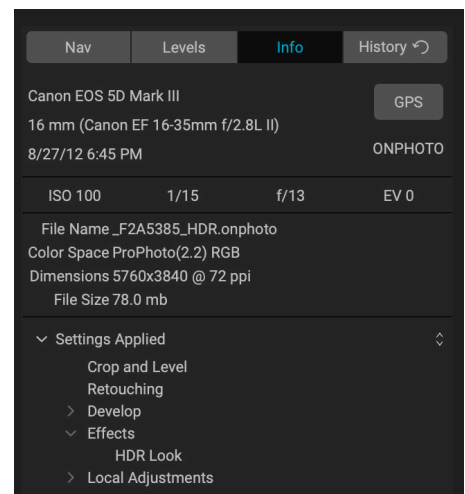


The Histogram pane also displays the RGB values under the cursor at the bottom of the pane.

THE INFO PANE

The Info pane displays metadata for the current image in an easy-to-read format. This metadata includes camera make and model; lens focal length; capture date and time; file type; GPS location data; ISO setting; shutter speed; aperture; and exposure compensation.

The Info pane also displays file-specific data, including name, color space, image dimensions and resolution. If any of the metadata fields are unavailable they will be left blank.



Settings Applied

At the bottom of the Info pane is a section that shows all of the operations from the Edit module that have been applied to the current image. Clicking on the right arrow to the left of the label will display a list of every tab in the Edit module, as well as primary adjustment options, including cropping, retouching and text operations. If an image has had any adjustments made to it, that section of the Settings Applied area will be represented in white type, and you can use the arrows to the left of the label to drill down further into the Develop, Effects and Local Adjustment tabs to see which adjustments were made to an image. (On an image that has had no adjustments, all of the settings will be grayed out.)

Double-clicking on any of the available items inside the Settings Applied area will take you to that specific setting inside the Edit module, where you can make any desired changes.

GPS Metadata

If your image has GPS metadata embedded in it, the GPS button will appear in the Info pane. Clicking on this button will open your default web browser to Google Maps to the location where the image was taken.

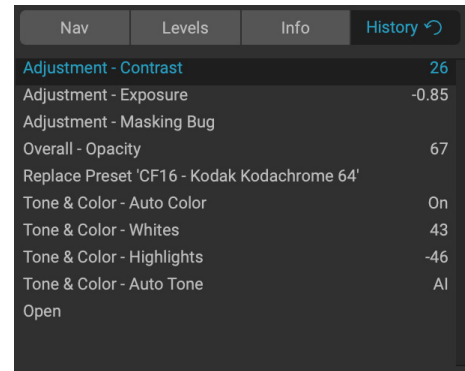
THE HISTORY PANE

ON1 HDR 2020 has a robust Undo capability, which is helpful when you wish to back up a few steps during the editing process. When you want to go back further, it can be tedious to keep pressing Command/Control-Z. That's where the history pane can be extremely useful. It displays every adjustment made during an editing session. From the History pane, you can scroll through your edits, all the way back to the state of your photo when you opened it for editing.

As you work, the History pane tracks all of your edits—even when working with layered files—adding each change you make to the top of the pane. History displays not only the adjustment, but in many cases will display the settings of sliders in the various panes and filters.

You can scroll through the list, and, if you click on an item, HDR will “roll back” your edits to the spot you clicked. You can click up and down in the list, and, as long as you don't make any changes, the entire Edit history is preserved. If you roll back to an edit and make a change, the History pane “resets” from that point on, losing any of the edits you made after the point you rolled back.

The History feature is designed to help you refine and understand the edits you made during an editing session; it not saved once you finish editing a photo.

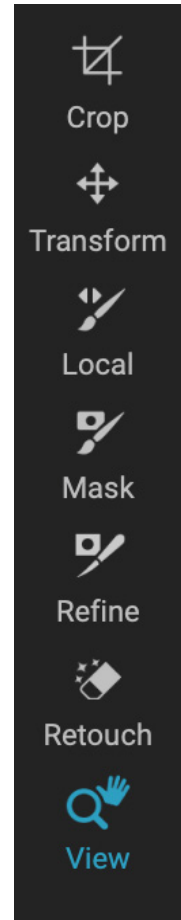


TIP: If you click on an item in the History pane, and you wish to step up or down in the adjustment history from that point, you can use the Undo/Redo commands to quickly go through the list. If you are happy with your edits, click back on the top item in the History pane to preserve the state of the photo.

The Tool Well

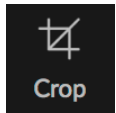
The Edit module has 14 tools available for you when you are working on a photo, and are accessible via the Tool well on the left side of the screen. Some tools—Transform (Move), Crop, and View—are self-contained within the tool icons. Others are nested within a tool group—Local, Mask, Refine, and Fix—and are accessible via the Tool Options bar at the top of the screen when you click on one of those tool icons:

- **Crop Tool:** Trims an image to your desired size or ratio. *Shortcut key: C*
- **Transform (Move) Tool:** Moves and changes the size and rotation of your layer. *Shortcut key: V*
- **Adjustment Brush (Local group):** Paints in or out local adjustments. *Shortcut key: K*
- **Adjustable Gradient (Local group):** Applies a selective gradient in local adjustment mode. *Shortcut key: Shift+K*
- **Masking Brush (Mask group):** Mask large similar areas quickly. (Includes Perfect Brush option.) *Shortcut key: B*
- **Masking Bug (Mask group):** Applies a selective gradient as a mask in any filter (or to the entire stack). *Shortcut key: M*
- **AI Quick Mask Tool (Mask group):** Create high-quality masks with only a few strokes as guidance. *Shortcut key: W*
- **Refine Brush (Refine group):** Lets you refine an existing mask's edges, to help mask difficult areas, such as hair. *Shortcut key: N*
- **Chisel Tool (Refine group):** Removes fringes from the edge of a mask. *Shortcut key: Shift-K*
- **Blur Tool (Refine group):** Blurs the edges of a masked area to help it blend more naturally. *Shortcut key: L*
- **Perfect Eraser (Retouch group):** Removes distractions like signs and power lines. *Shortcut key: Q*
- **Retouch Brush (Retouch group):** Removes blemishes like dust spots and acne. (Includes Perfect Brush option.) *Shortcut key: R*
- **Clone Stamp (Retouch group):** Paints over an area from a sample of another area. *Shortcut key: Shift-S*
- **View Tool:** Adjusts the magnification of the image in the Preview area, and lets you move around the Preview window. *Shortcut key: Z*



To access a tool, simply click on the tool, or use the shortcut key attached to the tool. When selected, the cursor will change, and you will see a set of options for the tool in the Tool Options bar above the Preview window. If the selected tool is part of a tool group, you will see the other tools in that group, on the left side of the Tool Options bar.

CROP TOOL



This tool lets you crop your image, and is fully non-destructive when you are using ON1 HDR 2020 as a standalone app.

To crop an image, select the Crop tool from the Tool well. Select any preset crop ratio you would like to use from the Options bar; the default is Freeform, which lets you crop in whatever size or ratio you would like. Adjust the corner handles of the crop tool overlay to get the area you wish. (The area outside the crop box appears darkened for guidance.) You can resize and move the image inside the crop box. When you are satisfied with your settings, press the Apply button in the Options bar or press Enter.

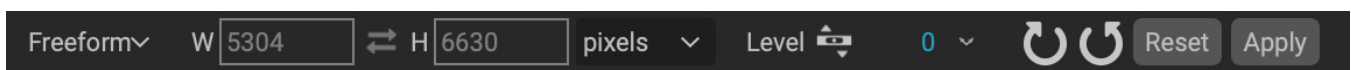
To move the image inside the crop box, simply click and drag inside the box. You can also nudge the image using the arrow keys on your keyboard. To resize the crop box, click and drag on any of the handles. Clicking on a corner handle allows you to adjust two sides at the same time; clicking on a side handle allows you to adjust that side. If you hold the Shift key down while adjusting the size, the box's proportions are maintained. To rotate the crop box, move outside a corner until the tool changes to rotate.

To straighten an image, you can use the Leveling Tool, which is found in the Tool Options bar when the Crop Tool is active. Click on it, and drag the tool across an element in your image that should be level.



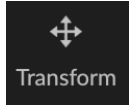
The Crop interface, with the Crop Preset pop-up open.

Crop Tool Options Bar:



- **Preset pop-up:** Lets you choose from Freeform or constrained preset ratios
- **Width:** Sets the width of the crop box.
- **Swap Dimensions:** Swaps the width and height. Handy for rotating the crop box.
- **Height:** Sets the height of the crop box.
- **Leveling Tool:** Click and drag this tool across an element in your image that should be level.
- **Angle:** See and adjust the angle of rotation.
- **Reset:** Resets the crop area to the size of your original photo.
- **Apply:** Applies the crop.

TRANSFORM (MOVE) TOOL



The Transform tool is used to manipulate the contents of a layer, and works even if the only layer you have is the base photo layer. A layer may be repositioned, sized or rotated using the Transform Tool. When the tool is selected, handles will appear on the edges of the selected layer. You use these handles to manipulate the image. When you are done, click the Apply button in the Tool Options bar.

The Transform tool is layer-dependent, and each document layer can have its own transform operations. It is useful when compositing photos, or applying backgrounds and textures in a multi-layered file.

Repositioning a Layer

To reposition a layer, simply click and drag inside the transform box. You can also use the keyboard arrow keys to nudge a layer one pixel in any direction.

Resizing a Layer

To resize a layer, click and drag on any of the transform handles. Clicking on a corner handle allows you to adjust two sides simultaneously. Clicking on a side handle allows you to adjust that side. If you hold the shift key down while adjusting the size, the proportions of the layer are maintained. If you hold down the Option (MacOS) or Alt (Windows) key while resizing, your image will resize from the center instead of from the edge. You can hold down Shift-Option (or Shift-Alt) to resize proportionally from the center.

You can type in the size you desire in the Tool Options bar (see below) in the width and height fields. You can also size a layer to fill the canvas automatically by pressing the Fill button in the Options Bar.

Rotating a Layer

To rotate a layer, move the Transform Tool just outside a corner transform handle. Notice that the tool cursor changes to a rotate cursor. Now click and drag to rotate the layer. You can also use the opt (alt) left and right arrow keys to rotate a layer when the transform tool is selected. To rotate the layer quickly in 90 degree increments, you can use the rotate left and rotate right buttons in the Tool Options bar.

Flipping a Layer

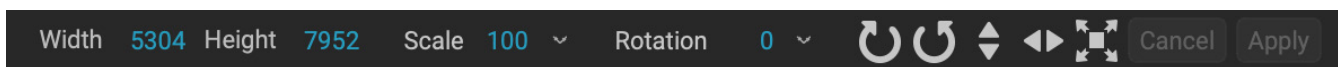
You can flip a layer either horizontally or vertically by pressing the flip buttons in the Tool Options bar.

When you have completed your transforms you need to commit the changes. You can do this by pressing the Apply button that appears in the Tool Options bar or by pressing the Enter key. You can cancel a transform by pressing the Cancel button in the Tool Options bar or by pressing the Escape key.

Restoring a Layer After a Move

The Reset All command inside the Edit module will not reset transforms made with the Move tool. To reset your layer to its original, non-transformed state, click the Move tool and adjust any rotation you might have made, as well as any flip operations. Then choose the Fit to Canvas button.

Transform Tool Options Bar



- **Width:** Changes the width of the layer, in pixels.
- **Height:** Changes the height of the layer, in pixels.
- **Scale:** Proportionally scales the layer, in percentage.
- **Rotation:** Rotates the layer, by degrees.
- **Rotate Left/Right buttons:** Rotates the layer 90° clockwise or counterclockwise.
- **Flip Horizontal/Vertical buttons:** Flips the horizontal or vertical axis.
- **Fill Canvas button:** Scales the layer contents to fit the document size.

ADJUSTMENT BRUSH (LOCAL GROUP)



The Adjustment Brush, which works within the Local Adjustments tab, works like a standard brush tool, with adjustable sizes, feathering and opacity. You can paint an adjustment in or out via the Mode pop-up in the Tool Options bar, and adjust the size and feathering of the brush via the bar or with the bracket keys on your keyboard. The Adjustment Brush is especially powerful when used with the Perfect Brush option, represented by its icon at the right of the Tool Options bar.

The Perfect Brush option incorporates a color-based, self-masking technology to help create precise selections and masks. When you turn the Perfect Brush option on, the Adjustment Brush collects the colors under the center of the brush and applies the effect only to those colors. This protects the adjustment from being applied across edges. A great example of using the Perfect Brush would be if you wanted to darken the sky in an image, but didn't want to darken a group of mountains on the horizon.

The Threshold slider will allow you to control the balance between keep and drop colors, based on the area you are working on. For example you may want the Perfect Brush to be very precise and only paint away very similar colors, other times you want it to paint away a broad range of colors in the same neighborhood.

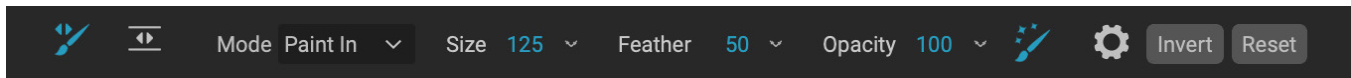
The Transition slider controls the feather of the Perfect Brush based on color. To create a soft edge, increase the transition. To create a harder edge you need to decrease the transition.



Perfect Brush options.

TIP: You can turn the Perfect Brush on and off using the Command-R keyboard shortcut (Control-R on Windows). You can also temporarily lock the color to remove by holding down the Control key (Windows) or the Command key (Mac). This is useful when brushing through areas with a lot of openings like tree branches.

Adjustment Brush Tool Options



- **Paint Mode:** The paint mode controls if you are painting out (hiding the effect) or painting in (restoring the effect). You can tell your current mode by looking at the plus or minus icon in the center of the brush. If the icon is minus, you are painting out, and if the icon is a plus, you are painting in. You can change the mode in the Tool Options bar, or by pressing the X key, or by holding down the Option (Mac) or Alt (Windows) key temporarily.
- **Brush Size:** You can control the size of the brush using the Size pop-up. Use a small brush at high magnification for precise work, and a large brush at fit to screen for general work. You can control the size of the brush several ways:
 - Use the Size pop-up in the Tool Options bar.
 - Use the left and right bracket keys: ' [' and '] ' .
 - Use your mouse's scroll wheel (this option can be set in ON1 HDR 2020's Preferences window).
 - Use your Wacom pressure-sensitive tablet.
- **Feather:** You control the amount of feathering—or hardness—of the brush by using the Feather pop-up in the Tool Options bar. The feather has a range from 1 to 100 percent. Use a small feather at high magnification for precise, hard-edged work and a large, soft-edged brush in Fit to screen mode for general work. You can visually see your feather by watching the outer concentric circle of the brush tool. In addition to the Feather pop-up, you can adjust the size of the feather by holding down the Shift key and pressing the right or left bracket keys on your keyboard.
- **Opacity:** You can control the opacity, or strength of the brush with the Opacity pop-up in the Tool Options bar. The opacity has a range from 1 to 100 percent. You use a high opacity to paint quickly and hide large areas. You use a lower opacity for blending areas together or for subtle work. You can control the size of the brush several ways:
 - Use the Opacity pop-up in the Tool Options bar.
 - Press the Option (Mac) or Alt (Windows) key on your keyboard and press one of the number keys. Each number represents an opacity percentage from 10% (1) to 90% (9); 0 represents no opacity.
 - Use your Wacom pressure-sensitive tablet.

TIP: Think of the opacity as the shade of gray you are painting onto your mask. While white in a mask represents 100% of an effect showing and black represents no effect showing, all opacity settings in between will show a percentage of the effect. This can be very useful when you wish to blend masks in a realistic manner.

- **Perfect Brush:** The Perfect Brush option incorporates a color-based, self-masking technology to help create precise selections and masks. When you turn the option on—by clicking on the Perfect Brush icon in the Tool Options bar—the Masking Brush collects the colors under the center of the brush and applies the effect only to those colors. This protects the adjustment from being applied across edges, such as tree branches. Further settings for the Perfect Brush can be found by clicking on the gear icon in the Tool Options bar. There, you can set the following options:

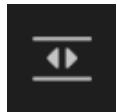
- **Color Threshold:** This option lets you control the balance between keep and drop colors, based on the area you are working on. For example, you may want the Perfect Brush to be very precise and only paint away very similar colors, while at other times you want it to paint away a broad range of colors in the same neighborhood.
- **Transition:** This slider controls the feather of the Perfect Brush based on color. To create a soft edge, increase the transition. To create a harder edge, decrease the transition amount.

Wacom Support

ON1 Photo supports pressure-sensitive tablets from Wacom with the Adjustment Brush. When you use the Masking Brush you can enable pressure sensitive controls for the brush size, brush opacity, or both simultaneously. To turn this support on, click on the gear icon in the Tool Options bar. You can activate pressure sensitivity for both size and opacity by clicking the appropriate buttons in the drop-down menu.

Detailed information on using Local Adjustments in ON1 HDR 2020 starts on [page 65](#).

ADJUSTABLE GRADIENT TOOL (LOCAL GROUP)

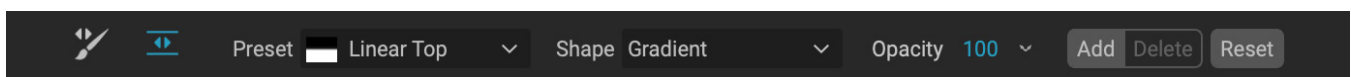


The Gradient Adjustment tool is very similar to the Masking Bug, but it is solely for use within the Local Adjustments tab. It lets you create a linear or radial gradient mask across part of your image. The gradient mask goes from dark to light in tone, applying more of the adjustment where the gradient is lighter, and less of the adjustment where the gradient's tone is dark. The most common use of gradient masks is to darken the sky in an image, while preserving the brightness of the foreground, similar to using a gradient filter on your camera lens.

To apply a standard gradient to a local adjustment, click on the tool, then click in the image roughly where you wish the effect to be. You'll see the outline of the gradient, which is called a bug. You can use the handles on the bug to move your gradient, increase or decrease the length of the gradient, or rotate it.

You can change the gradient shape via the Tool Options bar: in addition to the standard dark-to-light horizontal gradient, you can also create a circular gradient and a reflected gradient, which is like the horizontal gradient, but goes from black (no effect) at the outer edges to white (full effect) in the center.

Adjustable Gradient Tool Options Bar:



- **Preset:** The preset pop-up includes several common ways to use the Gradient Adjustment tool (top down, bottom up, left and right, and circular vignettes), and changes the current bug (if there is one) to match the preset.

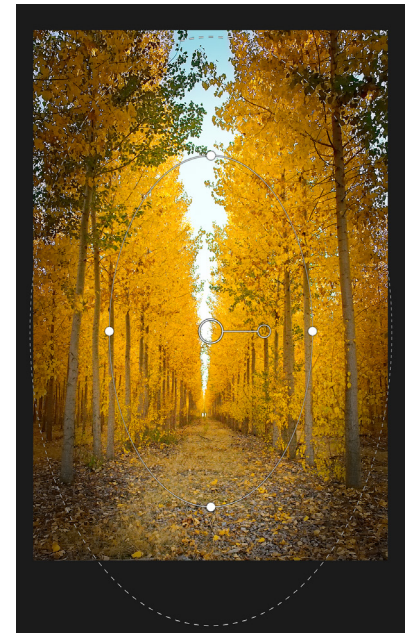
- **Shape:** The shape pop-up controls the shape of the bug. In addition to the standard Gradient and the Reflected Gradient, there are two radial shapes: Center, which puts the light tones at the center and the dark tones on the outside of the mask, and Edges, which sets the gradient in the opposite direction.
- **Opacity:** Sets the maximum opacity or density of the mask.
- **Add:** Adds a new gradient using the current settings.
- **Delete:** Deletes the current gradient.
- **Reset:** Resets the mask on the layer completely. This removes all gradients and clears any brushing that has been done.

Manipulating Gradient Masks

Once you've added a gradient to an image, you can modify it by accessing the parts of the gradient overlay:

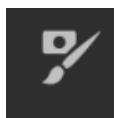
- To move a gradient, click on the big circle at the center of the gradient and drag.
- To resize a radial gradient, click and drag on the solid line.
- To adjust the feather (hardness) of the mask, click and drag along the dashed line.
- To rotate the mask, click the smaller circle near the gradient center and drag.

Detailed information on using Local Adjustments in ON1 HDR 2020 starts on [page 65](#).



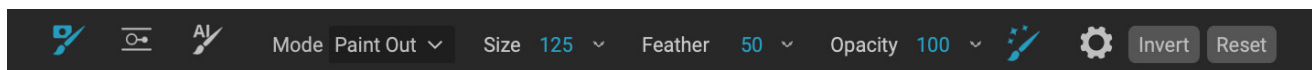
The Edges gradient shape lets you create such masking effects as customized, adjustable vignettes.

MASKING BRUSH (MASK GROUP)



The Masking Brush is one of two tools used for masking filters in Effects, as well as layer masks. When you select the Masking Brush, your cursor changes to look like two concentric circles, one representing the inner hard edge of the brush, and soft outer, feathered edge of the brush. At the center of the brush is either a plus or minus. The plus means that you are painting “in” a filter’s effect, while minus means the brush mode is set to paint out.

Masking Brush Tool Options



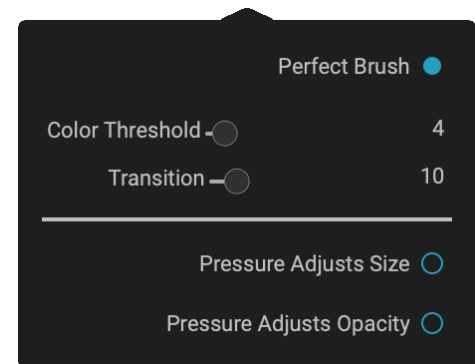
- **Paint Mode:** The paint mode controls if you are painting out (hiding the effect) or painting in (restoring the effect). You can tell your current mode by looking at the plus or minus icon in the center of the brush. If the icon is minus, you are painting out, and if the icon is a plus, you are painting in. You can change the mode in the Tool Options bar, or by pressing the X key, or by holding down the option (alt) key temporarily.

NOTE: If you would like to invert the mask (turn it from black to white), in order to paint a filter's effect into your image, select the Masking Brush tool, then choose Invert Mask from the Mask menu.

- **Brush Size:** You can control the size of the brush using the Size pop-up. Use a small brush at high magnification for precise work, and a large brush at fit to screen for general work. You can control the size of the brush several ways:
 - Use the Size pop-up in the Tool Options bar.
 - Use the left and right bracket keys: ' [' and '] '.
 - Use your mouse's scroll wheel (this option can be set in ON1 HDR's Preferences).
 - Use your Wacom pressure-sensitive tablet.
- **Feather:** You control the amount of feathering (hardness) of the brush by using the Feather pop-up in the Options bar. Use a small feather at high magnification for precise, hard-edged work and a large, soft-edged brush in Fit-screen mode for general work. You can see your feather by viewing the outer concentric circle of the brush. Adjust the size of the feather by holding down the Shift key and pressing the right or left bracket keys on your keyboard.
- **Opacity:** You can control the opacity, or strength of the brush with the Opacity pop-up in the Tool Options bar. The opacity has a range from 1 to 100 percent. You use a high opacity to paint quickly and hide large areas. You use a lower opacity for blending areas together or for subtle work. You can control the size of the brush several ways:
 - Use the Opacity pop-up in the Tool Options bar.
 - Press the Option (MacOS) or Alt (Windows) key and press one of the number keys. Each number represents an opacity percentage from 10% to 90%; 0 is no opacity.
 - Use your Wacom pressure-sensitive tablet.

TIP: Think of the opacity as the shade of gray you are painting onto your mask. While white in a mask represents 100% of an effect showing and black represents no effect showing, all opacity settings in between will show a percentage of the effect. This can be very useful when you wish to blend masks in a realistic manner.

- **Perfect Brush:** The Perfect Brush option incorporates a color-based, self-masking technology to help create precise selections and masks. When you turn the Perfect Brush option on—by clicking on the Perfect Brush icon in the Tool Options bar—the Masking Brush collects the colors under the center of the brush and applies the effect only to those colors. This protects the adjustment from being applied across edges, such as tree branches. Further settings for the Perfect Brush can be found by clicking on the gear icon in the Tool Options bar. There, you can set the following options:



Perfect Brush options.

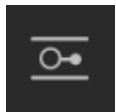
- **Color Threshold:** This option lets you control the balance between keep and drop colors, based on the area you are working on. For example, you may want the Perfect Brush to be very precise and only paint away very similar colors, while at other times you want it to paint away a broad range of colors in the same neighborhood.
- **Transition:** This slider controls the feather of the Perfect Brush based on color. To create a soft edge, increase the transition. To create a harder edge, decrease the transition amount.

TIP: You can turn the Perfect Brush on and off using the Command-R (MacOS) or Control-R (Windows) keyboard shortcut. You can also temporarily lock the color to remove by holding down the Command (Mac) or Control (Windows) key. This can be useful when brushing through areas with a lot of openings like tree branches.

Wacom Support

ON1 Photo supports pressure-sensitive tablets from Wacom with the Masking Brush. When you use the Masking Brush you can enable pressure sensitive controls for the brush size, brush opacity, or both simultaneously. To turn this support on, click on the gear icon in the Tool Options bar. You can activate pressure sensitivity for both size and opacity by clicking the appropriate buttons in the drop-down menu.

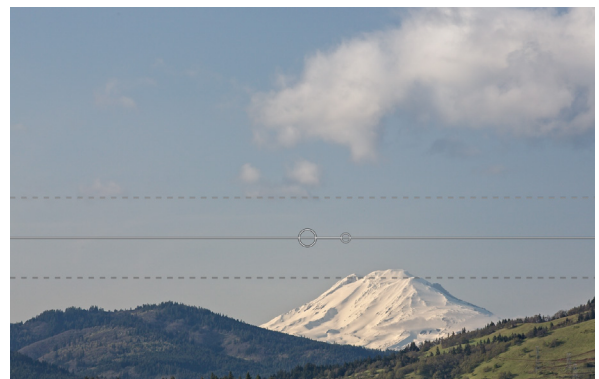
MASKING BUG (MASK GROUP)



The Masking Bug is used for blending layers by creating radial, gradient and reflected gradient mask shapes quickly. It works in a similar manner to the Adjustable Gradient tool in the Local Adjustments pane. The mask goes from dark to light in tone, applying more of the adjustment where the gradient is lighter, and less of the adjustment where the gradient's tone is dark. The most common use of gradient masks is to darken the sky in an image, while preserving the brightness of the foreground, similar to using a gradient filter on your camera lens.

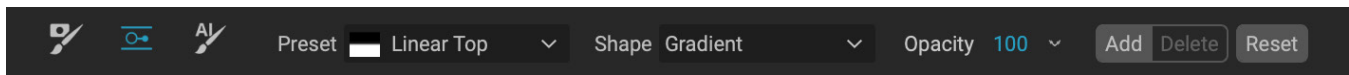
To apply a standard gradient to a filter, click on the Masking Bug in the Tool well, then click in the image roughly where you wish the gradient to go. You'll see the outline of the gradient, which is called a bug. You can use the handles on the bug to move your gradient around, increase or decrease the length of the gradient, or rotate it.

You can change the gradient shape via the Tool Options bar: in addition to the standard dark-to-light horizontal gradient, you can also create a circular gradient and a reflected gradient, which is like the horizontal gradient, but goes from black (no effect) at the outer edges to white (full effect) in the center.



In this image, a Dynamic Contrast filter has been applied in Effects. To keep the effect out of the clouds, a Masking Bug has been added.

Masking Bug Tool Options Bar:



- **Preset:** The preset pop-up includes several common ways to use the tool (linear top down, linear bottom up, left and right, and circular vignettes), and changes the current bug (if there is one) to match the preset.
- **Shape:** The shape pop-up controls the shape of the bug. In addition to the standard Gradient and the Reflected Gradient, there are two radial shapes: Center, which puts the light tones at the center and the dark tones on the outside of the mask, and Edges, which sets the gradient in the opposite direction.
- **Opacity:** Sets the maximum opacity or density of the mask.
- **Add:** Adds a new gradient using the current settings.
- **Delete:** Deletes the current gradient.
- **Reset:** Resets the mask on the layer completely. This removes all gradients and clears any brushing that has been done.

Manipulating a Gradient Mask

Once you've added a gradient to an image, you can modify it easily by accessing the following parts of the gradient overlay:

- To move a gradient, click on the large circle at the center of the gradient and drag.
- To resize a radial gradient, click and drag on the solid line.
- To adjust the feather (or hardness) of the mask, click and drag along the dashed line.
- To rotate the mask, click on the smaller circle near the center of the gradient and drag.



TIP: To see the mask created by the Masking Bug, and the range of black to white tonality, choose Show Mask from the View menu. You can choose either a red overlay, which presents the mask over your image, or grayscale, which just shows the mask as black to white tones.

Working with Multiple Masking Bugs

You can have up to six Masking Bugs per layer. To add another Masking Bug, press the Add button or click outside of the current bug while the Masking Bug tool is selected.

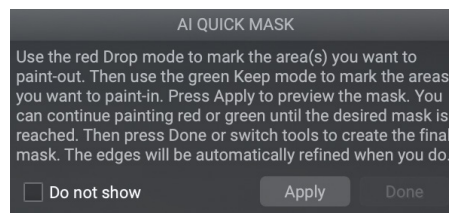
Only one Masking Bug may be adjusted at a time. You will see the overlay controls for the active bug while your mouse is over the preview area. Inactive bugs are marked with a small circle; to select an inactive bug clicking on this small circle marker.

Masking Bugs are subtractive. Each bug hides more and more of the current layer. When Masking Bugs overlay each other they may hide more of the layer too. You can always use the Masking Brush to override and paint areas back in hidden by the Masking Bugs.

AI QUICK MASK TOOL (MASK GROUP)



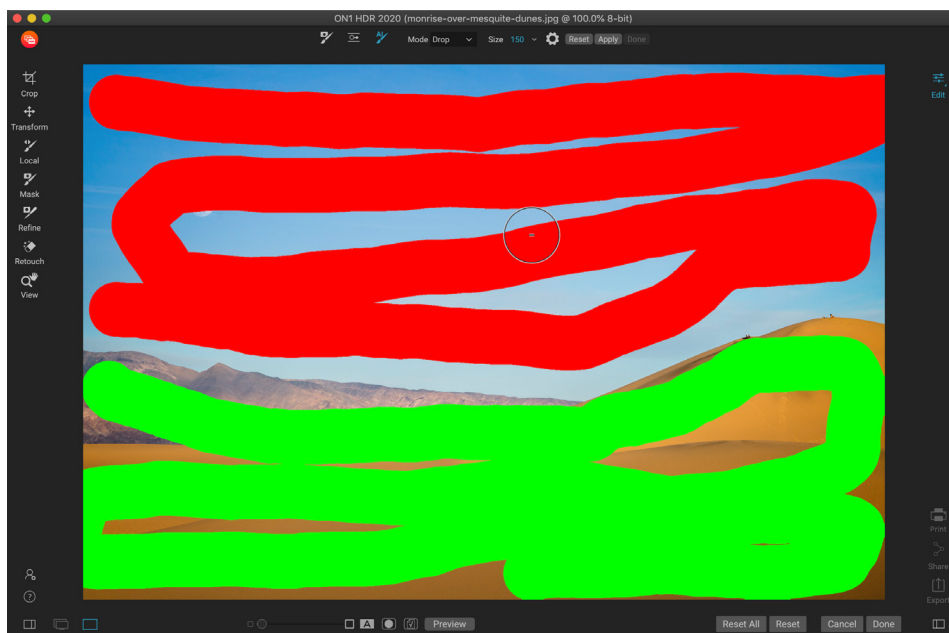
Powered by machine learning, the new AI Quick Mask tool can create high-quality masks with just a few strokes as guidance. To use it, just mark areas you want to keep in green and areas you want to drop in red. Then using its artificial intelligence it analyses the color, tone and texture of the marked regions to learn what you want to make out and then automatically finds the edges and creates the mask for you. Use it with layers to replace skies or with filters to selectively apply them quickly.



When you first open the AI Quick Mask tool, you'll see a window—called the HUD—that includes instructions for using the tool.

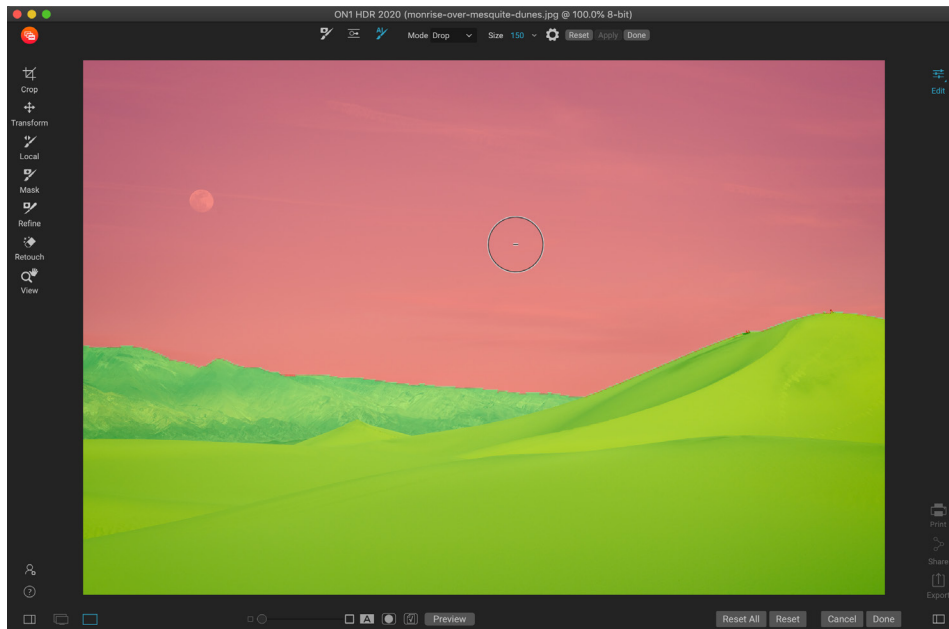
Here are the steps you need to follow to use the AI Quick Mask Tool:

1. First, you need to give the tool guidance as to what you want to keep and drop. This is done by loosely painting over the regions in your photo. There is no need to precisely paint the entire photo: just a few representative strokes of red and green are all that are needed. Paint with Drop mode—which is the default brushing mode—over the portions of your image that you want to remove. These brushstrokes will appear in red. Then change the tool's mode to Keep (via the Tool Options bar, or by holding the Option/Alt key) and paint over the areas you want to keep. These strokes will show up as green.



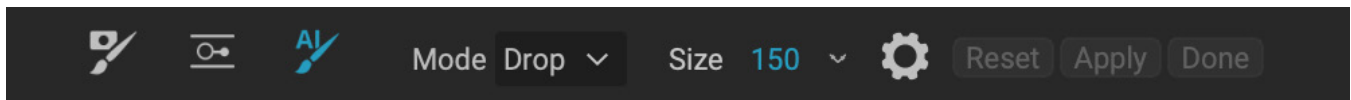
2. Now press the Apply button in either the Tool Options bar or the AI Quick Mask HUD. This will generate a temporary mask to preview the results. Areas that are filled with red will be masked out, areas in green will remain. Keep in mind the edges will appear rough at this point and will be smoothed out when you generate the final mask.
3. If the preview results look good, press the Done button in the Tool Options bar or the AI

Quick Mask HUD. If there are areas that are incorrect, you can continue to improve the results by adding more Keep and Drop strokes. Press Apply each time to preview the improved results. When you press Done, the edges are refined with high precision and ON1 HDR switches to the Refine Mask tool, which you can use over difficult, semi-transparent areas—like tree branches—if necessary.



NOTE: The AI Quick Mask tool resets any existing mask on a layer or filter.

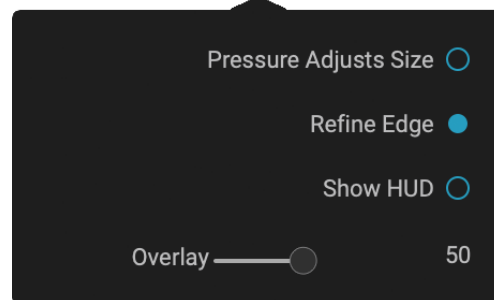
AI Quick Mask Tool Options Bar



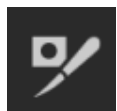
- Mode:** This controls keeping (painting green) or dropping (painting red). Green areas are protected in your mask, and are the areas of a layer or filter that will remain. The areas marked in red will be removed or masked. In your layer these areas will become transparent. On a filter in Effects, these areas will have the filter's effect removed.
 You can tell your current mode by looking at the plus or minus icon in the center of the AI Quick Mask brush. If the icon is minus, you are painting drop (red) areas; if the icon is a plus, you are painting keep (green) areas. You can change the mode in the Tool Options bar, or by pressing the Shift-X key, or by holding down the Option (Alt) key temporarily.
- Brush Size:** You can control the size of the brush using the Size pop-up. Use a small brush at high magnification for precise work, and a large brush at fit to screen for general work. You can control the size of the brush several ways:
 - Use the Size pop-up in the Tool Options bar.
 - Use the left and right bracket keys: ' [' and '] '.
 - Use your mouse's scroll wheel (this option can be set in HDR's Preferences).
 - Use your Wacom pressure-sensitive tablet.

Further settings for the AI Quick Mask tool can be found by clicking on the gear icon in the Tool Options bar. There, you can set the following options (shown right):

- **Pressure Adjusts Size:** This option lets you control the size of the brush using a pressure sensitive tablet. The harder you press, the larger the brush becomes up to the current setting of the size slider.
- **Refine Edge:** This applies the Refine Mask Brush automatically to the edge of the resulting mask, creating a more natural transition. This is on by default and recommended for most photos.
- **Show HUD:** This displays the AI Quick Mask HUD dialog (shown on [page 29](#)), which provides guidance on how to use the tool.
- **Overlay:** Sets the transparency of the red and green mask overlays on top of your image. A setting of 100 displays only the mask; the default setting is 50.



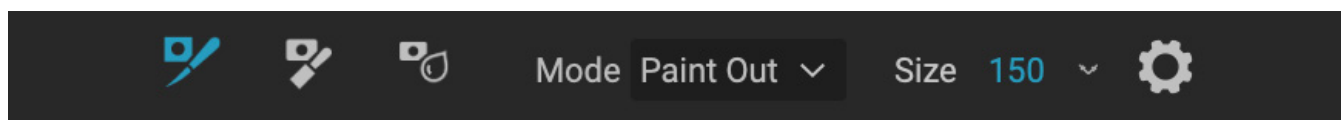
REFINE BRUSH (REFINE GROUP)



This tool cleans up intricate areas and the borders along a mask, and is helpful for cleaning up a mask created with the Masking Brush. For example, when you wish to apply an effect to a subject, and there are areas such as hair, or tree branches that are difficult to remove with the Masking Brush.

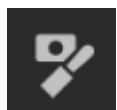
To use the Refine Brush, select the tool in the Options bar and paint along the edges where you would like the mask to be refined. The brush strokes are displayed as a red overlay, and when you let up off the mouse button, HDR will work to make making the mask edge more defined, improving the overall mask.

Refine Brush Tool Options



- **Mode:** Controls the refinement mode, either Paint Out, which always refines to remove from the mask, Paint In, which always refines to add to the mask, or Auto, which does both at the same time. Paint Out is recommended in most cases.
- **Size:** This slider adjusts the size of the brush. Select a brush size that is just larger than the intersection of the subject and background. Avoid using oversized brushes it will take longer to process and may yield lower quality results.
- **Pressure Adjusts Size (gear icon):** If you have a Wacom tablet you can control the size of the brush with pressure when this setting is turned on.

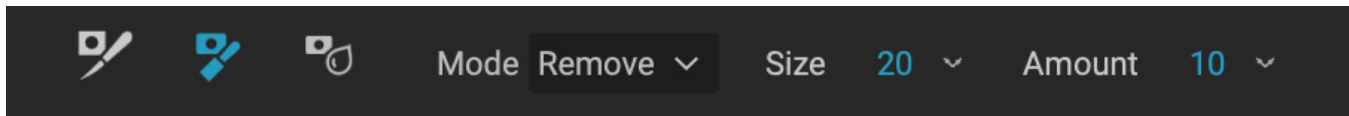
CHISEL MASK TOOL (REFINE GROUP)



The Chisel tool, accessible via the Refine Tool Options, bar works to remove fringes or halos along the hard edges of a mask; just click and drag along the edges of a mask you wish to refine. Fringes are common when the background to be removed is brighter than the

foreground. The chisel works like a chisel or plane in a wood shop: It removes just a sliver along the edges, and, because it only works on the edges, you don't have to be too careful when using it.

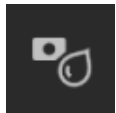
Chisel Mask Tool Options



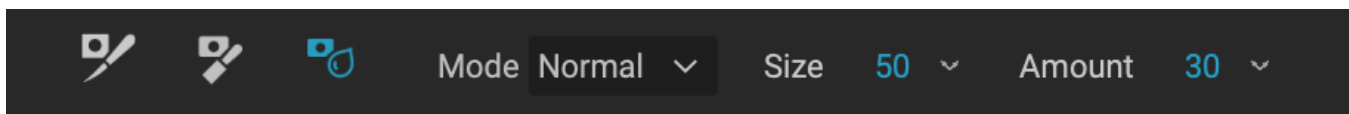
- **Mode:** Select remove or add
- **Size:** Adjusts the size of the chisel tool. Feel free to use a large chisel to make brushing fast. The size of the chisel does not affect how much is chiseled off.
- **Amount:** Controls the amount of pixels that will be removed or added during each stroke.

TIP: Double-click on the Chisel tool icon to apply the chisel to the entire mask.

BLUR MASK TOOL (REFINE GROUP)



The Blur Mask tool softens edges of the mask where you paint; all you need to do is run the tool over the edges you wish to blur. Softening the edges on blurred or semi-transparent subjects like hair can make them blend with a new background in a more realistic manner.

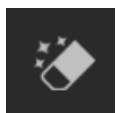


Blur Mask Tool Options

- **Mode:** Remove/Add/Normal lets you adjust what part of the mask edge to blur. Remove blurs and lightens the mask, Add blurs and darkens the mask, Normal blurs both light and darks.
- **Size:** Adjusts the tool size. Use a large size to make brushing fast; size doesn't affect blur amount.
- **Amount:** Controls the amount of blur. Use a low amount to maintain detail.

TIP: Double-clicking on the Blur tool icon applies the blur to the entire mask.

PERFECT ERASER (FIX GROUP)



The Perfect Eraser can be used to remove distracting elements and blemishes from your image. It uses a content-aware algorithm that replaces the pixels with a natural-looking result within the boundaries that are painted.

Using the tool is easy: paint over the area you wish to remove and release the mouse, making sure you cover the entire area. A red overlay appears where you paint. If the first attempt does not give you a perfect result, paint over it again. You can also fine tune the area after applying the tool by using the Retouch Brush (see below).

Perfect Eraser Options



The Perfect Eraser's Tool Options bar consists of two options; brush size, and Wacom tablet support. The default brush size for the Perfect Eraser is 125 pixels; you can make this bigger or smaller by clicking on the Brush Size in the Tool Options bar, or by pressing the right or left bracket keys on your keyboard. The maximum brush size is 500 pixels. If you have a Wacom pressure-sensitive tablet, select the Pressure Adjusts Size button in the Options bar.

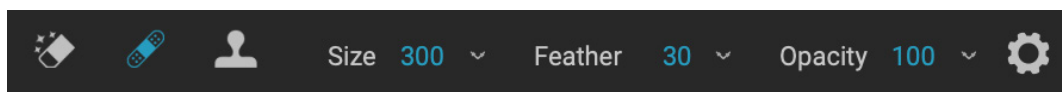
RETOUCH BRUSH (FIX GROUP)



Use the Retouch Brush to remove small imperfections like dust or blemishes. Just dab the brush on areas that contain spots or other imperfections, such as acne, sensor dust, power lines and more. The tool looks at the neighboring areas in your image and fills in the brushed area with an area of similar color and texture.

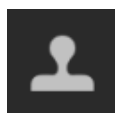
It is best to use the smallest brush size possible and to work by dabbing rather than making large brush strokes. If you dab with the Retouch Brush and don't like the results, use the Undo command and try using a smaller brush or vary your brush stroke and try again. The Retouch Brush is also great for retouching skin.

Retouch Brush Options



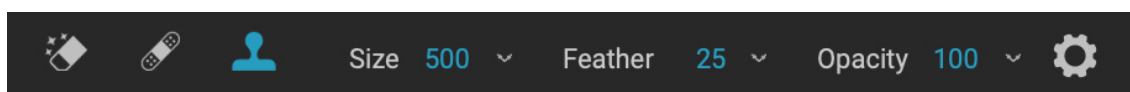
- **Brush Size:** This adjusts the overall size of the brush.
- **Brush Feather:** This adjusts the hardness of the brush. It works best to use a feather larger than 50 to blend and look natural.
- **Brush Opacity:** This adjusts how strong the retouching is. Use 100% to completely remove an imperfection. Use a lower opacity to soften them.
- **Pressure Adjusts Size:** Click on the button to activate the Wacom sensitivity controls.

CLONE STAMP (FIX GROUP)



Use the Clone Stamp tool to replace an area of a photo with an area from a different part. Hold down Option (Mac) or Alt (Windows) and click the area you want to clone from. Then click and drag on the area you want to clone over and it will clone from the point you selected.

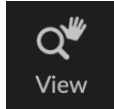
Clone Stamp Tool Options:



- **Brush Size:** This adjusts the overall size of the brush.

- **Brush Feather:** This adjusts the hardness of the brush. It works best to use a feather larger than 50 to blend and look natural.
- **Brush Opacity:** This adjusts how strong the retouching is. Use 100% to completely remove an imperfection. Use a lower opacity to soften them.
- **Pressure Adjusts Size:** If you have a Wacom pressure sensitive tablet, you can adjust the size of the brush according to the pressure. Click the button to activate.

VIEW (ZOOM) TOOL



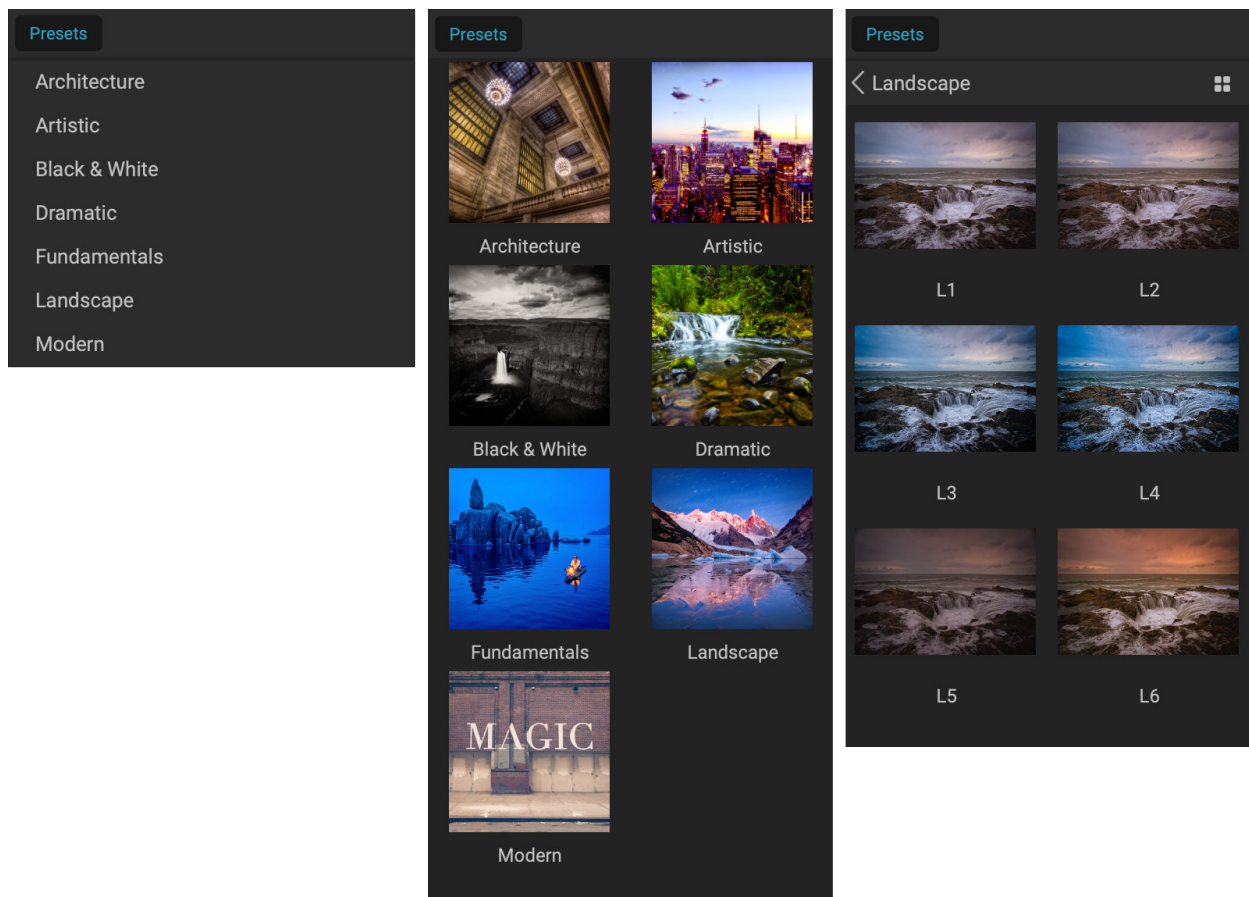
This tool, which is the default tool selected when you open an image in the Edit module, adjusts the magnification of the image in the Preview window. With the Zoom tool selected, click in the Preview window to zoom in and center the image at the location clicked.

Hold down the Option/Alt key to display the Hand tool, which lets you pan around the magnified image. You can also double-click the Zoom tool in the Tool well to set the image to 1:1 (or 100%) magnification view, which shows every pixel. This is best when examining small details.

Presets

Presets are stored “recipes” that include sets of Edit module adjustments, and can be applied to one or 100 images with ease, in Browse or Edit. Presets are a fast way to get consistent results when editing a group of images, helping you hone your own look. You can also easily create your own presets.

ON1 HDR 2020 comes with more than 50 built-in presets, in seven categories, ranging from landscapes to black and white and much more. You can create your own presets, or import presets from other ON1 users and photographers.



Three different views of the Preset panel. On the left is the List view, in the center is Thumbnail view; these views display the categories of presets. (The view options can be set in the View > Preset Browser submenu.) On the far right is an expanded category, displaying the various presets, with a thumbnail of the current image with the preset applied. From there, you can apply a preset to the current image.

As you hover over a category, the Quick View Browser icon appears on the left side of the category's name. (Hot Desert is shown above in the preset category list.) Clicking on that icon will open a full-screen window showing your photo with that category's presets applied to it. (See the following page for a screen shot of the Quick View Browser.

HDR lets you create your own custom presets and categories, and you can also create subcategories of presets. (See [page 7](#) for more.)

You can create presets that apply Develop adjustments, Effects settings, and local adjustments that use the Adjustable Gradient tool, and any combination of these.

Presets can also store crop settings and retouching information, as well as masks created with brush tools, Effects' Masking Bug, and the Adjustable Gradient Tool in the Local Adjustments panel. If you apply a preset that contains these options, you should check to make sure that you have the desired result; if not, you can reset the various individual operations via the Settings menu.

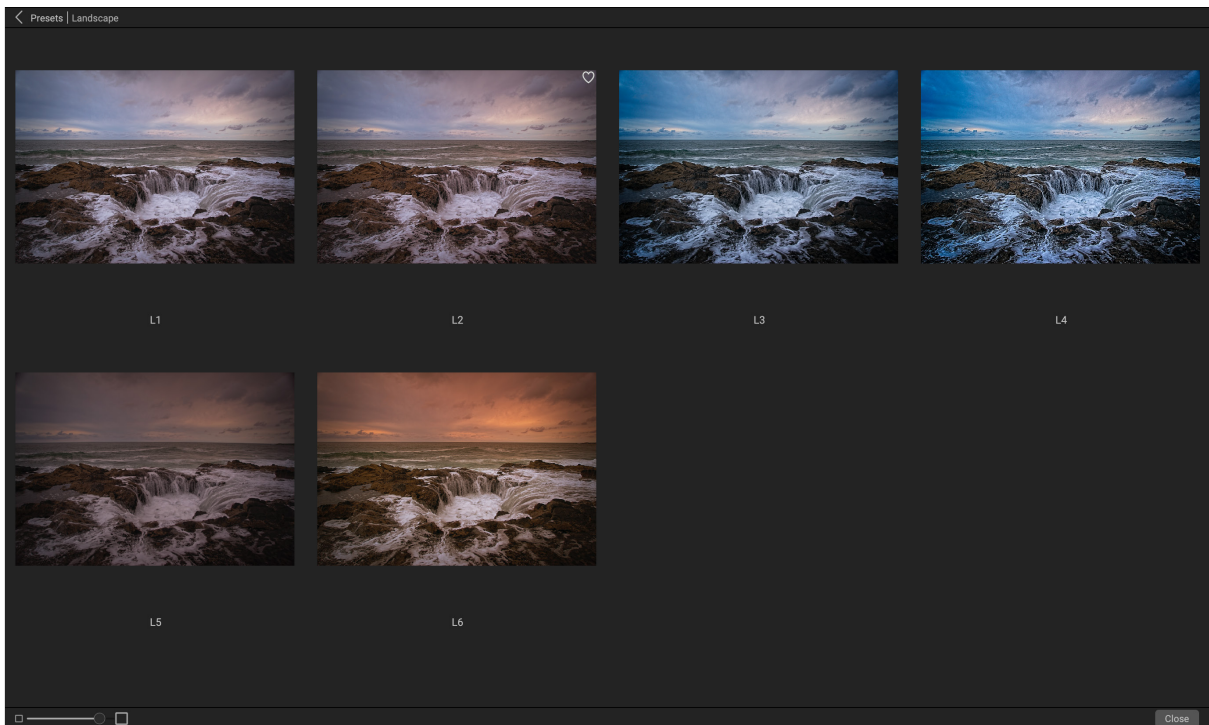
APPLYING PRESETS

To apply a preset to an image, click on the Presets panel. There you will see any built-in presets supplied by ON1—ordered by category—as well as any presets you might have created or installed yourself. Clicking on a category name will open it and display any presets within that category, with a tiny thumbnail showing your selected image with that preset applied to it. To change the size of the thumbnails in the Presets panel, select the Browser Mode option from the View menu and choose One, Two or Three Column View.

Golden Autumn

A preset with the Quick View Browser icon shown.

If you'd like to see a larger representation of what your selected photo will look like with a category's presets, click on the Quick View Browser icon in the category's title bar. That will display a window with all of the presets in that category. (Press the Escape key to close the Quick View Browser.)



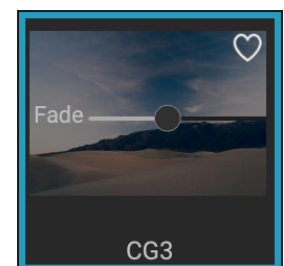
Clicking on the Quick View Browser icon in the Panels pane (or choosing Open Quick View Browser from the Window menu) will open a full-screen representation of that category's presets, giving you a larger representation of how that preset will look on your image.

To apply a preset to a photo, click on the preset in the mini-browser or in the Quick View Browser. Presets are not cumulative; clicking on another preset will remove the previous one and apply the new one.

Once you've applied a preset, you can reduce its overall effect by hovering over the chosen preset. There, you will see a Fade slider, where you can lower the opacity of any Effects filters applied with the preset. (Develop and local adjustments included in a preset are not reduced.)

After you have applied a preset, you can still make changes to any of the settings—in Develop, Effects, and Local Adjustments—add or remove adjustments, switch to another preset, perform any retouching or more.

If you don't like a preset, clicking on another one will replace the settings of the previous preset with the settings of the new preset. To remove a preset entirely,



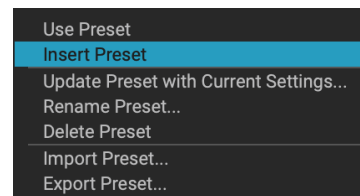
The Fade slider reduces the opacity of Effects filters applied with a preset. To find it, just hover over the applied preset in the Presets pane.

choose one of the reset options from the Settings menu, or remove the individual settings from the appropriate panes in Develop and Effects. (The latter approach is recommended if you have created masks or local adjustments that you wish to preserve.)

You can save a preset as a favorite by hovering over its thumbnail in the browser, and clicking on the heart icon. This will add that preset to a Favorites category that resides at the top of the Presets panel. To remove a favorite, click again on the heart icon.

Inserting Presets (Effects tab only)

When you click on a preset, HDR's default behavior is to remove any existing adjustments and apply the newly chosen preset to your photo. Sometimes, however, you would like to add a preset on top of your adjustments. To do this, open the Presets pane, right-click on the preset you wish to add, and choose Insert Preset from the pop-up menu. This will add the preset's filters above the currently selected filter pane and will preserve any edits you made in the Develop or Local Adjustment tabs.



The Insert Preset option is only available when working in the Effects tab.

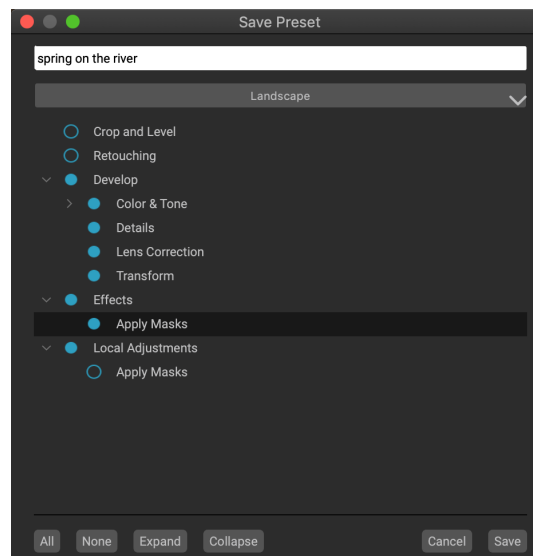
Inserting a preset will only add that preset's Effects filters to your currently edited photo. Develop adjustments and local adjustment layers will not be added.

CREATING YOUR OWN PRESETS

Once you have a group of edited settings that you wish to save, go to the Settings menu and select Save Preset. The Save Preset dialog will appear, with options for which module's settings you wish to save, naming the preset, and adding it to an existing or new category. Nearly all of the Edit module settings can be saved as a preset, including cropping, retouching, text blocks and masks.

If you have applied a preset to an image, and subsequently updated any of the edit settings (or add or remove adjustments), you can update the preset with the new settings by choosing Update Preset with Current Settings from the Settings menu. This will only change the preset in your app; any images that had the old version of the preset will keep those settings unless you reapply the preset. (You can also update a preset by right-clicking on the preset in the Preset Browser.)

If you would like to create a new preset category—which will be added to the Presets panel throughout ON1 Photo—choose Add New Category from the category pop-up.



The Save Preset window includes all of the operations possible in the Edit module, with the exception of layer operations. Filled circles to the left of a setting mean that the setting will be saved in the preset; click the circle if you don't wish that setting to be saved.

MANAGING PRESETS AND CATEGORIES

You can perform a variety of operations on presets and preset categories, including importing and exporting presets (individually or by category), deleting individual presets, and hiding categories.

Importing & Exporting Presets

You can import presets you have downloaded from the ON1 website or other source. Some files will be individual presets, while others might be preset “packs,” which will include more than one preset.

A preset will have an ‘.ONP’ extension, while a preset pack has an ‘ONPreset’ extension; all you need to do is double-click on the file—or choose Import Preset from the Settings menu—and HDR 2020 will ask you to pick a category where you wish to place the preset or pack, and it will copy the presets into the app. You can delete the downloaded files, if desired.

To export an individual preset, click on it and choose Export preset from the Settings menu. You can also export an entire category of presets, via the category preset menu (shown below).

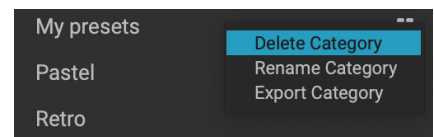
Deleting presets

To remove a preset if you no longer want to have access to it, select the preset you wish to remove in the Preset panel, and choose Delete Preset from the Settings menu. You can also right-click on an individual preset and click Delete Preset from the pop-up menu.

You can delete any preset, including the presets that came pre-installed with ON1 Photo. If you think you might wish to save a preset, export it first, then delete it.

Managing categories

In addition to creating your own preset categories, which get displayed in the Presets pane, you can also perform other operations on categories, including deleting, renaming or exporting. These options are all available via the Preset Category pop-up menu, which is available when you hold right-click on a category name:



Right-click on a preset category to get the category pop-up menu.

- To remove a category—and its presets—from the Presets panel, choose Delete Category from the pop-up.
- Choose Rename category if you wish to change the name of the category.
- To export a category and all of the presets within it as an ONPreset pack, choose Export Category from the pop-up menu.

TIP: Many preset management options can also be performed by clicking on a preset in the Preset panel and right-clicking on the preset. This is helpful if you want to update, export or rename a preset without applying it to an image in Develop or Effects.

Nesting presets

To help manage large groups of presets, HDR's Extras Manager lets you nest preset categories. See [page 7](#) for details on how to create and manage preset category subfolders.

RESETTING EDITS

Any edits you have made with ON1 HDR 2020 can be completely reset from within the Edit module.

The Settings menu offers six options for erasing edits made to a photo:

- **Reset All Settings:** This removes all adjustments made to a photo in the Edit module. (This option can also be accessed from the Reset All button at the bottom right of the Browse and Edit windows.)
- **Reset Develop Settings:** Removes only the settings applied in the Develop tab.
- **Reset Effects Settings:** Removes only the settings applied in the Effects tab.
- **Reset All Retouching Tools:** Resets any retouching applied anywhere in the Edit module.
- **Reset Local Adjustments:** Removes all local adjustment layers.
- **Reset Crop:** Returns the image to its original, uncropped size.

You can undo any of these changes immediately after making them; otherwise resetting with the appropriate option will permanently reset the image.

NOTE: The Reset settings work on the currently selected layer, not on the file.

Soft Proofing

ON1 HDR's soft proofing feature lets you see how a photo will look when printed, using the color profiles that get installed with your printer. Soft proofing helps you determine where there might be issues when you print, so that you can adjust your tone, color and effects to give you a print that is closer to your editing vision.

Normally, when you're viewing an image in HDR, you are viewing it through the lens of your monitor's display profile. The color gamut of your computer's display is wider than that of most photo printers, which means that some colors you are able to view on-screen are not reproducible when you print. When this happens, the color profile conversion that happens in the print engine will cause substitutions of colors that the printer cannot print to the closest color that it can. This means that your image could have subtle (or broad) shifts in color, especially in certain color ranges.

Soft proofing is turned on via the View menu, or by clicking on the soft proofing icon to the left of the Preview button at the bottom of the main HDR window. You soft-proof various paper types by choosing an installed printer profile from the Profiles submenu. The image will change to approximate the color of the paper you're profiling. You can also turn on an overlay that will display out-of-gamut colors.

The primary soft-proofing options are available underneath the Enable Soft Proofing item in the View menu. The options are as follows:

- **Gamut warning:** When checked, this displays colors in the image (via a red overlay) that don't correspond to the current printer profile being soft proofed.
- **Profiles:** The Profiles submenu lists the currently available printer profiles. Choosing one will change the on-screen display to use that profile. You can also import profiles via this submenu.



These three screen shots show the results of soft proofing options, as viewed in the Edit module. The top image is with soft proofing off (and is using the display color profile). The middle image is with soft proofing turned on, and using a printer profile for Epson's Exhibition Matte Paper. The bottom image has the Gamut warning turned on; out of gamut colors are highlighted by the bright red overlay.

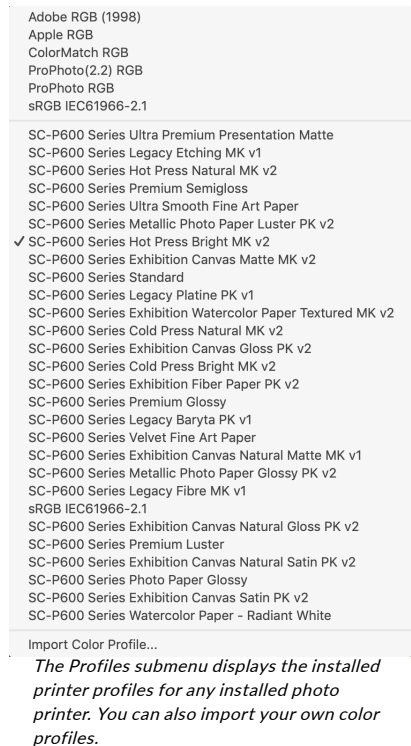
- **Intent:** HDR offers two different rendering “intents” when soft proofing, which are used to convert the color from display to print. Perceptual shrinks the color gamut during the conversion, which works to preserve the relationship between colors in the image. The other intent type, Relative, only converts colors that are outside the current color gamut, but this can sometimes cause two colors, one in gamut, and one outside, to be identical after conversion.

Neither rendering intent is perfect or desired; it often is a matter of the makeup of the image, your editing intent, the paper being printed on, and so forth. Often, you’ll want to switch back and forth between Relative and Perceptual, seeing which gives you a better print.

- **Simulate Paper and Ink:** Turning this setting on will cause HDR to use the white point for the chosen paper type (instead of the white point of your monitor), and the paper’s actual black density (instead of the display’s black point). If you’re trying to match a print, you will usually want this setting turned on.

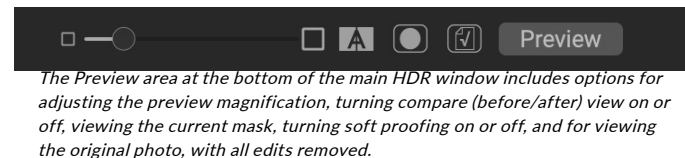
Adjusting images with soft proofing is often a bit of trial and error. It’s easy to get caught up in eliminating out-of-gamut colors, but most modern photo printers—both home printers and online print services—do a pretty good job of properly approximating colors.

The biggest thing you want to be looking for when viewing a soft proof is tone, contrast and color accuracy between screen and print. When using a home printer, use test prints to hone in on the right mix of Edit module adjustments.



Other Edit Module Preview Options

In addition to soft proofing, ON1 HDR 2020 offers a few other previewing options in the Edit module, which can be found in the previewing section at the bottom of the HDR window. With these options, you can compare the before and after views of a photo—in either split-screen or full-screen views—see the current mask, and turn soft proofing on or off.

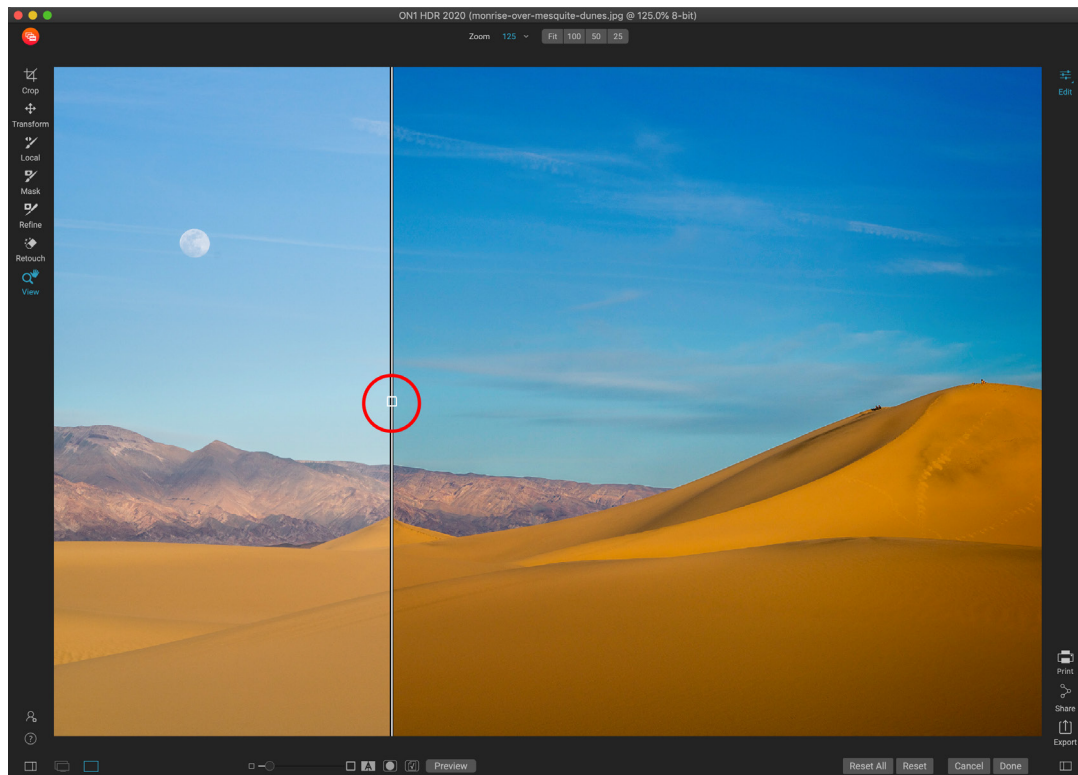


CHANGING THE MAGNIFICATION VIEW

HDR includes various options for zooming in or out of a photo while you’re working on it. In addition to the Zoom tool and the Navigation pane (see [page 34](#) and [page 16](#), respectively), you can change the zoom view by moving the magnification slider. You can either click on the control and slide it to the right to zoom in and to the left to zoom out, or you can click on the boxes at the ends of the slider.

BEFORE/AFTER PREVIEWS

As you work in the Edit module, it can be helpful to see how individual edits—via items in the different edit tabs—affect your photo, as well as to see the cumulative changes made to the original image. The Edit module's Compare mode displays a side-by-side view of your photo, with the original version on the left, the edited version on the right. There is a movable slider in the middle of the screen, which lets you view more or less of each view; click on the box at the center of the slider and drag it to the left (to view more of the edited image) or to the right (to view more of the original). While working in Compare view, you can use the magnification slider to zoom in or out of the image, which can be useful when you wish to see the effects of your edits on smaller sections of your photo.



Edit's Compare view displays a before/after view of your current photo, with a movable slider for expanding and contracting the different views.

You can also view your original image full-screen by clicking the Preview button at the far right of the previewing toolbar. When you click this button, the original photo is displayed with a “Preview Off” overlay. To return to your edited version, click the Preview button again. (You can also use the backslash key—‘\’—to show and hide the full-screen preview.)

SHOW/HIDE MASK

ON1 HDR 2020 has extensive masking capabilities throughout the Edit module. While you're in the process of creating a mask, you have two options for displaying the contents of a current mask:

- As a transparent red overlay, where the masked sections of your photo are shown in red.
- As a grayscale mask, where you do not see the photo, but see only the mask. Masked areas are shown in shades of gray, with pure black meaning that those pixels are completely masked. Gray values (from 1% to 99%) represent the opacity of those pixels relative to the mask, and areas of pure white are not masked.

The overlays can be set in the Mask menu's View Mode submenu while you are working in the Edit module. You can also, via this option, show the mask as a red overlay only when you are brushing a mask.

You can toggle the current mask view by clicking on the Show Mask icon in the previewing toolbar, or by pressing the O key.



The two options for viewing a mask are with a red overlay (left), which shows the masked areas in red, and a grayscale mask (right), which shows only the mask, in a range of tones from white (not masked) to black (completely masked). Tones in gray represent varying percentages of the mask's opacity.

For more information on the varying aspects of masking in ON1 HDR 2020, check the respective masking tools earlier in this chapter, as well as the [“Filter Masks” on page 57](#).

FOCUS AND CLIPPING VIEWS

Two additional previewing tools that can be quite powerful aids when you are editing photos are the Clipping and Focus Mask overlays. These options can be displayed in any of the Edit module tabs (as well as in the Browse module).

Clipping

Clipping occurs when the shadow and highlight tones in an image are suddenly cut off to completely white or black, rather than fading smoothly. (Large expanses of white pixels in a photo are often referred to as ‘blown’ highlights, and can be quite distracting to a viewer.) One of the benefits of shooting in raw format is that, while many photos will have areas of pure white or black when originally viewed on-screen, there is still recoverable data in the raw image. The Clipping overlay can help determine how big a problem you might have with a photo, and how easy (or difficult) it will be to fix.

To display the Clipping overlay temporarily, press the J key; to turn it on permanently as you move from photo to photo, choose View > Show Clipping, or press Alt (Windows) or Option (Mac) J on your keyboard.



Clipping view displays pure white pixels with a bright red overlay, and pure black pixels with a bright blue overlay.

The Clipping view overlay displays the areas that have either pure white or pure black in them. Those areas with a bright blue overlay indicate pure black pixels, while the areas with the bright red overlay indicate pure white pixels.

Focus Mask

It can often be difficult to view the sharpness in a photo without zooming in to 100% or more, and if you have a lot of photos from a shoot, it can be a bit tedious to check focus at that level. Luckily, HDR's Focus Mask overlay can help winnow your shots down to the sharpest ones.

To turn on Focus Mask, choose View > Show Focus Mask, or press Shift-Alt-J (Windows) or Shift-Option-J (Mac). The sharpest areas in your image will be represented by a bright green overlay. As you move from photo to photo in a folder, you'll be able to tell whether you have an acceptable level of sharpness where you need it by the strength of the overlay. The mask will continue to be displayed even as you zoom in on a photo.



The Focus Mask option displays areas of sharpness with a bright green overlay.

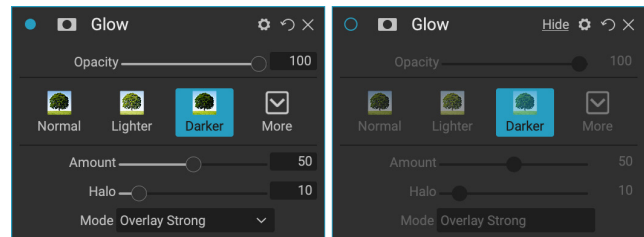
Showing or Hiding Edit Module Adjustments

You can also show or hide many individual adjustments made throughout the Edit module. Most of the panels in the Develop, Effects and Local tabs have a Show/Hide control in the upper left-hand corner of the panel. You can make your adjustments, and can click the control to turn the effect on or off.

That this option is not solely for previewing an effect; if the adjustment is turned off, it will not be present in the edited image. This can be helpful if you're trying different filters in Effects, for example, and you want to see if one looks better than another, or if you wish to see if it truly helps the photo or not. To turn the adjustment back on, click on the Show/Hide control so that the circle is filled.

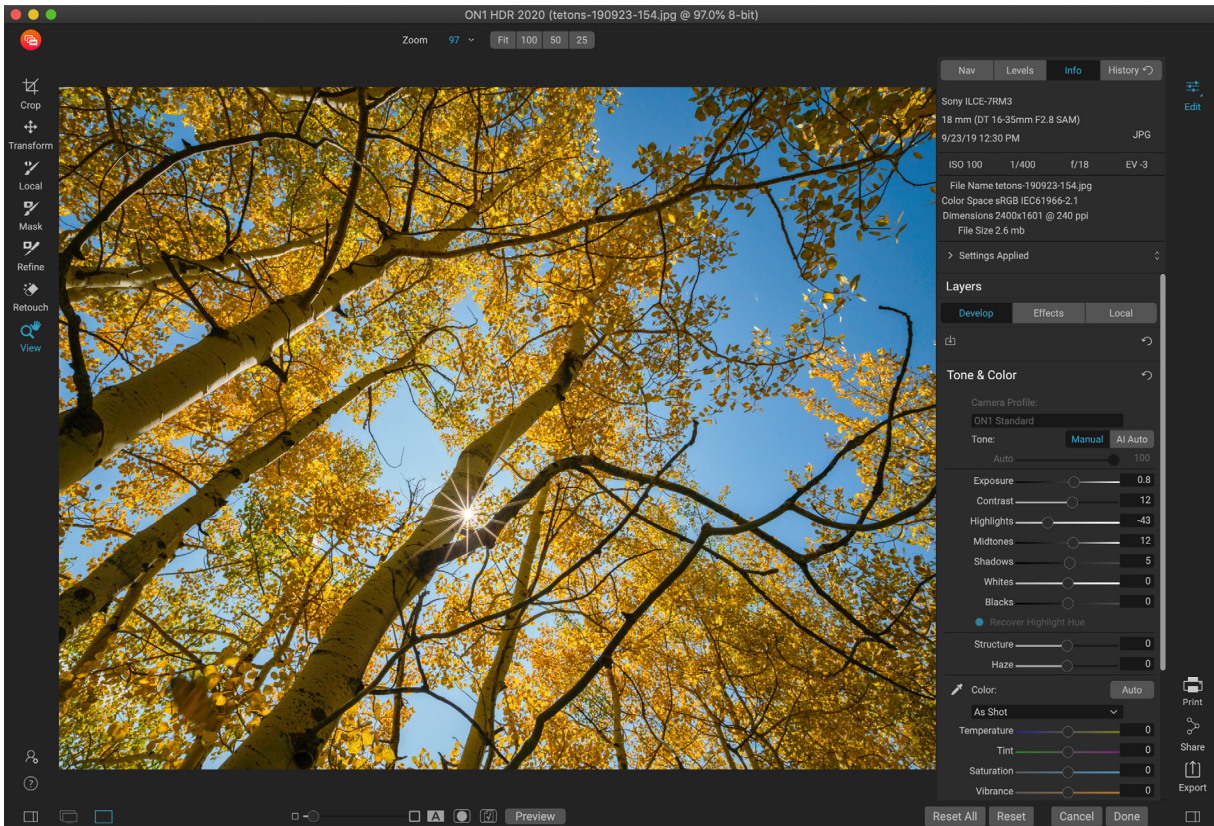
The only adjustment inside the Edit module that cannot be turned off in this way is the Tone & Color panel in the Develop module. If you wish to view your photo without those adjustments, you need to press the Reset icon, which is represented by 'O' at the top right side of the panel.

For a complete description of the controls in most Edit module panels, see [page 54](#).



To turn an effect or other adjustment off, click on the Show/Hide control in the upper left of an adjustment's panel. If the control's circle is empty, that effect is not implemented. Clicking the control will turn it back on.

PART 4: BASIC EDITING WITH DEVELOP



Develop is the module for performing basic global editing operations—adjusting tone and color, removing noise, sharpening and applying transforms to a photo. It is the perfect place to begin editing your photos.

Develop Adjustment Panes

The Develop tab has four adjustment panes found in the Overall Settings panel. Unlike the Effects tab, which lets you stack filters in any order, the Develop tab's adjustments are applied in the following order:

1. Tone & Color
2. Details
3. Lens Correction
4. Transform

WORKING WITH PANES

The Tone & Color pane is at the top of the stack, followed by the Details, Lens Correction and Transform panes. These panes are not removable from the stack, although you do not have to apply any of these operations to a photo. The remaining panes can be applied based upon what you wish to do with your photo. Clicking on the button to the left of the pane's name will turn that pane on or off, which can be helpful if you want to see the effect in the context of other edits you have made. The Reset button—designated by the circular arrow icon at the top right of each pane—will reset that pane's settings to their default state.

TIP: Each pane can be collapsed, by clicking in the pane's title bar (a Hide/Show link is visible when you move your cursor over the bar, but the entire title bar is clickable). If you don't want to have to scroll up and down the Settings panel when you have a lot of open panes, choose Solo Mode from the Window menu. This will leave only the current pane open, and will hide all the other panes. Clicking on another pane will open that one and collapse the previous one.

TONE & COLOR

This pane adjusts the tonal and color characteristics of an image, letting you correct and enhance exposure, contrast, detail and color. It is split into two sections, Tone and Color, with a Color Profile option at the top of the pane.

Camera Profile

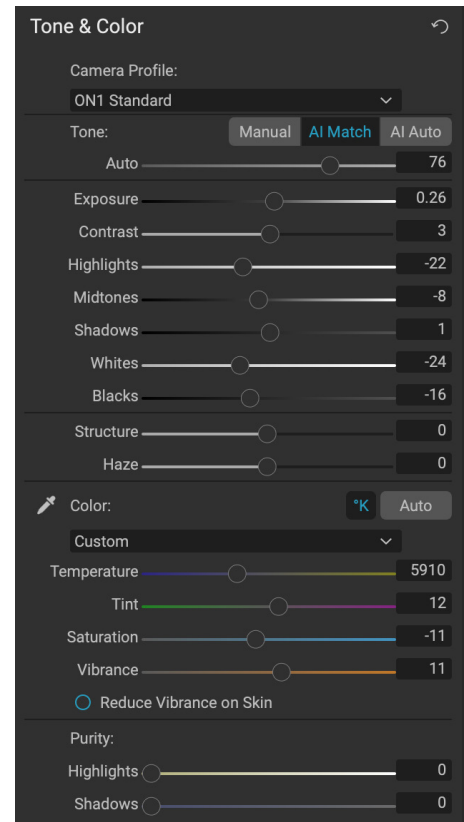
Camera profiles apply alternative interpretations of the raw data in an image based upon different genre types or intents. The pop-up menu displays HDR's built-in profiles: ON1 Standard, Landscape, Portrait, Vivid and Neutral. If your camera has its own embedded profiles, you will see those profiles in the list as well, and you can also import your own custom camera profiles using HDR, and X-Rite's ColorChecker and ColorChecker Camera Calibration software. (See [page 51](#) for more information on how to create and import custom camera profiles into HDR.)

HDR's camera profiles are non-destructive, and work independently of any changes you make to tone or color.

Tone

The Tone sliders control the global tonality, or brightness and contrast of the image. You can adjust each of the following:

- **Manual, AI Match and AI Auto buttons:** The AI Match button uses artificial intelligence technology to automatically adjust the controls in the Tone panel to closely match your photo as you saw it on the back of your camera's display. The AI Auto button performs an automatic tone adjustment on your photo using a proprietary ON1 algorithm. If you don't use either of these options, or if you make subsequent adjustments, the Manual button will be highlighted.
- **Auto Tone slider:** This option is only available when using the AI Match or the AI Auto option. Using this slider will let you 'fade' the effect of those options.
- **Exposure:** Adjusting this slider to the right will lighten your image. Adjusting to the left will darken your image.
- **Contrast:** Increase or decrease the contrast in your image.
- **Highlights:** Darkens the highlights, recovering detail.



- **Shadows:** Lightens the shadows, revealing details.
- **Whites:** Adjusts the white point, adding or removing contrast in the highlights.
- **Blacks:** Adjusts the black point, adding or removing contrast in the shadows.
- **Structure:** Adjusts the detail in your image by changing the local contrast.
- **Haze:** When moved to the left, this will remove haze or fog from your photos; moving it right will enhance fog or haze.

NOTE: The AI Match and AI Auto buttons only affect the tone and saturation of your image; they don't adjust the white balance. If you wish to change the white balance, use the Auto button in the Color section of the panel, or adjust the Temperature and Tint sliders as desired, as described below.

Color

The Color sliders control the Temperature, Tint and Vibrance. They are used to remove a color cast and enhance the color of the image. By default, when working with raw (or DNG) files, the color temperature is measured in degrees Kelvin (°K), which gives you a larger and more accurate range to make adjustments.

The settings in this section of the Tone & Color pane include:

- **Auto Button:** The auto button attempts to detect and remove a color cast. It makes adjustments to the Temperature and Tint sliders.
- **Gray Dropper:** Used to remove a color cast of an image. Click the icon to activate, then click on an area in the image that should be gray.
- **White Balance presets:** This pop-up lets you change the white balance according to common color temperatures (As Shot, Auto, Daylight, Cloudy, Shade, Tungsten, Florescent, Flash, Custom). The default is As Shot, which is the color temperature that the camera recorded when you took the photo.
- **Temperature:** This slider shifts the color either cooler (blue) or warmer (yellow). When editing a raw file, the °K button will be blue, which means that the temperature is measured in degrees Kelvin. Clicking the button will change the slider to a relative color ramp. (The Kelvin ramp is only available when working with raw photos; other formats use the relative slider.)
- **Tint:** Shifts the color either green or magenta.
- **Saturation:** Increases or decreases the saturation of your image.
- **Vibrance:** Increases/decreases the color of muted tones, leaving more saturated colors alone.
- **Reduce Vibrance on Skin:** When turned on, adjustments made with Vibrance slider are reduced on skin colored areas. This allows you to increase the vibrance of clothing and the background without adversely affecting the skin color.
- **Purity – Highlights:** Reduces the saturation in the highlights.
- **Purity – Shadows:** Reduces the saturation in the shadows.

DETAILS

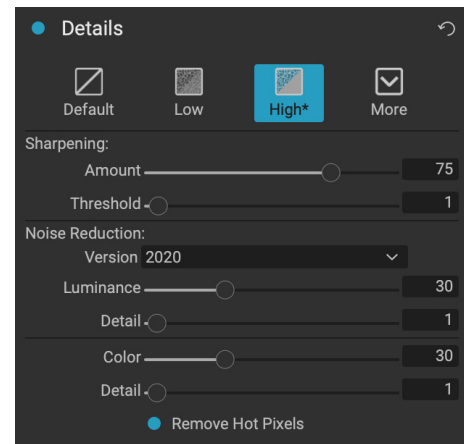
The Details pane incorporates sharpening and noise reduction, two adjustments that often compete with each other when working on a photo. We've added them together into a single pane to help you achieve the right balance between sharpness and noise during your initial photo editing.

Sharpening

The sharpening section of the Details pane is designed to help visually sharpen an image based on its initial state from your camera—for example, to bring back some sharpness that might have been lost. It has two basic controls: Amount and Threshold. Amount controls the strength of the sharpening applied, while Threshold reduces sharpening in areas of low detail via a threshold mask.

If you hold down the Option (Mac) or Alt (Windows) key as you adjust the Amount slider ON1 Photo will display your photo in grayscale, which can make it easier to view the degree of sharpening you're applying.

With the Threshold slider, a setting of 0 means that the sharpening amount gets applied to every pixel. As you increase the amount, it focuses the sharpening only where there is a difference between neighboring pixels. To help you determine which edges are sharpened, you can use the same Option/Alt key trick mentioned above. In this view, as you adjust the Threshold slider, everything that is white will get sharpening applied to it; everything displayed as black will not have sharpening applied.



NOTE: When you are adjusting the sharpening or the noise in a photo, it is best to be working at 100% view. To do this, you can click on the 100 button in the Navigator pane, choose View Actual Pixels from the View menu, or press Command-Option-0 (Mac) or Control-Alt-0 (Windows) on your keyboard.

Noise Reduction

The Noise Reduction section reduces luminance and color noise, while maintaining image detail. By default, ON1 Photo applies a small amount of noise reduction on your photo, based on the camera type used. You can then further refine both luminance and color noise, as defined below:

- **Luminance:** Adjusts the overall strength of the noise reduction applied to the luminance or detail of the image. Hold down the Alt/Option key to see just the luminance while adjusting this slider.
- **Color:** Controls the amount of noise reduction applied just to the color noise or chroma, of the image.
- **Detail:** Controls how much edge detail is protected. Hold down the Alt/Option key to see the edge mask while adjusting this slider.
- **Remove Hot Pixels:** If you have any individual, blown-out pixels in your image, turning this setting on will remove them, changing that pixel's color to one that blends in with the surrounding pixels. This setting can also be helpful in reducing noise in long exposures.

The Details pane is intended to adjust the base-level sharpening and noise reduction of a photo. If you wish to apply further sharpening for printing or other output uses, you can add more targeted sharpening in the Effects tab, or the Print window, if you wish to sharpen for output.

NOTE: ON1 HDR 2020 uses an improved noise reduction engine, which is available via the Version pop-up in the Details panel. In order to provide editing compatibility, photos that have been edited in previous versions will default to the 2017 noise reduction model, while new photos that are edited in ON1 HDR 2020 will default to the new model. You can change any image to the other model via the Version pop-up.

Styles

The Details pane has a set of built-in styles in the top part of the pane. Styles are like preset adjustments for a pane: they provide a group of settings to help you get started in the pane, or to apply a specific effect.

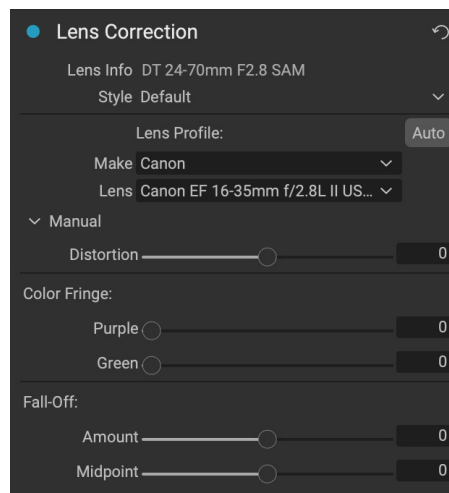
You use a style by clicking on the style's icon in the pane, and then can adjust the sliders as desired to get the right effect for your photo.

You can save your own settings as a style. Simply click on the More icon on the far right side of the styles list for that pane, then choose Save New Style from the pop-up. Name your style, and it will then be added to the top of the More menu. To apply a saved style, choose the style from the More pop-up menu. To adjust the settings for a saved style, apply it, make any changes you would like to the sliders or other options, then click on the More pop-up and choose Update Style with Current Settings from the menu.

LENS CORRECTION

The Lens Correction pane detects the lens used in a photo (from its metadata), and searches ON1 Photo's internal lens database for an appropriate profile. If found, the profile will be applied automatically, reducing distortion, chromatic aberration and peripheral fall-off.

NOTE: Lens profiles can only be applied to raw photos that are opened via ON1 HDR. If you use HDR as a plug-in from Lightroom, lens profiles will not have any effect on your photo, although adjustments made in the Manual section of the pane will get applied to your final photo.



If HDR doesn't have a built-in profile for your lens—or you wish to apply further correction to a photo—you can make manual adjustments by clicking on the Manual triangle. There, you can adjust either pincushion (where lines in a photo curve inward) or barrel (lines curve outward) distortion by moving the slider to the right or the left. The Manual section also can help remove any purple or green color fringing that might occur along edges, and can reduce the light fall-off (vignetting) that can occur at the outer edges of a lens.

TIP: If you have a lens that isn't in the profile database, open a typical photo shot with that lens, and adjust the Manual settings in the Lens Correction pane to fix any lens abnormalities. Save these settings as a style by clicking on the Style pop-up and choosing Save New Style. When you open additional photos shot with that lens, choose that Style from the Style pop-up.

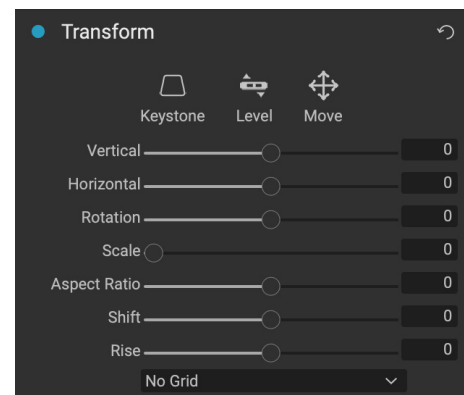
A list of the currently supported lens profiles can be found on the ON1 support website, via [this link](#).

TRANSFORM

Transform applies distortion and perspective correction to your image, and offers rotation and scaling options as well. You can use these settings to make small adjustments to perspective or distortion.

The three icons at the top of the pane let you apply specific transforms to the current photo:

- **Keystone** lets you project your image as if it were on an angled surface. This type of effect is often used to help adjust the perspective in architectural photos. Selecting the Keystone option will give you a box with four handles at the corners. You can extend the handles in any direction. Once you're done, click on the Apply button at the center of the keystone box.
- **Level** works in a similar fashion to the one found in the Crop tool (found on [page 20](#)). Select the tool and click and drag across an element in your image that should be level.
- **Move** lets you adjust the image's position on the canvas. Click and drag to reposition.



Keystoning can be helpful when you want to adjust the perspective in a photo; just adjust the four corners to align with an object that should have parallel lines, like a window or door, then click the Apply button. The Transform pane doesn't apply a crop when you apply a transformation; you'll need to use the Crop tool to do that.

In addition to the above tools, the following options will apply specific transform operations:

- **Vertical:** Adjusts the vertical perspective.
- **Horizontal:** Adjusts the horizontal perspective.
- **Rotation:** Rotates the canvas up to 45° clockwise or counterclockwise.
- **Scale:** Scales your image up from the center, to 100%.
- **Aspect Ratio:** Stretches your image horizontally (moving the slider to the left) or vertically (to the right).
- **Shift:** Translates the image left or right.
- **Rise:** Translates the image up or down.

The Grid pop-up menu at the bottom of the Transform pane lets you display a grid overlay while you are adjusting the pane's sliders. The default for the pane is No Grid, but you can also choose between 10% (large), 5% (medium) or 1% (fine) grid settings.

The Transform tool works best most of the time in small amounts. It's not necessarily going to fix a photo with an extreme perspective, but it can often help with slight adjustments, especially if you fine-tune them with some of the Transform panel's other controls or the Manual section of the Lens Correction panel. In addition, the tool does not apply a crop after an operation; if you are happy with the transform results, use the Crop tool to finish your work.



The Transform pane's Keystone option can help with perspective issues in a photo. Clicking the Keystone icon gives you a box that you can use to align the four corners of an object that should have parallel lines (above left). Once you have the edges of the object aligned, click the Apply button in the center to create the transform, and apply a crop as necessary. (Sometimes, you'll find that using the manual section of the Lens Correction pane can help reduce some of the distortion that the Keystone operation can create.)

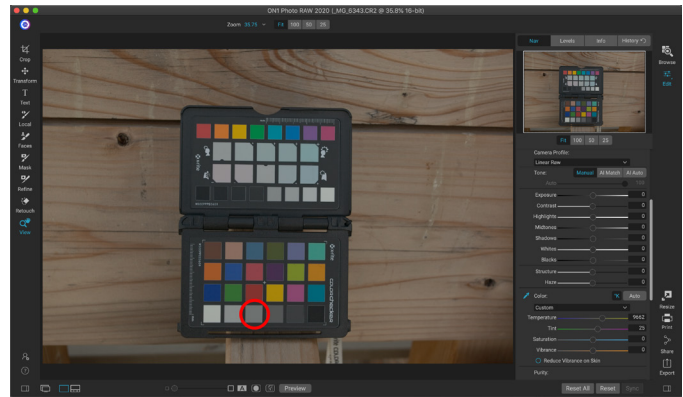
CREATING AND ADDING CUSTOM CAMERA PROFILES

As noted in the section on the Tone & Color panel ([page 46](#)), you can create your own custom camera profiles and import them into HDR. Custom camera profiles can help improve the fidelity of color reproduction in your photos, and for some photographers, this can be a useful tool.

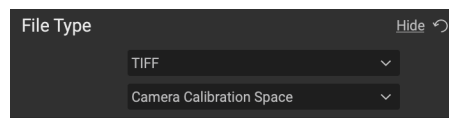
To build a new profile, you'll require a color profiling target and special software that creates the profile. ON1 worked with X-Rite Inc. during the development process to create a workflow that helps ease this process and ensure consistent results when building camera profiles. In addition to ON1 HDR 2020, you'll need a reference target, such as one of the ColorChecker series, and X-Rite's ColorChecker Camera Calibration app.

The process for creating a custom profile is as follows:

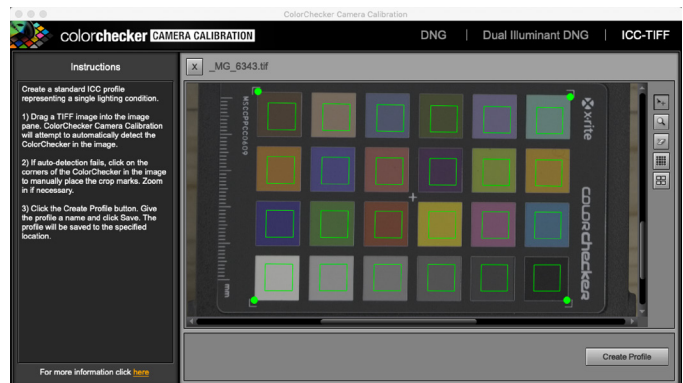
- Turn off automatic white balance on your camera; set it to the lighting conditions—daylight, tungsten, flash, fluorescent—in which you are shooting the target.
- Place the color reference target in the center of your scene, with even light. Take the photo.
- Open the photo in HDR's Develop tab.
- In the Camera Profile section of the Tone & Color panel, choose the Linear Raw profile from the pop-up.
- Click on the dropper icon in the Color section of the Tone & Color panel (see [page 47](#)), and click on one of the light gray patches in the target. This will neutralize the image.
- Using the Export feature, export your photo as a TIFF, selecting the Camera Calibration color space from the pop-up under the file type option. (See [page 77](#) if you need help with exporting photos from HDR.)
- Using X-Rite's ColorChecker Camera Calibration software, open the exported TIFF file. The app should find and align the target; if so, click the Create Profile button, and save the exported profile. If it doesn't find the target, follow the guidelines in the software to help improve your chances with a new photo.
- In HDR, go to the Develop module with a photo created with the camera you profiled. In the Tone & Color panel, click on the Import Profile item in the Camera Profile pop-up menu. Find the exported profile and choose Open. Your profile is now installed.



When you open the photo with the color target, set the camera profile to Linear Raw, and use the gray dropper to neutralize the photo, by clicking on one of the light gray targets (circled, above).



When exporting your neutralized target, set the file type to TIFF, and the color space to Camera Calibration Space.



Using X-Rite's ColorChecker Camera Calibration app, you can open the exported TIFF file, and create your own custom camera profile. Then, import the profile via the Camera Profile pop-up in Develop to use it with any photos taken with that camera.

NOTE: You can find the different ColorChecker options on the X-Rite website at xritephoto.com/camerasolutions.

PART 5: STYLIZING WITH EFFECTS



If Develop is the base from which you start editing your photos, Effects is the finishing school. With eight filters that can be stacked in any order, and with extensive blending and masking options, Effects lets you create stunning, pro-level photos with ease. And, since it is built upon ON1 HDR 2020's non-destructive editing engine, you can go from Develop to Effects to Local and back again, preserving your edits, masks and more without having to worry about saving multiple versions of your files.

While Develop and Effects share the same tools, Effects is much more customizable in how adjustments—called filters in Effects—are applied. The editing stack inside Develop is fixed, while the stack in Effects is extremely flexible. Here are just a few of the things you can do with an image in Effects:

- You can add filters in any order (even multiple instances of the same filter).
- Move filters up and down in the stack.
- Add blending options to all or some of the filters and set the opacity of each filter individually.
- Create complex masks for each filter you add, letting you selectively apply a filter to specific portions of an image.

Filters

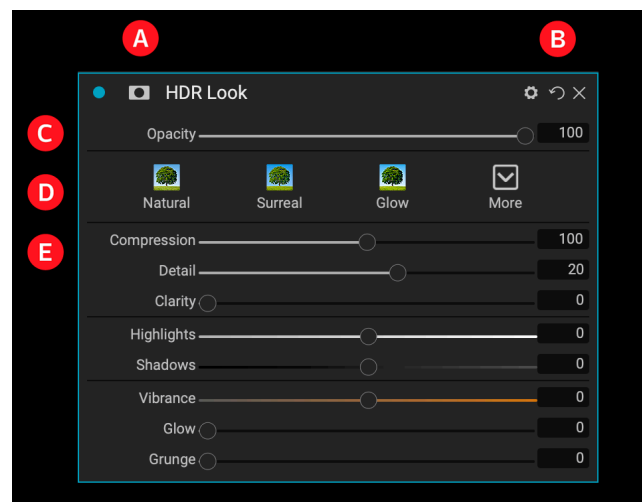
Filters are the building blocks of Effects' editing power. Each filter is an adjustment type, much like the basic adjustment panes inside Develop, but Effects filters have much more functionality than the Develop panes. Each filter is like a movable, editable layer over the base image you are working on. You can use Effects' masking tools to apply a filter to only part of an image and can change the blending mode (and opacity of the filter) to alter the way the filter interacts with those above and below it in the stack.

The Effects tab has eight filter types, added either by the Add Filter button found at the top of the Effects tab, or via the Filters pane on the left side of the window. You can apply filters in any order, and you can have more than one instance of a filter in the stack. (This can be helpful when you are creating complicated masks on an image and wish to apply the same filter differently in parts of the photo.)

FILTER OVERVIEW

Each filter pane has a different set of adjustment options and controls, but every filter pane has the same five sections:

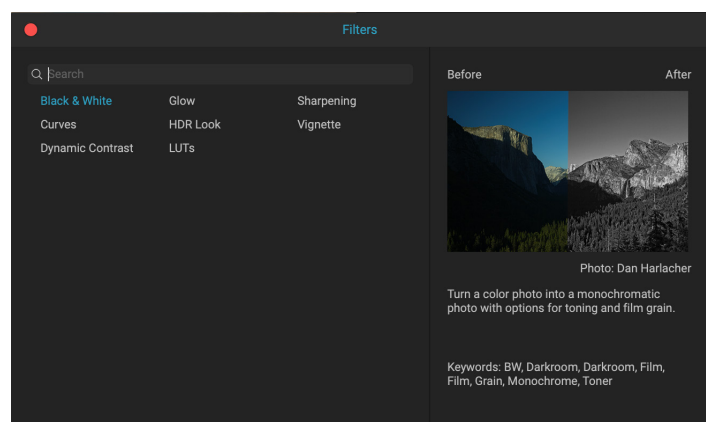
- A. Filter on/off button (left); Show/Hide Mask (right)
- B. Displays blending mode options (left); Resets filter (middle); Deletes filter from the stack (right).
- C. Filter opacity setting.
- D. Styles pane for filter presets.
- E. Control area for adjusting that filter's specific settings (dependent upon the filter chosen).



Overview of a filter—in this case, the HDR Look filter—inside Effects.

APPLYING FILTERS WITH THE ADD FILTER BUTTON

If you click the Add Filter button at the top of the Effects tab, the Filters window opens up, with a list of all nine filters. If you run your cursor over a filter name, the right side of the window will have a small before/after thumbnail, a short description, and a list of keywords that relate to that filter. To add a filter, click once on the filter name, and it will add it to the stack, above the current filter. If there aren't any filters in the stack, the new filter will be at the top of the stack. You can click and drag the title bar in any filter to move it up or down in the stack.



The Filters window opens when you click on the Add Filter button at the top of the Effects tab.

If you're not sure what you might be looking for, you can search for filters using keywords, like "monochrome," "contrast," "sharpening," and so forth. HDR will then narrow down the search to those filters that match your search terms.

APPLYING FILTERS WITH THE FILTER BROWSER

In addition to the Presets panel, Effects has an additional Filter panel on the left side of the screen. This panel lets you browse all of the filters inside Effects, and display previews of the available styles for that filter.

To choose the Filters panel, click on the Filters tab. A list of the filters will appear, and clicking on a filter will display thumbnails of your image with that filter's available styles. To choose one, click on the style, and Effects will add that filter to the Overall Settings pane. Note that this will replace the currently selected filter in the stack; to add a new one on top of the stack, click the Add Filter button at the top of the Effects tab on the right, then choose a filter from the list. (You can also click and drag the title bar of any filter and move it up or down in the stack.)

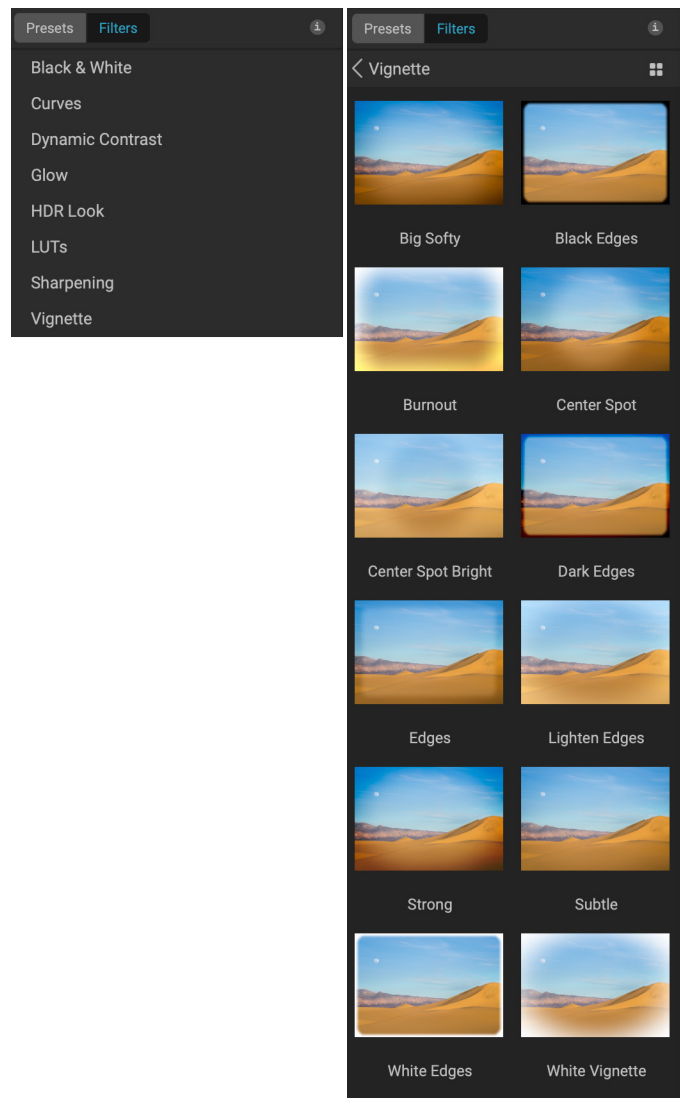
If you'd like to see a larger representation of what your selected photo will look like with a filter's styles, click on the Quick View Browser icon in the category's title bar. That will display a window with all of the presets in that category. (Press the Escape key to close the Quick View Browser.)

To change the size of the thumbnails in the filter styles panel, select the Browser Mode option from the View menu and choose One, Two or Three Column Thumbnail View. (If you choose Thumbnail from the Browser Mode submenu, the Filters and Presets panels will display as thumbnails.)

If you'd like help with what the different filter operations do, click on the Info button at the top right of the panel. With that button checked, when you hover over a filter, HDR will display a small pop-up window containing the same description (with before/after thumbnail) found in the Add Filter window. Click the Info button again to turn off this display.

Searching for filter styles inside the Filter Browser

To search for styles inside the Filter Browser, type in the name in the search field at the bottom of the panel. The search results will appear in a new subfolder called 'Search Results.'



The Filter Browser has a list of all the filters available in Effects (left). Clicking on a filter will display thumbnails of the filter's styles using your photo (right). You can also click the icon on the right side of any filter to view the styles in the Quick View Browser.

Saving filter styles as favorites

If you hover over a filter style's thumbnail in either the Filter Browser or the Quick View Browser, you'll see a heart icon. Clicking the icon will add that style to your Favorites category. This category resides at the top of the filter list, and contains all filter styles you have selected as a favorite. To remove a favorite, open the Favorites category, and click again in the heart icon.

To apply a style to a photo, simply click on the style in the Filter Browser or in the Quick View Browser.

WORKING WITH FILTER PANES

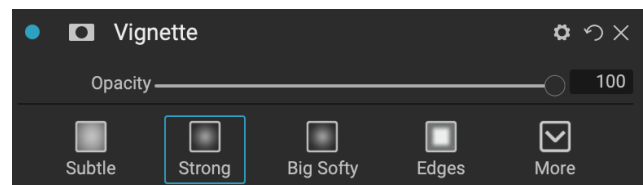
By default, the filter stack is empty, although, if you have applied a preset that uses filters from Effects, you will see those filters in the stack. Clicking the button in the top left corner of the filter pane will turn that effect on or off, which can be helpful if you want to see the effect in the context of other edits. If you don't like the effect, click on the 'X' icon in the pane's title bar to get rid of it. The Reset button, which is next to the Delete button, represented by '↺', will reset that pane's settings to their original state.

To move a filter up or down in the stack, click on the pane's title bar and drag it up or down. A heavy white line will appear between panes as you drag; let go of the mouse at the location you wish the filter to go.

TIP: Each pane can be collapsed, by clicking in the pane's title bar (a Hide/Show link is visible when you move your cursor over the title bar, but the entire title bar is clickable). If you don't want to have to scroll up and down the filter stack when you have a lot of open panes, go to the Window menu and choose Solo Mode. This will leave the current pane open, and will hide all the other panes. Clicking on another pane will open that one and collapse the previous one.

STYLES

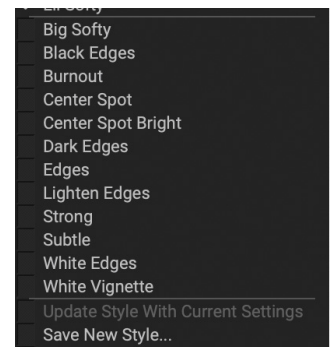
All of the Effects filters have a set of built-in styles in the top part of the pane. Styles are like preset adjustments for a pane: they provide a group of settings to help you get started in the pane, or to apply a specific effect.



Styles for the Vignette filter.

You use a style by clicking on the style's icon in the pane, and then can adjust the sliders as desired to get the right effect for your photo.

You can also save your own settings as a style. Simply click on the More icon on the far right side of the styles list for that pane, then choose Save New Style from the pop-up. Name your style, and it will then be added to the top of the More menu (see right). To apply a saved style, choose the style from the More pop-up menu. To adjust the settings for a saved style, apply it, make any changes you would like to the sliders or other options, then right-click on the More pop-up and choose Update Style with Current Settings from the menu.



Saved styles appear at the top of the More menu.

FILTER MASKS

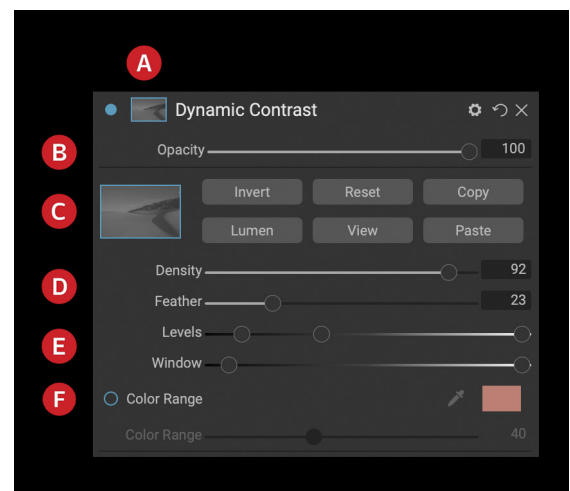
Every filter (and local adjustment) has a mask associated with it, which lets you apply that filter's effect to specific areas of an image, using the Masking Brush (or the Local Adjustment Brush and Gradient, when working in the Local tab) and Masking Bug tools. By default, the mask is white, which means that the effect is visible in every part of the image. Using the Masking Brush, for example, you can 'paint out' the effect in areas that you wish not to be affected by the filter. Alternatively, you can invert a filter's mask and choose to 'paint in' the filter where you would like it to be.

When you add a filter, the mask is technically hidden. You can add one by either selecting and using one of the two masking tools, or by clicking the Show/Hide Mask icon in the title bar of the filter pane (this icon will initially be represented with a plus sign in the middle of it). When you add a mask in either way, the contents of the Show Mask icon will represent the mask on that filter layer.

HDR has two options for viewing the contents of a mask: either as a red overlay on top of your image (the default) or a view only of the mask itself, represented as grayscale. These options are available from the Mask menu; select Show Mask to see the mask, while the View Mode option lets you switch between the two modes. (HDR will remember the previous settings.)

The Mask section of any effect or local adjustment has the following contents, as shown below (using the Dynamic Contrast filter as an example):

- A. The Show/Hide Mask icon, which displays the contents of the current mask. The default mask contents are white when you add an effect, and black when you add a local adjustment layer.
- B. Sets the overall opacity of the mask.
- C. Larger display of the current mask, with buttons to invert, reset, copy, paste, and view/hide the mask contents. The Lumen button creates a luminosity mask of the image.
- D. Density adjusts the overall mask density from black (100) to white (0). Feather blurs the mask.
- E. The Levels and Window settings let you adjust the black and white points of the mask, fine tuning them in different ways.
- F. The Color Range option lets you choose a color (selected via the dropper tool), and make or tune the mask based on the range of the color selected.



Overview of the Mask Options section of a filter pane in Effects, showing a luminosity mask. Mask Options is also applicable when working in the Local Adjustments tab, or on a layer in the Layers pane.

Luminosity Masks

A luminosity mask is a specialized mask type you can create anywhere you can create a mask inside HDR. This mask uses the brightness (or luminance) values in your image to let you target specific tonal ranges with an effect (or to hide the effect from those tones). It is ideal for subtle enhancements to very specific areas of an image.



A photo with the luminosity mask displayed in Grayscale mode (set using the settings from the Mask menu's View Mask option). Viewing the mask can help greatly when refining a luminosity mask via the Density, Feather, Levels and Window controls.

To add one of these masks, click on the Lumen button in the Mask options area or choose Create Luminosity Mask from the Mask menu. If you view the mask, you will see that it looks like a black-and-white version of your image. With a luminosity mask, your effect will be applied in an increasing amount depending upon the brightness value of the pixel underneath: if the pixel is black, none of the effect will be applied; if it is white, it will be entirely applied; for all other tones, the effect will get applied as a percentage of the pixel's brightness, from 0 (white) to 100 (black).

You can use the Levels or Window controls to further target tones with your luminosity mask. The Levels setting lets you set the black (left triangle) and white (right) points of the mask, with the midpoint, or gamma, setting being adjusted by the middle triangle. This lets you refine the mask to focus on narrow bands of luminance values in an image; for example, if you wanted to focus an effect on the midtones, bringing the white and black points into the middle of the Levels slider, and adjusting the midpoint, will help achieve this much quicker than you could with the Masking Brush.

The Window slider is similar to the Levels slider, in that it works like a black point slider from both sides. When you move the right and left triangles, all of the tonal ranges outside the points will be black, leaving those areas affected that are within the 'window' of the mask. For example, if you wanted only the shadows in your image to have an effect, you would move the right slider over towards the left by about two-thirds.

Color Range selections

The Color Range option lets you create a mask using a specific color, either one inside your image, or one via your system's color picker. To use this option, click the On button next to the Color Range section, and click the eyedropper tool to select a color inside your image that you wish to sample. You can then use the slider to expand or contract your mask based on that color: lower numbers means that fewer colors will be selected, higher numbers mean that more.

Masking tips

Here are a few tips for working with the various options in the Mask pane:

- You can use multiple masking tools to create and modify masks. For example, you can start with a luminosity mask, adjust the tonal range of the mask with the Levels or Window sliders, and then further refine your mask with the Masking Brush or Masking Bug. A luminosity mask always overrides the current mask, however, so you should start there.
- Use the Feather slider to smooth transitions between masked and unmasked sections.
- Lowering the Density slider helps intensify an effect after you've created a mask. Think of it like a 'reverse fade': at the 100, all of your mask is viewable, at 0, the mask is entirely white.
- Because it can sometimes be helpful to use the same mask on different filters, use the Copy button to grab the contents of a mask from one filter and the Paste button to paste that onto the mask of another filter.

DELETING A FILTER

You remove a filter by selecting it and pressing the 'X' icon to the right of the filter's pane.

FILTER OPACITY

Every filter has an opacity setting, which effectively adjusts the strength of the filter. The Opacity slider, which is found at the top of each filter's pane, ranges from 0 (no effect) to 100 (full effect). What this means is that at 100, all of the filter is applied to the image in the stack. At 50, the filter strength is half, and the effect is much less strong. Playing with a filter's opacity can often help soften an effect in a way that you wouldn't be able to get otherwise.

For example, if you add a Black & White filter to an image, but would like a faded, muted color effect, reduce the opacity of that filter. The more you reduce the opacity, the less effect the filter will have.

By default, when you add a filter, the opacity will be set to 100. You can create presets, however, with whatever opacity you wish for a given filter.

BLENDING MODES

In addition to opacity, you have one other very powerful option for adjusting the strength and effect of a filter: blending modes. Blend modes determine how a filter interacts with the filters below it in the image stack. Blend modes can darken or lighten an image, depending upon the mode chosen, while others adjust contrast or color. ON1 HDR 2020's blend modes also let you apply a blend mode to specific colors or tones in your image, making them a very useful tool for precision editing of your images. You can apply sharpening, for example, only to the midtones in an image, which can be very helpful in a landscape image.

To see the blending modes, click on the Blending Options gear icon at the top of a filter's pane. The Blending Options area will drop down from the top of the panel. The blending option controls are:

- **Blending Options:** A pop-up list of blending modes. There are 24 common blending modes available in the list, including Normal, Lighten, Darken, Screen, Multiply, Soft Light, Hard Light, Overlay and Color.

- **Apply To:** This lets you apply the blending mode to a specific color or tonal range. The options are; All (the default), Highlights, Midtones, Shadows, Reds, Greens, Blues, Magentas, Cyans, Yellows, Flesh Colors, Vivid Colors and Neutrals. (You can also manually choose a color range by selecting the Dropper Tool in the pane and clicking on a color in your image.)

When you choose one of the options in this menu, the adjustment is only applied to that part of the image that is based on the lightness, hue, or saturation range specified. The Range slider expands or contracts the selected option, and the Highlights, Shadows, and Skin sliders protect those settings from your adjustments.

How blending modes work

At their basic level, blend modes determine how the pixels on one layer interact with the layers below it. With 24 blend modes in ON1 HDR 2020, it might be difficult to know which ones to use in any given situation, but they can easily be grouped into Normal (the default mode) and five categories: Darken, Lighten, Contrast, Comparison, and Color/Luminosity.

Normal is the most widely used: it simply applies the effect to all of the pixels in the adjustment (or effect), assuming the layer opacity is 100%.

The other modes apply different levels of that category's effect using various mathematical formulas, and sometimes it can be hard to know which mode will work best with what photo. Most often, when you know how you want to apply an effect—by darkening, for example—you'll need to perform a bit of experimentation with the different modes in that category to determine which mode works best.

ON1 PHOTO'S BLEND MODES

	Normal
	Darken
	Multiply
DARKENS	Color Burn
	Linear Burn
	Darker Color
	Lighten
	Screen
LIGHTENS	Color Dodge
	Linear Dodge (Add)
	Lighter Color
	Overlay
	Soft Light
ADDS CONTRAST	Hard Light
	Vivid Light
	Linear Light
	Pin Light
	Hard Mix
ADJUSTS BASED ON COMPARISON	Difference
	Exclusion
	Hue
AFFECTS COLOR OR BRIGHTNESS	Saturation
	Color
	Luminosity

MASTER OPACITY, BLENDING AND MASK OPTIONS

Effects also has master opacity and master blend mode options for the entire image stack, and includes a Master mask option. The Master Opacity slider, found at the top of the Effects tab, controls the strength of the composite filter stack against the original image—if you haven't performed any other editing operations on it—or against the image as it has been inside the Edit module.

The Master Blend Mode options can be accessed via the gear icon at the top of the Edit tab. It has the same controls as the blending options in the individual filter panes.

To create a Master mask, click on the mask icon next to the Save Preset icon in the Edit tab. This mask works on the entire effects stack, letting you selectively add or remove an entire effect.

Filter Types

Effects has eight filter types available for you to use inside ON1 HDR 2020. Each filter has a set of styles in the top row, providing a range of popular or useful options for using that filter. You can also save your own preset styles by clicking the More pop-up at the end of the Styles row.

BLACK & WHITE

This pane is used to turn a color image into a monochromatic image, with some additional toning features.

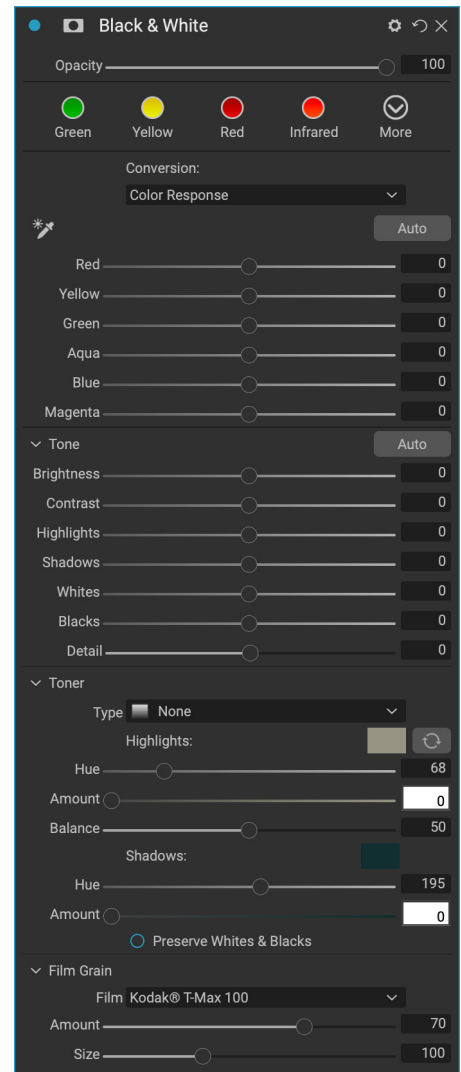
The styles at the top of the pane represent different filter types often applied to an image, while the Auto button selects the black and white points of your image automatically. To manipulate the tones manually, move the color range sliders to the right (increasing brightness) or the left (decreasing). Alternatively, you can choose the Channel Mixer option from the Conversion pop-up, and use the slider to choose a look that accentuates the color tones you are most interested in.

To change the tones directly inside a photo, choose the Color Response tool in the pane: click on it to select the tool, then click and drag in the image to increase or decrease the brightness of the selected color range.

Tone

The Tone section of the Black & White pane lets you adjust brightness, contrast, highlights and shadows, whites and blacks, and detail, directly within the filter pane.

- **Auto Button:** The auto button sets the white and black points automatically, adjusting all of the primary tone settings to balance the histogram.
- **Exposure:** Adjusting this slider to the right will lighten your image. Adjusting to the left will darken your image.
- **Contrast:** Increase or decrease the contrast.
- **Highlights:** Darkens the highlights, recovering detail.
- **Shadows:** Lightens the shadows, revealing details.
- **Whites:** Adjusts the white point, adding or removing contrast in the highlights.
- **Blacks:** Adjusts the black point, adding or removing contrast in the shadows.
- **Compression:** Compresses the tone to reveal highlight and shadow detail.
- **Detail:** Increases the local contrast in the image.



Toner

The Toner section of the filter is designed to approximate many traditional and popular darkroom-based paper toners, from sepia tones to platinum, selenium, coffee and more. You can choose from more than 20 toning options via the Type pop-up menu, and adjust the combination of paper (which is represented by the Highlights section of the pane) and silver (represented by the Shadows). To tune your options, you can adjust the Hue or Amount of each setting, and use the Swap tones icon (next to the Highlights color well) to swap the highlights and shadows colors. The Preserve Whites and Blacks button keeps the pure whites and pure blacks neutral, instead of taking on the color of the toner.

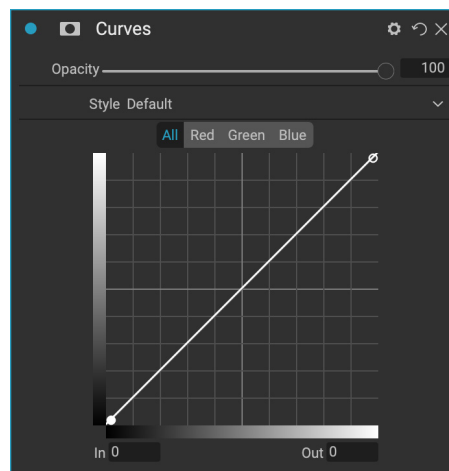
Film Grain

The last section of the Black & White pane is Film Grain, which, like the Toner section, is designed to add a classic film grain look to your photos. To add film grain, choose from the drop-down list of popular black and white films. The Amount slider controls the strength of the effect, while the Size slider adjusts the scale of the grain.

CURVES

The Curves pane is a powerful, advanced tool for adjusting contrast and color in your image. The buttons at the top of the pane let you adjust the composite RGB channel, or you can adjust the individual Red, Green or Blue channels independently.

In the main part of the pane, the left side of the X-axis represents the dark tones in your image, while the right side represents the light tones. By clicking on the line at the center of the pane and dragging it up or down, you adjust those specific tones making them lighter or darker. (It is often helpful to keep an eye on the Histogram when making adjustments with Curves.)

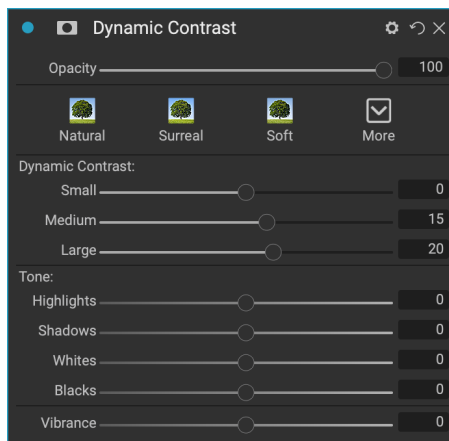


DYNAMIC CONTRAST

Dynamic contrast adds clarity—also known as tonal contrast—to your image, making it pop. It can be a strong effect, so it is often combined with masks to help lessen the effect in certain areas of an image (clouds in a sky, for example, often look surreal with too much Dynamic Contrast applied to them).

The top portion of the pane adjusts the contrast in areas of small, medium and large detail; moving the slider to the left decreases the contrast, while moving the sliders to the right increases them.

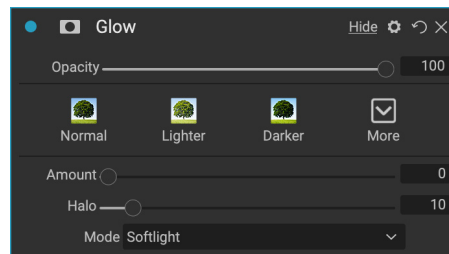
Because adjusting the contrast in extreme ways can affect an image's tonal qualities, the bottom section of the pane lets you make adjustments to the highlights and shadows to recover detail, in the white and black areas, and increase vibrance.



GLOW

This pane adds a soft-focus glow to the image. Adjustable settings for the Glow pane include:

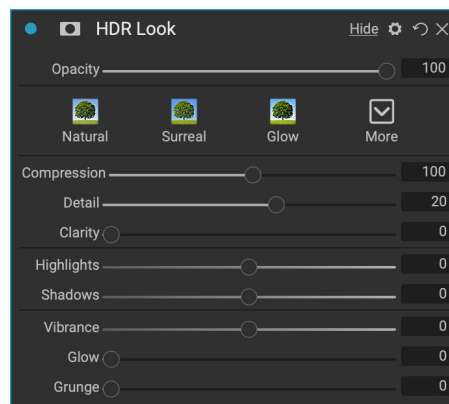
- **Amount:** Controls the overall glow strength.
- **Halo:** Sets the radius of the glow effect, creating a fuzziness to your image's edges.
- **Mode:** Lets you set the blending mode for the effect.



HDR LOOK

This filter recreates the HDR style of tone mapping, with accentuated edges and sharpening. Settings include:

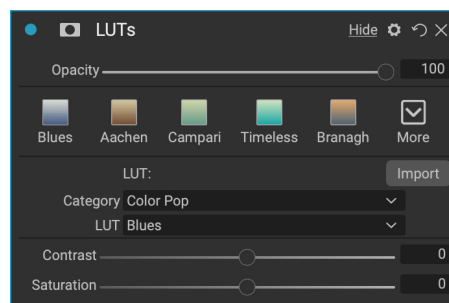
- **Compression:** Compresses the tone to reveal highlight and shadow detail.
- **Detail:** Increases the local contrast of details and edges.
- **Clarity:** Increases the global contrast.
- **Highlights:** Recovers detail in the highlights.
- **Shadows:** Recovers detail in the shadows.
- **Vibrance:** Adjusts the vibrance of muted colors.
- **Glow:** Adds a bright glow.
- **Grunge:** Adds a dark gritty look.



LUTS

The LUTs filter applies a color look-up table (LUT) to transform the underlying color of an image. LUTs were first used with video applications to provide color-grading effects to film, and they are increasingly popular in still photography. The Styles section has default effects you can apply, and you can also import your own LUTs, by clicking the Import button inside the filter. (HDR imports common LUT file formats, including .3DL and .CUBE file types.)

- **Category:** Lets you choose from one of the pre-installed LUT categories, or any imported categories .
- **LUT:** Displays the available LUTs within the chosen category.
- **Contrast:** Lets you adjust the underlying contrast.
- **Saturation:** Adds or reduces saturation.

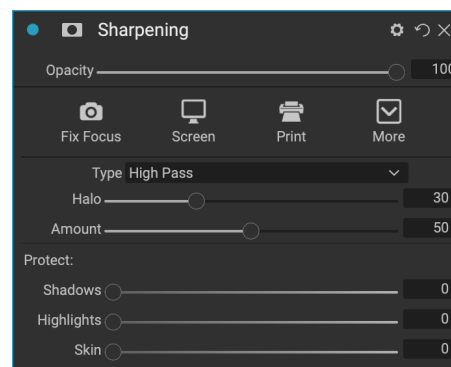


NOTE: See [page 7](#) for information on how to use the Extras Manager to import LUTs into HDR.

SHARPENING

This pane helps add sharpness to your photos, to compensate for a moving subject or a slightly out-of-focus camera, or for an illustrative effect. ON1 HDR 2020 offers three algorithms for sharpening, High-Pass, Progressive and Unsharp Mask. Which one you use depends upon the image or your personal preferences. The styles section and the More pop-up have a wide range of sharpening styles to help you get started.

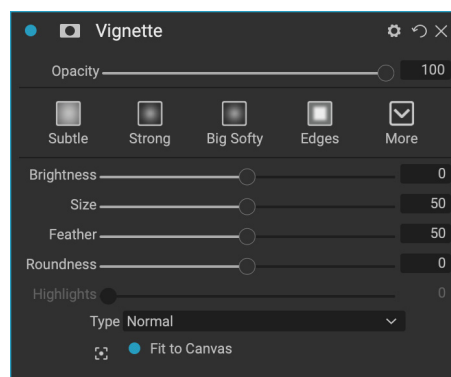
- **Type:** Chooses the sharpening method. Each sharpening method has its own set of sliders.
- **Amount (all types):** Controls the overall strength of the sharpening for each sharpening type.
- **Halo (Unsharp Mask, High Pass):** Sets the radius of the sharpening effect. Smaller amounts keep fine detail, while larger amounts can exaggerate edge detail.
- **Threshold (Unsharp Mask, Progressive):** Controls the sharpening effect based on contrast in your photo. Larger settings means that smoother areas do not get sharpened.
- **Detail (Progressive only):** Controls sharpening in small details.
- The **Protect** section protects highlight, and shadow areas and skin tones from having sharpening applied.



VIGNETTE

The Vignette pane creates flexible vignettes which focus a viewer's eye toward the center of the image by darkening the edges of the frame. The buttons at the top of the pane let you quickly apply a vignette and then customize the look with the advanced controls. Styles apply common vignette types.

- **Brightness:** Controls how light or dark the vignette is.
- **Size:** Controls the size of the vignette.
- **Feather:** Controls the hardness of the edge of the vignette.
- **Roundness:** Controls the shape of the vignette from square to round.
- **Type:** This drop-down menu lets you select a Normal, Subtle, or Soft vignette effect. The Priority option will let you preserve highlights (using the Tone & Color pane in Develop) when applying the vignette.



The Center Tool at the bottom left of the pane lets you to select the center point of the vignette. Click on the tool icon to activate and then click on the area in the image you wish to make the center of your vignette.

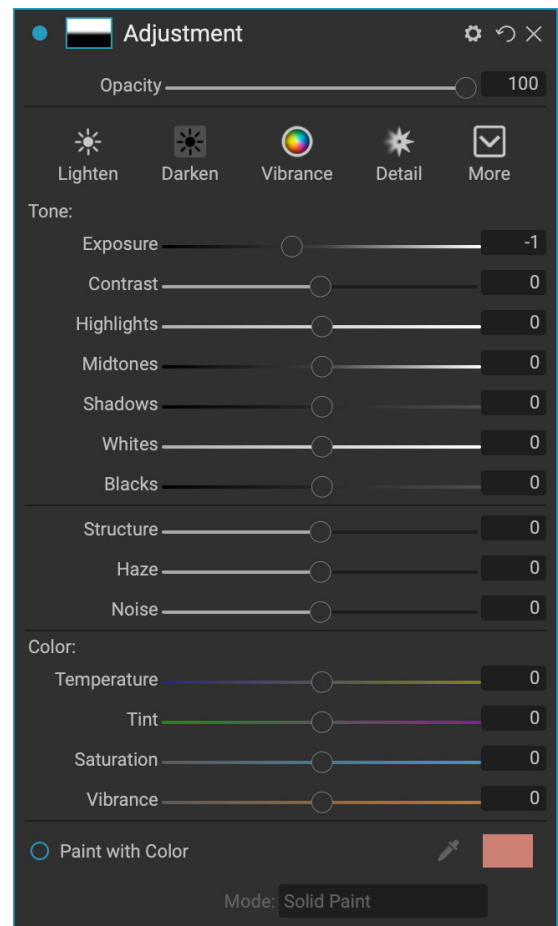
PART 6: LOCAL ADJUSTMENTS

You can easily make local adjustments to portions of an image in ON1 HDR 2020. You can apply these adjustments using either the Adjustment Brush or the Adjustable Gradient (or both, if desired). You can create as many local adjustments as you need on an image (by clicking on the Add Layer button at the top of the Local Adjustments section).

Local adjustments can be used to apply a gradient filter to darken a sky, for example, or to add a more complicated vignette to an image. Local adjustments are in essence a mask that is applied to a portion of your image, and you can manipulate those masks in powerful ways with both the blending modes and the luminosity options in the Local tabs.

Operations you can perform with local adjustments include tone (exposure, contrast, highlights and shadows, detail), color (white balance, saturation and vibrance) and detail (structure and noise). Each local adjustment layer can have completely different settings and work on different parts of your image. You can also use local adjustments to paint with color over part of a photo, to perform specialized tasks such as skin retouching or to replace the color of an object.

Local adjustments are independent from the Develop and Effects tabs; you can create a local adjustment while working in Develop, switch to Effects, and when you click on the Local tab, your local adjustments remain intact.



Adjustment panes let you adjust basic tone and color settings on the parts of the image you choose. You can also set the opacity of the adjustment, as well as apply masks (via the mask icon, top) and advanced blending options (accessed via the gear menu).

TIP: You can name each adjustment layer by double-clicking on the word 'Adjustment' in the pane. This can be helpful when you have a lot of adjustment layers and wish to remember which adjustment did what.

The Local Adjustments tab

To create a local adjustment, click on the Local tab. If there are no local adjustment layers present, HDR will add one. If you want to add additional adjustment layers, click the Add Layer button. The top of each adjustment layer includes the following options:

- **Opacity:** Sets the opacity of the adjustment.
- **Styles:** The pane has a number of canned styles for you to start with, including ones for

lightening or darkening (dodging and burning), adding vibrance, fixing teeth or red eye, and many more. (You can also save your own styles via the More pop-up menu.)

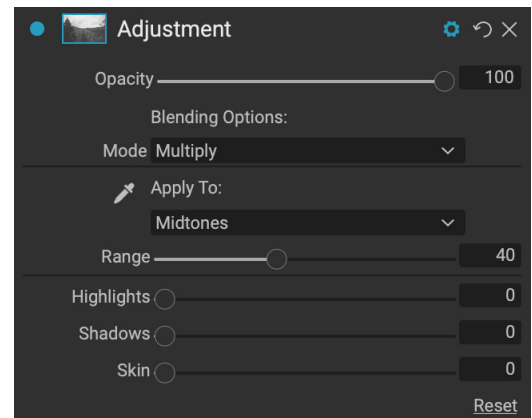
The main section of the Local tab has all of the same options found in the Tone & Color pane in the Develop tab: Exposure, Contrast, Highlights, Shadows, Detail, and Color Temperature, Tint, Saturation and Vibrance. In addition to those settings, the local adjustment pane includes a Noise slider, designed to help reduce noise on a targeted level (most often seen in the shadows).

These controls work the same way inside the Local Adjustments panel. One difference is that, since a local adjustment is actually a layer that sits on top of your global adjustments, ON1 HDR 2020 provides you with a number of blending options for each adjustment. Blending modes determine how the selected layer blend with the items below it in the image stack.

Click on the Blending Options gear icon at the top of the Local tab to drop down the Blending Options. The blending option controls are:

- **Blending Options:** A pop-up list of blending modes. There are 24 common blending modes available in the list, including Normal, Lighten, Darken, Screen, Multiply, Soft Light, Hard Light, Overlay and Color.
- **Apply To:** This lets you apply the blending mode to a specific color or tonal range. The options are; All (the default), Highlights, Midtones, Shadows, Reds, Greens, Blues, Magentas, Cyans, Yellows, Flesh Colors, Vivid Colors and Neutrals. (You can also manually choose a color range by selecting the Dropper Tool in the pane and clicking on a color in your image.)

When you choose one of the options in this menu, the adjustment is only applied to that part of the image that is based on the lightness, hue, or saturation range specified. The Range slider expands or contracts the selected option, and the Highlights, Shadows, and Skin sliders protect those settings from your adjustments.



The Adjustment pane's Blending controls give you extensive options for applying local adjustments to targeted tonal and color ranges in an image.

ABOUT BLENDING MODES

At their basic level, blend modes determine how the pixels on one layer interact with the layers below it. With 24 blend modes in ON1 HDR 2020, it might be difficult to know which ones to use in any given situation, but they can easily be grouped into Normal (the default mode) and five categories: Darken, Lighten, Contrast, Comparison, and Color/Luminosity.

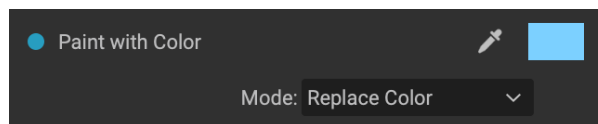
Normal is the most widely used: it simply applies the effect to all of the pixels in the adjustment (or effect), assuming the layer opacity is 100%.

The other modes apply different levels of that category's effect using various mathematical formulas, and sometimes it can be hard to know which mode will work best with what photo. Most often, when you know how you want to apply an effect—by darkening, for example—you'll need to perform a bit of experimentation with the different modes in that category to determine which mode works best. (See ["Blending Modes" on page 59](#) for more information.)

Painting with Color

The Paint with Color option at the bottom of the local adjustment panel lets you use the Local Adjustment brush to select a color and paint it into your image. It is designed for two situations: when you wish to apply softening (or evening out) to portions of an image by blending existing color, and to replace the color of an existing object.

The Paint with Color section has three options, Solid Paint, Replace Color, and Classic, and a color swatch for the chosen color. You can choose a color from your image by clicking on the eyedropper icon, or you can click on the swatch and choose a color from the system color picker.



Solid Paint will paint over anything you brush with the chosen color; think of it as painting with a Normal blending mode. Replace Color will replace the hue, but not the luminosity, of the color you are brushing over; it is essentially painting with a Color blend mode, in which whites are preserved.

The Solid Paint option is an ideal skin softening tool; use the eyedropper to select a middle tone section of skin, and, using a low opacity setting on your brush, you can paint over parts of the skin with the brush.

Working with Local Adjustments

When adding a local adjustment layer, click on the tool you wish to use in the Tool Options bar at the top of the window. The Adjustment Brush is perfect for working with specific subjects or areas in an image: a person or primary object that you wish to brighten, shadow areas that you wish to darken, and more. It works in the same manner as the regular Masking Brush: you set the paint mode (in or out), brush size, feather and opacity, and brush in the areas you wish to paint an effect in or out.

The Adjustable Gradient is designed to apply a gradient mask over a section of an image: most commonly to darken a sky, for example. Because the local adjustment tools are for working on a mask, you have all of the masking and blending options you have throughout HDR, and you can use one or both tools—in addition to the Refine, Chisel and Blur Mask tools—to refine your adjustment mask as desired.

To apply a standard gradient to a local adjustment, click on the tool, then click in the image roughly where you wish the effect to be. You'll see the outline of the gradient, which is called a bug. You can use the handles on the bug to move your gradient, increase or decrease the length of the gradient, or rotate it.

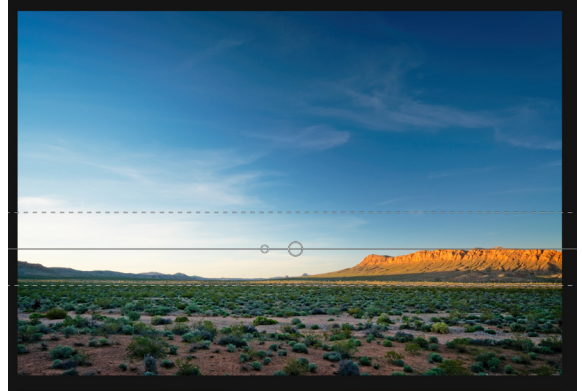
You can change the gradient shape via the Tool Options bar: in addition to the standard dark-to-light horizontal gradient, you can also create a circular gradient and a reflected gradient, which is like the horizontal gradient, but goes from black (no effect) at the outer edges to white (full effect) in the center.

TIP: To see the mask created by the Adjustable Gradient, choose Show Mask from the View menu. You can choose a red overlay, which presents the mask over your image, or grayscale, which shows the mask as black to white tones. These views can be helpful in understanding how these gradients work.

Manipulating a Linear Gradient Mask

Once you've added a gradient to an image, you can modify it by accessing the parts of the gradient overlay:

- To move a gradient, click on the big circle at the center of the gradient and drag.
- To resize a radial gradient, click and drag on the solid line.
- To adjust the feather (hardness) of the mask, click and drag along the dashed line.
- To rotate the mask, click the smaller circle near the gradient center and drag.



When working with local adjustment masks, all of the tools in the Refine group—the Refine Mask, and the Chisel and Blur tools—can be used to help give you create smoother and more realistic masks.

Other masking options

Every local adjustment has its own mask, and it uses the same masking options and controls found in Effects and Layers. To access the mask, click on the mask icon in the title bar of the local adjustment layer. There you can copy and paste masks, create luminosity masks, and create masks based on color ranges. For specific details on how to work with these masking options, see [“Filter Masks” on page 57](#).

PART 7: COMBINING PHOTOS WITH LAYERS

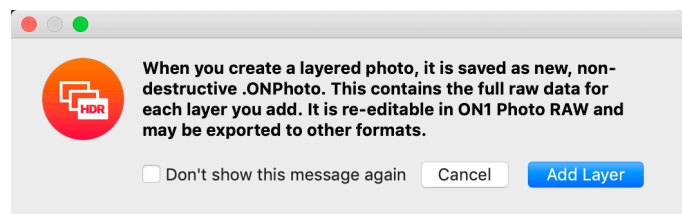


The Layers feature inside ON1 HDR 2020 is fully non-destructive. This means you can use all of the Edit module's tools, tabs and filters, along with layer-independent masking capabilities, and still preserve your original photos and can come back at any time to further enhance your creations.

The Layers functionality inside ON1 HDR 2020's Edit module lets you create quick composites, blend multiple images together, paint in new skies or backgrounds, align layers based on their content, and much more. And, because Layers is tightly integrated within the Edit module, all of your work remains re-editable at all times: you can go back and add, change or update any setting, on any layer.

You can combine multiple photos or copies of the same photo as layers. Each layer can be moved, sized and masked on its own. But more than that, each layer has its own non-destructive settings—just like any photo in HDR, all the way back to the original raw data. That means you can use all of HDR's editing features—basic exposure changes, camera profiles, Effects filters and more—as part of a layered photo.

When you add a layer to a photo, HDR automatically creates a new document with an .onphoto extension, leaving your original photo intact. This document type contains all the layer information and non-destructive editing operations made inside HDR.



Layers can be as simple as copies of the current photo, to apply more complex adjustments to portions of an image than you could with local adjustments. You can also add other documents as a layer inside the current document, for replacing skies or other backgrounds, for adding textures, or for when you wish to create complex collages. HDR supports up to 14 layers in a document.

Once you have added a layer, the entire Edit module is available for that layer. When you click on a layer, you can add any adjustment from the four edit tabs, create masks, and more. You can use the Transform tool to move, rotate, and scale the contents of a layer independently from the complete document. (Because the Crop tool works at the document level, you can't crop individual layers.)

OPENING A LAYERED PHOTOSHOP FILE

ON1 HDR 2020 can open most layered Photoshop files in the Edit module. What happens depends upon the composition and type of layers in the document:

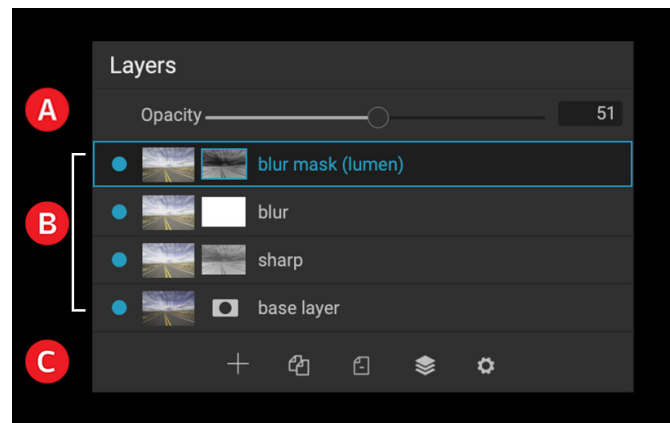
- If the layered document has basic Photoshop layers and masks, HDR will open the document inside Edit, with each layer and mask visible in the Layers pane.
- If the Photoshop file has specialty layers—smart objects, text layers, layer styles— HDR will flatten the visible layers and let you work on a composite.

In either case, HDR will convert the file to an .onphoto file, preserving your previous document.

WORKING WITH THE LAYERS PANE

The Layers pane is fairly straightforward, with three sections:

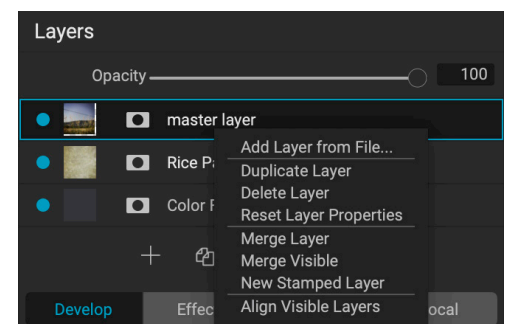
- Layer Opacity:** Reflects the opacity of the currently selected layer.
- Layers:** All of the layers in your document are listed here, with a thumbnail of the layer contents and the layer mask (if there is one); the currently selected layer has an colored outline around it (based on the Accent Color chosen in the System Preferences' General tab). You can rename a layer by double-clicking on the title.
- Layer Tools:** The toolbar at the bottom of the Layers pane includes buttons for (from left to right) adding a layer, duplicating the current layer, deleting the current layer, merging layers, and setting a layer's blending options.



The Layers pane in HDR. This photo has four active layers.

Accessing Layer Commands

Most of the layer commands in HDR can be accessed via the Layers menu, the toolbar at the bottom of the Layers pane, and a pop-up menu that you get when you right-click on any layer.



Right-clicking on a layer brings up a list of available Layers operations.

Layer Visibility

A layer's visibility can be turned on or off by clicking the button to the left of the layer thumbnail. When turned off, the layer has no effect on the composite image.

Changing Opacity

The opacity slider controls how opaque or how strong the selected layer is. The default is 100%. At lower settings, the layer will blend with the layer(s) under it. Altering the blending mode and opacity of a layer can create a wide range of color and tone effects.

Changing the Layer Order

You may change the order of layers by dragging and dropping layers into the order you prefer.

Renaming Layers

You can rename a layer by double-clicking on it. The name turns into an editable field. Type in your preferred name and press Enter.

Deleting a Layer

You may delete a layer by selecting the layer, then choosing Delete Layer from the main Layer or pop-up menus, or by pressing the Delete button in the toolbar.

Resetting layer mask and transform operations

Choosing Reset Layer Properties from the Layers menu or the pop-up will delete any layer masks or transform operations made to the current layer. To reset Develop or Effects settings or local adjustments made to a layer, click the Reset Layer button at the bottom right of the main Edit module window.

Duplicating a Layer

You may duplicate or copy the current layer by pressing the Duplicate Layer button in the pane's toolbar, or by right-clicking on the layer and choosing Duplicate Layer from the pop-up menu.

Merging Layers

You can merge two layers together: by selecting the top layer (of the two) and clicking on the merge button in the Layers pane's toolbar, by right-clicking on the layers by selecting them and pressing the Merge button in the toolbar, or via the Layer menu or the layer pop-up menu. The merged layer will inherit the name of the top layer.

You can also merge all visible layers by choosing Merge Visible from the Layer menu or pop-up. The merged composite will use the name of the layer that was selected.

Creating composites from layers

Sometimes, you'll want to create a composite of all the layers in your file, maybe to perform some final

finishing in Effects or Develop, or to preserve your current layer state (like a snapshot). To create a composite, choose Create Stamped Layer from either the Layer menu or the pop-up menu. All visible layers will be merged into a composite that is placed at the top of the Layer stack.

Changing blending modes

Blending modes determine how the selected layer blend with the layer(s) below it. The default blending mode is Normal. This maintains the full opacity of the upper layer. Layers also supports many other blending modes which can be used to alter the brightness, contrast and color of the image.

How blending modes work

At their basic level, blend modes determine how the pixels on one layer interact with the layers below it. With 24 blend modes in ON1 HDR 2020, it might be difficult to know which ones to use in any given situation, but they can easily be grouped into Normal (the default mode) and five categories: Darken, Lighten, Contrast, Comparison, and Color/Luminosity.

Normal is the most widely used: it simply applies the effect to all of the pixels in the adjustment (or effect), assuming the layer opacity is 100%.

The other modes apply different levels of that category's effect using various mathematical formulas, and sometimes it can be hard to know which mode will work best with what photo.

Most often, when you know how you want to apply an effect —by darkening, for example— you'll need to perform a bit of experimentation with the different modes in that category to determine which mode works best.

ON1 PHOTO'S BLEND MODES

	Normal
	Darken
	Multiply
DARKENS	Color Burn
	Linear Burn
	Darker Color
	Lighten
	Screen
LIGHTENS	Color Dodge
	Linear Dodge (Add)
	Lighter Color
	Overlay
	Soft Light
	Hard Light
ADDS CONTRAST	Vivid Light
	Linear Light
	Pin Light
	Hard Mix
	Difference
ADJUSTS BASED ON COMPARISON	Exclusion
	Hue
	Saturation
AFFECTS COLOR OR BRIGHTNESS	Color
	Luminosity

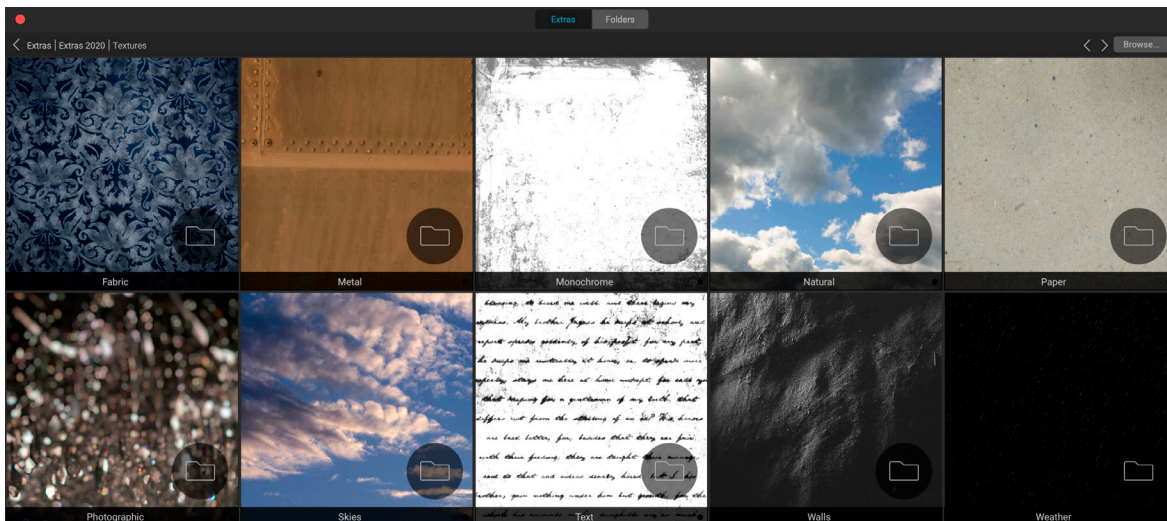
Layer masks

If you use any of the masking tools, a layer mask will be created automatically. Clicking on the layer's mask icon will display the standard HDR mask options, and you can use all of the Edit module's masking tools to create or modify layer masks. You can also copy and paste layer masks—including masks from Effects filters—via the Mask options section or via the Mask menu. See [page 25](#) for more on using HDR's masking tools.

ADDING LAYERS TO AN EXISTING DOCUMENT

When you're working in the Edit module, you can add layers to a file by choosing Add Layer from File from either the Layer menu or the Layer pop-up menu. The Add File window will come up, letting you choose from the hundreds of built-in extras that ON1 ships with HDR, or from any file that is accessible on your computer and is supported by HDR (see [“Working with Files”](#) on page 5 for more).

The default view for the Folders tab in this window is the location of the current document or image. You can navigate to any folder on your system via the Browse button in the upper right corner of the window: navigate to the folder you wish to browse, and click the Open button. The Add File window will now display the supported files. Just double-click on the one you wish to add.



When you choose Add Layer from File, a window appears with Extras and Folders tabs. The Extras tab contains backgrounds, textures (shown above) and borders supplied by ON1 with HDR, as well as any extras you might have added via the Extras Manager. Clicking on the Folders tab (or the Browse button at the top right of the window) will let you browse your computer for photos and other supported files.

The Extras tab in the Add Layer window automatically displays two folders, My Extras and ON1 Extras, each subdivided into three sub-folders: Backgrounds, Borders, and Textures. ON1 HDR 2020 ships with more than 800 free images that you can add as a layer from the ON1 Extras folders. And, if you've added any of your own backgrounds, borders or textures to HDR via the Extras Manager (see), these files will be visible via the My Extras folder.

NOTE: If the file you add is larger or smaller than the pixel dimensions of the document, use the Transform tool to resize it as desired. If you wish to preserve the original aspect ratio of the placed file, use the Shift key to resize it proportionally.

USING THE TRANSFORM TOOL WITH LAYERS

Use the Transform tool at the top of the Toolbar to manipulate layers. A layer may be repositioned, sized or rotated using the tool. When selected, transform handles will appear on the edges of the selected layer. You use these transform handles to manipulate the image. You can only transform one layer at a time.

Repositioning a Layer

To reposition a layer, simply click and drag inside the transform box. You can also use the keyboard arrow keys to nudge a layer one pixel in any direction.

Resizing a Layer

To resize a layer, click and drag on any of the transform handles. Clicking on a corner handle allows you to adjust two sides simultaneously. Clicking on a side handle allows you to adjust that side. If you hold the shift key down while adjusting the size, the proportions of the layer are maintained. If you hold down the Option (MacOS) or Alt (Windows) key while resizing, your image will resize from the center instead of from the edge. You can hold down Shift-Option (or Shift-Alt) to resize proportionally from the center.

You can type in the size you desire in the Tool Options bar in the width and height fields. You can also size a layer to fill the canvas automatically by pressing the Fill button in the Inspector.

Rotating a Layer

To rotate a layer, move the Transform tool just outside a corner transform handle. Notice that the tool cursor changes to a rotate cursor. Now click and drag to rotate the layer. You can also use Option/Alt with the left or right arrow keys to rotate a layer when the Transform tool is selected. To rotate the layer quickly in 90 degree increments, you can use the rotate left and rotate right buttons in the Tool Options bar.

Flipping a Layer

You can flip a layer either horizontally or vertically by pressing the flip buttons in the Tool Options Bar.

When you have completed your transforms you need to commit the changes. You can do this by pressing the Apply button that appears in the Tool Options Bar or by pressing the Enter key. You can cancel a transform by pressing the Cancel button in the Tool Options Bar or by pressing the Escape key.

NOTE: For detailed specifics on how to use the Transform tool's options, see [page 21](#).

ALIGNING LAYERS

One of HDR's most advanced features is the ability to align multiple layers based on content. This can be a great aid when you've hand-held a group of shots, and want to blend portions of one image onto another, to use a better sky, for example.

To align layers, open them in the Layers pane, and choose Align Layers from the Layer menu or pop-up menu. HDR will then analyze the contents of the layers, and aligns them to the one with the most commonality. When you look at the individual layers after aligning them, you'll see that some layers have been moved or rotated slightly to match the content.

An example of HDR's layer alignment can be seen in the photos below, which are handheld shots taken two days apart from the same location. The top photo is the base layer, shown after alignment, but with the second layer hidden.

The bottom photo shows the aligned layers, with a gradient mask blending the top part of the base layer with the bottom part of the other photo. Despite the fact that the photos were shot days apart, HDR has aligned the photos perfectly.



The base aligned layer.



The final aligned photos, blended together with a gradient mask from top to bottom.

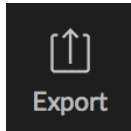
PART 5: OUTPUT AND SHARING

While editing and organizing your photos are probably the most important tasks you'll do on a regular basis inside ON1 HDR 2020, there will be times when you want to “do something else” with your photos. Whether it's enlarging photos for high-quality prints, sharing your photos with others or on social media, or printing to your desktop printer, HDR has all the functionality you'll need to get your photos where you want them to be.

In this section, you'll find detailed information on the following topics:

- **Export:** The power of ON1's patented Resize technology in an easy-to-use panel. Export your photos with flexibility and control.
- **Print:** Print your photos in any size, as individual photos, or in contact sheet form.
- **Share:** A quick way to share your photos (MacOS only).

Export



Export is a special panel that is always available in ON1 HDR 2020. The Export pane gives you the power of ON1's patented Resize technology in an easy to use panel, letting you export your photos with incredible flexibility, ease and control.

To open the panel, click the Export icon in the lower right corner of the module selector, or choose Export from the File menu. Once selected, the Export panel opens on the right side of the main HDR window, letting you select a group of options as you prepare to export a photo. By default, the panel includes two active panes, which are located at the bottom of the Export panel: File Type and Location. Adjusting these two options is required when exporting a file, but you can also expand your export options with the Photo Size, Watermark, Sharpening, Tiling, Gallery Wrap, and Rename panes.

FILE TYPE

The File Type lets you choose what format you want your photo to be exported as, along with a color profile that you wish to assign to the exported file. The type options are Photoshop, Photoshop Large Document, JPEG, TIFF, and PNG.

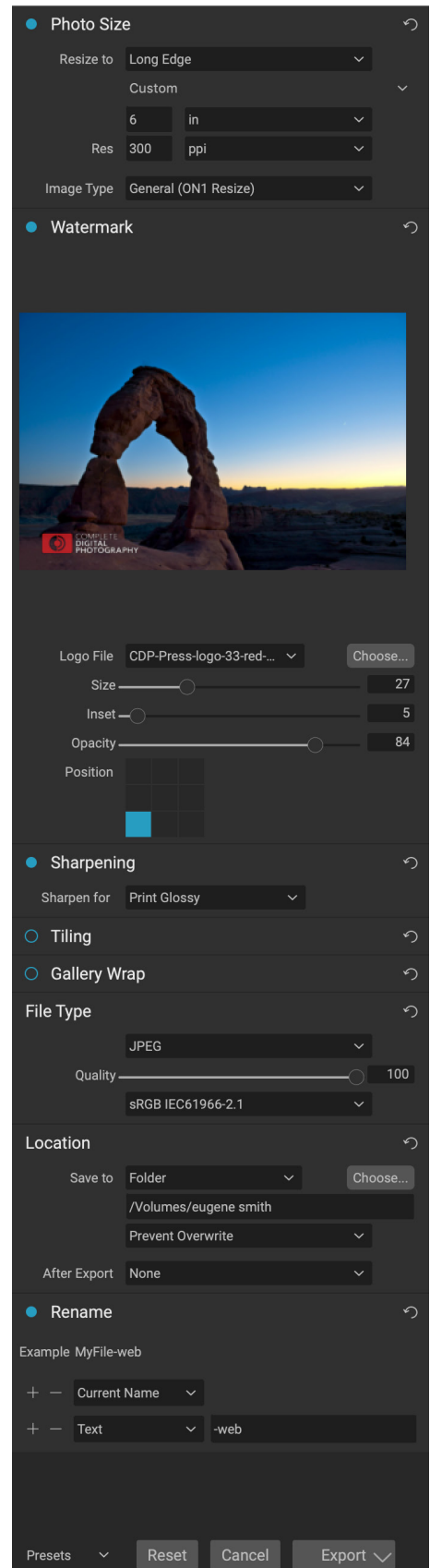
Saving as JPEG lets you choose a Quality setting, with 100 being the highest.

LOCATION

Click the Choose button to select a location, or click on the Save To pop-up for more options, including:

- **Current Folder** will write the file to the same location as the original file.
- **Folder** lets you choose a location by pressing the Choose button
- **Round Trip** (only available when exporting through Adobe Lightroom) saves the file over the original and uses the same format, bit-depth, color space and name.

With regard to the other options in this pane, If Prevent Overwrite is selected the word 'copy' will be added to the file(s); otherwise it will overwrite your original image if the destination is set to Current Location. You can also have HDR open the folder you exported your image to by choosing the Show in Finder (MacOS) or Show in Explorer (Windows) option from the After Export menu.



RENAME

This option may be used to rename the file name. The options include: Current Name, Text, Date and Number. The field to the right allows you to enter a custom name. The plus and minus icons will allow you to add or remove naming elements. Current Name will use the source name without the file extension. Text is used for assigning a custom text string. Date lets you add today's date in any one of 12 standard formats. Number creates an automatically incremented number, starting with the number input in the field. Reset will clear all current settings.

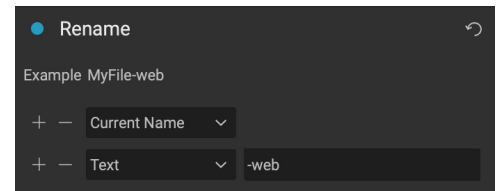
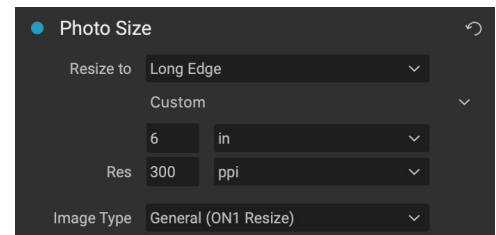


PHOTO SIZE

The Photo Size pane displays the original image size when you first open it. You can simply type into the Width or Height fields to change the document size, or you can choose from a variety of preset sizes—including standard photo paper sizes—by clicking on the pop-up menu underneath the Resize To pop-up.



Keep in mind that the Width and Height fields are locked together to maintain the photos proportions. Changing the width will change the height proportionally. Export does not support non-proportional scaling. If you would like to change the proportions of the image it requires cropping.

The Long Edge and Short Edge options in the Photo Size pane are useful when you want to lock one edge to a specific length or width and don't care about the sizing of the other edge. Simply choose which option is the important one for your photo, enter the dimensions, and Export will resize your photo accordingly.

NOTE: Export does not offer any options for cropping, and if you choose an aspect ratio that is different from that of your photo, on export, your photo will be cropped from the center point out to meet the new ratio. If you wish to crop to a different ratio, it is better to use Resize.

The units of measurement can be switched by clicking the down arrow. You also control your resolution in pixels per inch. Use this setting to optimize for your output device.

The Photo Size presets make it easy to set the width/height of your image in a preset size. Use the drop down menu to select a preset size or choose custom to create your own.

The Image Type drop down provides a few options for resizing:

- **General (ON1 Resize)** uses the ON1 Resize algorithm also known as Genuine Fractals: This is the classic, patented, fractal-based algorithm that has made Perfect Resize the standard for over a decade.
- **Low-Res JPG** is best for enlarging low resolution JPEGs (this setting use the bicubic algorithm method).
- **Portrait** works well for resizing portraits protects skin tones from artifacts (uses bicubic

algorithm method).

- **Landscape** is great for Landscape photos (uses ON1 Resize algorithm).
- **High Detail** is great for images with many small items (uses ON1 Resize algorithm).

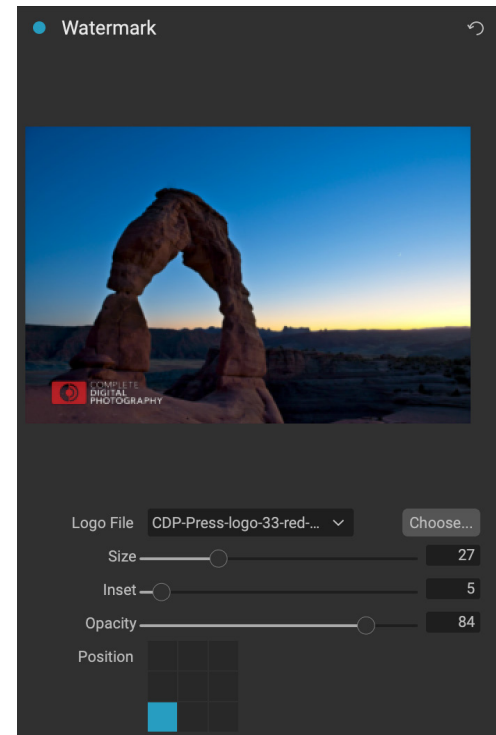
WATERMARK

The Watermark module allows you to add an overlay to the image, most often used for your logo, signature or copyright. Watermarks generally need a transparent background, so make sure your watermark file is a PNG or PSD.

The module has the following options:

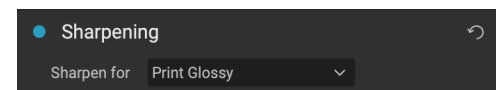
- **Choose:** Click the Choose button to select the file you wish to use as your watermark.
- **Size:** This slider controls the size of the watermark file.
- **Inset:** This will determine the percentage in which the file is inset from the edge, based on the Position (see below).
- **Opacity:** This sets the opacity of the watermark.
- **Position:** This grid sets the location of the watermark. Click on the square of the location you desire.

When working with watermarks, make sure your watermark file is sufficiently large for your usage. For example, if you want it to appear 2 inches wide on a 300-ppi image, your watermark needs to be at least 600 pixels wide. Or if you want it to appear across an entire photo—such as when posting to social media—it needs to be the same size as what you are exporting for the web, typically over 1000 pixels. Using a watermark file that is too small will create a pixelated watermark appearance.



SHARPENING

The Sharpening pane adds additional sharpness to your image, and are designed to be general options for screen or print work. Using these controls can save you the workflow step of adding additional sharpening before printing and can help compensate for loss of sharpness due to dot gain from your printer. Sharpening should only be applied at the end of your workflow, just before printing. If you plan to do additional retouching or compositing work after resizing your image, you should disable the sharpening controls.



TILING

The tiling feature in Export divides an enlargement into smaller pieces so that the image can be printed on a smaller printer.

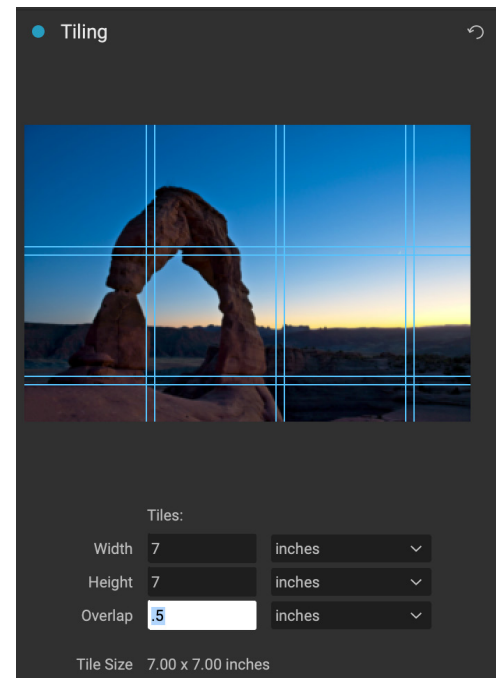
For example, you might want to create a mural that is 8 feet tall by 12 feet wide, but your printer can only print 24-inch wide strips. With the tiling feature you could automatically create four separate files that are 24 inches wide and 8 feet tall, to create your mural in sections.

With the tiling feature all you do is specify the size of paper you have to print on and if you would like the pages to overlap. Then Export will resize your image and section it down into the individual tiles.

To use the Tiling pane, follow these instructions:

1. Set the Width/Height fields to the size and orientation of paper you wish to print on, or select the number of rows and columns instead.
2. Set the Overlap size. The overlap makes each tile overlap so you can tape multiple panels together and corrects for printer margins if you are not printing borderless.

The preview will show cyan guide lines for each tile that will be created.

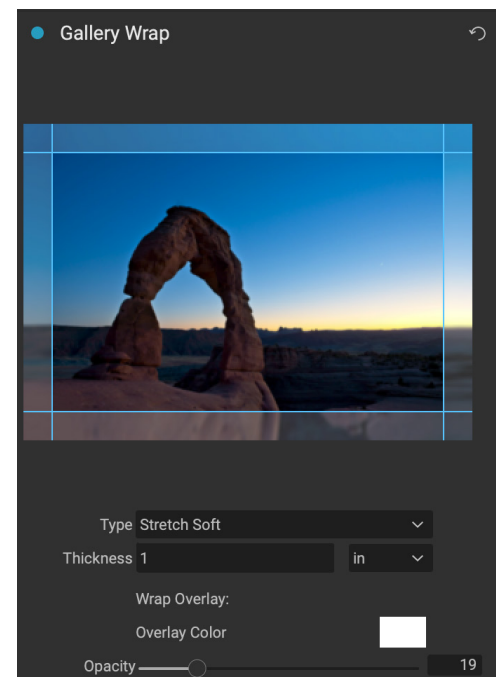


GALLERY WRAP

The Gallery Wrap feature is designed to help you print on canvas. When making enlargements for canvas it is common to wrap a portion of the image around wooden stretcher bars. These are used for mounting the canvas. These are commonly called gallery wraps. However, if the photo has important detail near the edges of the image they may be lost in the wrapping process. The Gallery Wrap feature in ON1 Resize automatically creates extended margins by reflecting or stretching the areas near the edge of the image allowing the photographer to create a gallery wrap without having to sacrifice any of the original image. The Gallery Wrap feature allows you to select the thickness of the canvas mounting bars and offers a variety of techniques for creating additional margins.

To use the Gallery Wrap feature follow these instructions:

1. Set the Thickness control to the amount of margins you would like to add. A good rule of thumb is the thickness of the stretcher bars, plus half an inch.
2. Select the Type you would like to use.
3. If you wish to add an overlay to the wrap wings, set the color and opacity.



The Gallery Wrap feature has several settings for adding margins and adjusting the look of the wrap. The Type pop-up has four options:

- **Reflect:** Copies an area equal to the thickness setting around your image, then flips each side and adds it as the margins. This is a good general purpose technique.
- **Reflect Soft:** Does the same as the Reflect method but softens the added margins.
- **Stretch:** The Stretch method takes a small area around the edge of the image and stretches it to add the margins.
- **Stretch Soft:** Does the same as stretch, but softens the added margins.

The Thickness slider controls how thick your canvas stretcher bars are. Two inches generally works well for most gallery wraps.

You can also darken the wrap or add a solid color to the wrap area with the Overlay Color and Opacity sliders.

EXPORT PRESETS

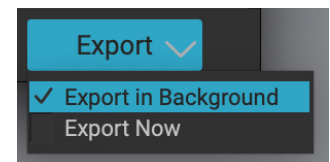
Presets remember all of the settings and details selected in the Export window pane. To save a group of settings as a preset, click the Save Preset button at the bottom of the panel. Give the preset a name, and it will appear in the Presets pop-up at the top of the Export panel.

NOTE: Unlike presets in other parts of ON1 HDR 2020, you can't export or import presets from the Export panel.

EXPORTING OPTIONS

When your export settings have been set, you have two options for exporting, accessible via a pop-up in the Export button at the bottom of the pane:

- **Export in the Background:** If you wish to keep working inside ON1 HDR during the export process, choose this option. It will take more time, since not all of the app's processing power will be dedicated to the export operation.
- **Export Now:** Choose this if you wish the export process to happen more quickly. You won't be able to work inside HDR until the exporting is done.

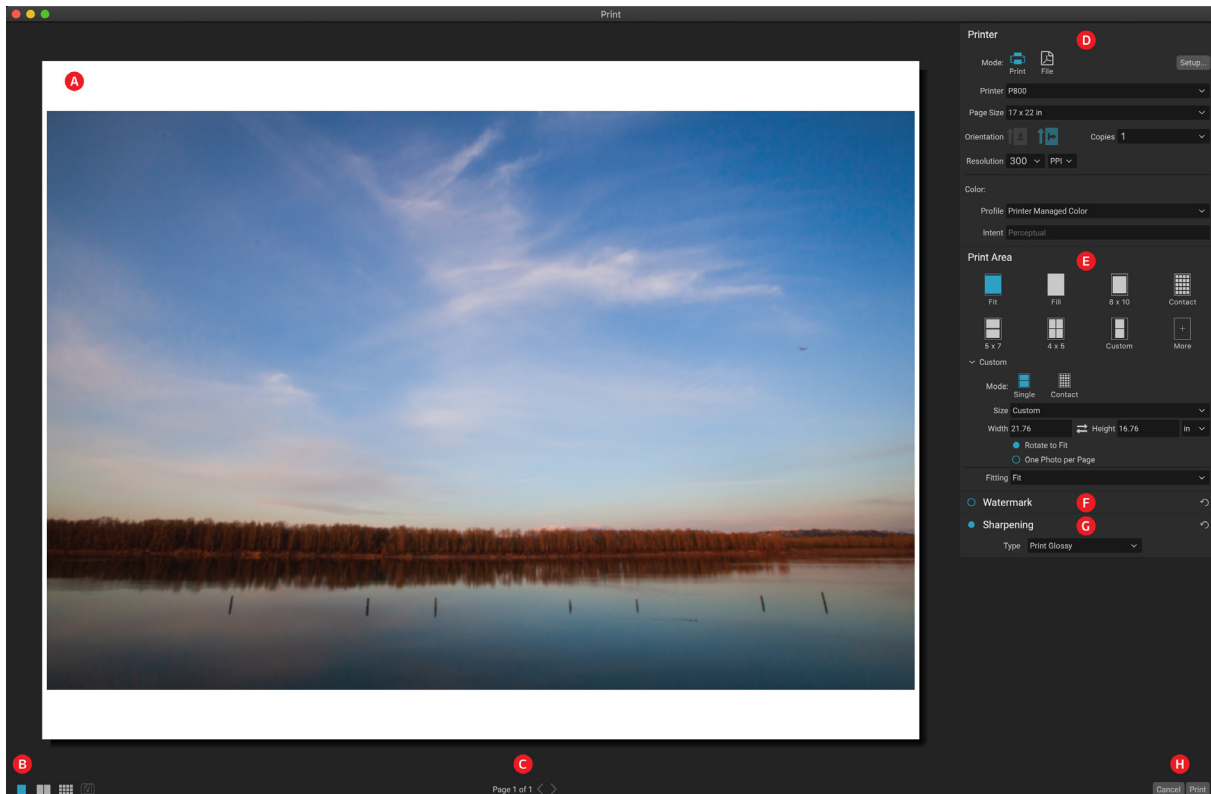


To get the options, press and hold your mouse button over the down arrow in the Export button at the bottom of the pane, then make your selection. If you just click the button without holding, the default is Export Now, although HDR will remember your last setting if you change it.

Printing

While editing and stylizing your photos are probably the most important tasks you'll do on a regular basis inside ON1 HDR 2020, there will be times when you want to print your photos or export them in different formats and sizes. Whether it's creating high-quality prints, or sharing your photos with others, ON1 HDR has all the functionality you'll need to get your photos where you want them to be.

HDR 2020 has a flexible print engine that can print photos at any size. You can print photos individually; or multiple versions of a photo, package style, on a single piece of paper. You can even print when using HDR as a plug-in from Lightroom.



The print window can be opened by clicking on the Print icon in the module selector, or by selecting the Print command from the File menu. It has the following components:

- A. **Preview:** Displays the photo or photos being printed.
- B. **View Selector:** Lets you view the photos being printed individually, in facing-page view, or in grid view. The icon on the far right turns soft proofing on and off.
- C. **Filmstrip:** Shows all of the photos that have been selected for printing, with check marks to turn printing on or off. (The Filmstrip is not visible when a single image has been selected for printing.)
- D. **Page view:** Displays the number of pages being printed, and lets you move from page to page.
- E. **Printer pane:** Contains options for output—printer or PDF—as well as printer, page setup, page size, number of copies, resolution, and printer profile and rendering intent.
- F. **Print Area pane:** Contains options for fitting and selecting the print image size.

- G. **Watermark pane:** For adding a watermark to printed photos.
- H. **Sharpening:** Options for sharpening during the print process.
- I. **Print/Cancel:** Print One (current image), Print All, or Cancel.

NOTE: The print engine in HDR 2020 is based upon the engine inside ON1 Photo RAW 2020, which has the capability to print multiple photos at a time. Because HDR can only edit a single photo at a time, some options, like contact sheets and some view settings, are not applicable in ON1 HDR.

The four panes in the Print window—Printer, Print Area, Watermark, and Sharpening—each deal with a specific printing-related task.

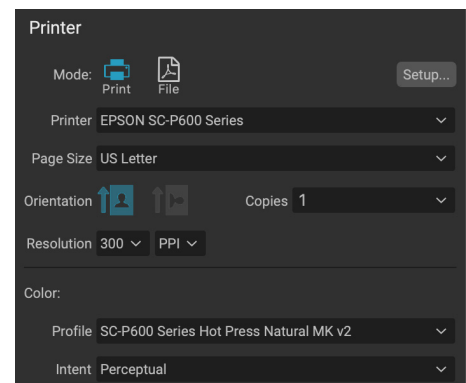
PRINTER PANE

The Printer pane is where you set the printer-specific features for your output. It has two modes, which are chosen by clicking on the icon at the top of the pane: Print, which lets you print to a connected printer, and File, which will print the selection to a PDF.

When choosing to output to a printer, you'll set the specifics of your printer, the paper size you wish to print to, the resolution, orientation, and the number of copies. When choosing resolution, make sure that you are printing at the printer's optimal resolution. Most photo printers, for example, work best with a file that has between 240 and 360 ppi. (HDR will use its internal resampling engine to ensure that your photo is at the print resolution you choose.)

At the bottom of the pane is a section for choosing a printer-specific color profile; choose the media profile for the paper type you are printing to.

The rendering intent is related to the conversion of an image's colors to fit within the color range (or gamut) of the printer. The default intent, Perceptual, will change all of the colors in a photo proportionally to fit within the printer's range of colors. The other option, Relative Colorimetric will only change the colors out of the printer's gamut, to the closest in-gamut color. Depending upon the image, you might need to play with the intent settings, but Perceptual is usually the best place to start. (You can use HDR's Soft Proofing feature to look at out-of-gamut colors in your photos. See [“Soft Proofing” on page 40](#) for more.)



The Printer pane sets printer-specific options for the current print job. You can also choose to render the print job to a PDF file.

NOTE: HDR's Print feature will work with borderless printing options as well. Be sure to choose your printer's borderless options in the page setup pop-up. Different printers will have specific borderless settings, so check the manual to see how to turn borderless printing on.

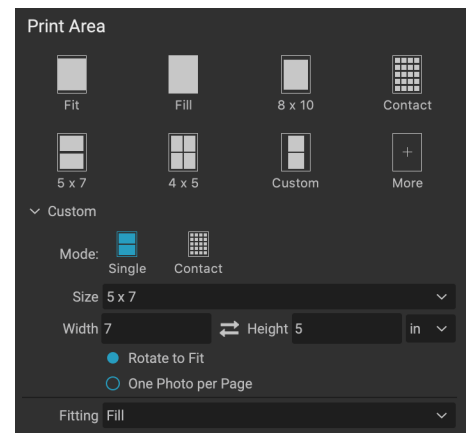
Printing to a file

In addition to sending images to a printer, you can also choose to export the current print job to a file. This can be helpful if you are submitting prints to an online service or to print remotely. To use this option, click on the File icon at the top of the pane. HDR will ask you for a filename and a location to save the file. Choose a page size for the file from the Page Size pop-up, and adjust your print area settings. When you choose Print, HDR will create a PDF of the photo (or photos) and save it with the name and destination you specified earlier.

PRINT AREA PANE

The Print Area pane is where you set the options for the size of the print, and how you wish your photos to be printed. You can also choose whether to print photos individually or package-style. (The contact sheet option, while present, is not applicable in HDR, as it is largely designed to gang-print a set of different photos.)

The top of the pane includes preset styles for either fitting the current photo inside the size of the print, or filling the entire size of the print. It also includes options for printing at common print sizes, including 8x10, 5x7, 4x6; and options for printing to a contact sheet. You can also create custom print sizes via the Custom section at the bottom of the pane; just set the width and height of the print size, and whether you wish to fit the image to the print size, or to fill the frame with it. If you would like to save this print size as a style, click on the More pop-up at the top of the pane, and choose Save as New Style from the menu. You'll then be able to recall that style from the More pop-up whenever you print.



The Print Area pane is for setting the actual print size of the photo or photos you are printing.

If you are printing multiple copies of a single photo, HDR will attempt to put as many photos at your chosen print size on the paper size as defined in the Printer pane. To print only one photo per page, click that option at the bottom of the Print Area pane.

Page size vs. print size

It's worth understanding the distinction between the page size and the print size. In some cases, the two will be identical. For example, if you wish to print on 4x6-inch photo paper, you would choose that option in the Printer pane's Page Size pop-up, and then 4x6 in the Print Area's Custom pop-up. Depending upon the aspect ratio of your photo, you then might need to choose Fit or Fill to get the proper crop. Fit does exactly what it sounds like: it will fit the entire photo within the bounds of the photo's dimensions, which means that there could be some extra white space around the final print. Fill will resize the photo to fill the dimensions of the chosen print size, centering the image.

In our example, a 4x6-inch print has an aspect ratio of 2:3. If the photo you are printing has that aspect ratio, then Fit and Fill do the exact same thing: the photo will fill the print area without any cropping.

For package printing, where you wish to generate multiple prints on a larger sheet of paper, you'll set the specific size paper you are printing to in the Printer pane, and then set the appropriate print size for each photo in the Print Area pane.

WATERMARK PANE

The Watermark pane adds an overlay to the printed image, and is most often used for your logo, signature or copyright. Watermarks generally need a transparent background, so make sure your watermark file is a PNG or PSD.

The module has the following options:

- **Choose:** Click the Choose button to select the file you wish to use as your watermark. Once you've added a watermark file, it will be saved to the Logo File pop-up.
- **Size:** This slider controls the size of the watermark file.
- **Inset:** This will determine the percentage in which the file is inset from the edge, based on the Position (see below).
- **Opacity:** This sets the opacity of the watermark.
- **Position:** This grid sets the location of the watermark. Click on the square of the location you desire.

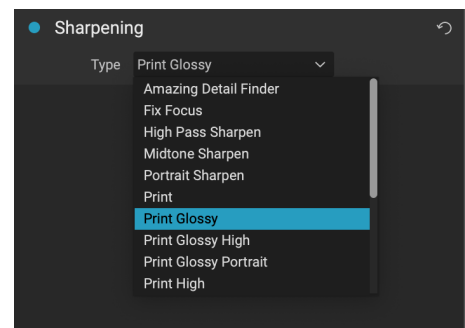
When working with watermarks, make sure your watermark file is sufficiently large for your usage. For example, if you want it to appear 2 inches wide on a 300-ppi image, your watermark needs to be at least 600 pixels wide. Otherwise, it could appear pixelated on the print.



SHARPENING PANE

In most cases, and depending upon the media type you print to—glossy papers often benefit from additional sharpening, for example—you'll need to add an additional sharpening step when printing. This is an additional level of sharpening beyond anything you might have applied in the Edit module.

The Sharpening pane lets you select a type of sharpening that will be applied to your photos during the printing process. The pop-up menu has a set of options for general sharpening, including ones for a standard print, glossy papers, details, high-pass sharpening, and many more. Depending upon the image, you might need to play with the settings here; performing test prints on small sections of a photo can often be quite helpful in determining the proper level of sharpening in a print.



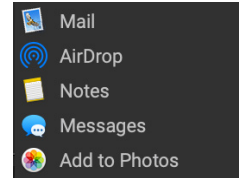
Use the Sharpening pane to add additional sharpening to your printed image.

Other Sharing Options (MacOS Only)



In addition to SmugMug publishing, the MacOS version of ON1 HDR 2020 includes other photo-sharing options, including:

- **Mail:** Creates a new email message in Apple Mail with the shared photo.
- **AirDrop:** Uses Apple's AirDrop networking feature to share with local MacOS or iOS devices.
- **Notes:** Adds the shared photo to Apple's Notes app. You can choose to create a new note, or add the photo to an existing note.
- **Messages:** Shares photo to Apple's Messages app.
- **Add to Photos:** Adds the photo to Apple's Photos app.



All of the sharing options perform the same operation: HDR exports a full-size JPEG of the selected photo and shares it with the selected target from the list.

PART 9:
ON1 HDR 2020 REFERENCE
MENUS AND PREFERENCES

EDIT MENUS

ON1 HDR (MacOS Only)

- **About ON1 HDR:** Opens the About box and displays your version number. (This is in the Help menu on Windows)
- **Preferences:** Opens the preferences dialog. (In the Edit menu on Windows)
- **Quit ON1 HDR:** Quits ON1 HDR 2020.

ON1 HDR 2020	
About ON1 HDR 2020	
Preferences...	⌘,
Services	▶
Hide ON1 HDR 2020	⌘H
Hide Others	⇧ ⌘H
Show All	
Quit ON1 HDR 2020	⌘Q

File Menu

- **Quick Export:** Saves the current image in Photoshop, TIFF, JPEG or PNG format.
- **Export:** Opens the export side panel.
- **Print:** Opens up the print dialog box.
- **Manage Extras:** Opens the Extras Manager window.

File	
Quick Export...	⇧ ⌘S
Export...	
Print...	⌘P
Manage Extras...	

Edit Menu

- **Undo:** Removes the last file operation.
- **Redo:** Redoes the undo operation. This is only available if the last thing you did was an undo.
- **Undo Delete:** *[unused]*
- **Redo Delete:** *[unused]*
- **Cut:** Cuts the currently selected item.
- **Copy:** Copies the currently selected item.
- **Paste:** Pastes (copies) the items in the clipboard to the current location.
- **Delete:** *[unused]*
- **Revert:** Reverts to the original state of the current photo.
- **Preferences (Windows):** Opens the Preferences dialog.

Edit	
Undo	⌘Z
Redo	⇧ ⌘Z
Undo Delete	
Redo Delete	
Cut	⌘X
Copy	⌘C
Paste	⌘V
Delete	
Revert	

Layer Menu

- **Add Layer from File:** Lets you add a new file to the current document as a layer.
- **Delete:** Deletes the currently selected layer.
- **Duplicate:** Duplicates the currently selected layer.
- **Reset Layer Properties:** Removes any applied layer masks or transforms to the current layer.
- **Merge Layer:** Merges the current layer with the one beneath it.
- **Merge Visible:** Merges all of the visible layers into a new, merged layer.
- **New Stamped Layer:** Merges the visible layers into a new, composite layer, leaving the visible layers intact.
- **Align Visible Layers:** Aligns visible layers based on their content.

Layer	
Add Layer from File...	⇧ ⌘ O
Delete	
Duplicate	⌘ J
Reset Layer Properties	
Merge Layer	⌘ E
Merge Visible	⇧ ⌘ E
New Stamped Layer	⇧ ⌘ J
Align Visible Layers	

Photo Menu

- **Rotate 90 Degrees CW:** Rotates an image clockwise by 90°
- **Rotate 90 Degrees CCW:** Rotates an image counterclockwise by 90°

Photo	
Rotate 90 Degrees CW	⌘]
Rotate 90 Degrees CCW	⌘ [

Mask Menu

- **Invert Mask:** Inverts the mask, what was hidden is revealed and vice versa.
- **Reset Mask:** Resets the mask to plain white.
- **Copy Mask:** Copies the mask.
- **Paste Mask:** Pastes the mask.
- **Create Luminosity Mask:** Creates a luminosity layer mask based off of a photo's black or white tonal values.
- **Show Mask:** Displays the current mask either as a red overlay or as grayscale.
- **View Mode:** Sets the Show Mask mode to either red overlay or grayscale.

Mask	
Invert Mask	⌘ I
Reset Mask	
Copy Mask	
Paste Mask	
Create Luminosity Mask	
Show Mask	^ M
View Mode	▶

Settings Menu

- **Reset All Settings:** Resets all of the Edit module settings on a photo.
- **Reset Develop Settings:** Resets settings applied in Develop.
- **Reset Effects Settings:** Resets settings applied in Effects.
- **Reset All Retouching Tools:** Resets retouching applied in Edit.
- **Reset Local Adjustments:** Resets any local adjustments.
- **Reset Crop:** Resets any cropping made to a photo.
- **Save Settings as Preset:** Saves the editing settings of the selected photo as a preset.
- **Update Preset with Current Settings:** If an image with a preset has had some settings changed, this lets you update the preset with the new settings.
- **Rename Preset:** Renames a preset.
- **Delete Preset:** Deletes a preset.
- **Export Preset:** Exports a preset as an ON1 preset file.
- **Import Preset:** Imports ON1 preset files.
- **Get More Presets:** Goes to ON1's Photo Presets web page.

Settings

Reset All Settings ⌘R
Reset Develop Settings
Reset Effects Settings
Reset All Retouching Tools
Reset Local Adjustments
Reset Crop

Save Settings as Preset...
Update Preset with Current Settings...
Rename Preset...
Delete Preset

Export Preset...
Import Preset...
Get More Presets...

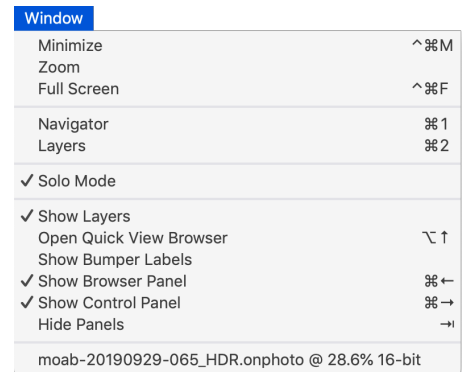
View Menu

- **Zoom In:** Zooms the preview window in one increment. This will make the preview image larger.
- **Zoom Out:** Zooms the preview window out one increment. This will make the preview images smaller.
- **Fit to Screen:** This sets the preview image so that the entire image is on screen at once. Think of this as an overview of the entire image. This is the setting you will use most of the time.
- **Actual Pixels:** This sets the preview image so that it zooms to actual pixels or 1:1 also called 100%. This setting allows you to see every pixel in the image. This is useful when making precision adjustments.
- **Preset Browser:** Sets the Preset panel browser view to 1, 2 or 3 columns.
- **Show Clipping:** Shows the clipping overlay view, displaying the pure white or black pixels in the current image.
- **Show Focus Mask:** Displays a green overlay on those portions of the current image that are in focus.
- **Show Preview:** Toggle to enable or disable the preview.
- **Compare:** Displays an adjustable split-screen view of the current image, with the Before view on the left side of the preview area.
- **Preview Background Color:** Lets you set the background color options.
- **Enable Soft Proofing:** Turns on soft proofing for the current image.
- **Gamut warning:** Displays colors that the printer can't reproduce with a red overlay.
- **Profiles:** Displays a list of installed printer and display profiles; choosing a profile will apply soft proofing for that profile's paper type.
- **Intent:** Lets you switch between perceptual or relative rendering intent for the current image.
- **Simulate Paper and Ink:** When turned on, HDR will set the white point and black point of the display to account for that of the chosen profile.

View	
Zoom In	⌘+
Zoom Out	⌘-
Fit to Screen	⌘0
Actual Pixels	⌘⇧0
Preset Browser	▶
Show Clipping	⌘J
Show Focus Mask	⌘⇧J
✓ Show Preview	\
Compare	⌘Y
Preview Background Color	▶
Enable Soft Proofing	⌘S
Gamut warning	
Profiles	▶
Intent	▶
Simulate Paper and Ink	

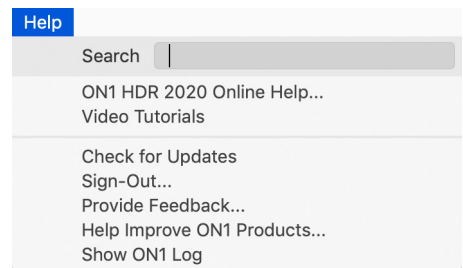
Window

- **Minimize:** Minimizes your screen.
- **Zoom:** Zooms your window to full-size.
- **Full Screen:** Toggles full-screen mode (hides menus).
- **Navigator:** Hides or shows the Navigator, Loupe, Histogram and Info pane.
- **Layers:** Collapses the Layers pane.
- **Solo Mode:** Keeps only one pane open at a time.
- **Show Layers:** Completely hides/shows the Layers pane.
- **Open Quick View Browser:** Opens the Quick View Browser overlay for the selected preset category.
- **Show Bumper Labels:** Hides/reveals the text labels in the module selector.
- **Show Browser Panel:** Hides/shows the Browser Panel.
- **Show Control Panel:** Hides/shows the Control Panel.
- **Hide Panels:** Hides or shows all Panels.
- **Document Name:** Shows the name, zoom level and bit depth of the open image.



Help

- **Search:** Searches the menu options (MacOS only).
- **ON1 HDR 2020 Online Help:** Opens ON1.com support page in your default web browser.
- **Video Tutorials:** Opens ON1.com product training page in your default web browser.
- **Getting Started:** Opens the initial HDR startup screens.
- **Check for Updates:** Checks with the ON1 update server to see if you are running the current version. If there is a newer version, you will be notified and be walked through the update process.
- **Sign-In/Sign-Out:** Uses your ON1 account login information to authenticate your copy of ON1 HDR 2020.
- **Provide Feedback:** Opens the default web browser and goes to the feedback page of the ON1 website.
- **About ON1 HDR (Windows Only):** Opens the about box with the version number displayed.
- **Help Improve ON1 Products:** Opens the Improve ON1 Products dialog.
- **Show ON1 Log:** Diagnostic tool that can help ON1 support when you're having issues with ON1 HDR 2020.



PREFERENCES

ON1 HDR 2020 has a number of system-wide settings that you can set via the Preferences window. To access Preferences, either click on the gear icon at the lower left side of the screen, or choose Preferences from the ON1 HDR 2020 menu (MacOS) or the Edit menu in Windows.

The Preferences window has three tabs—General, Plug-Ins, System—and are described below.

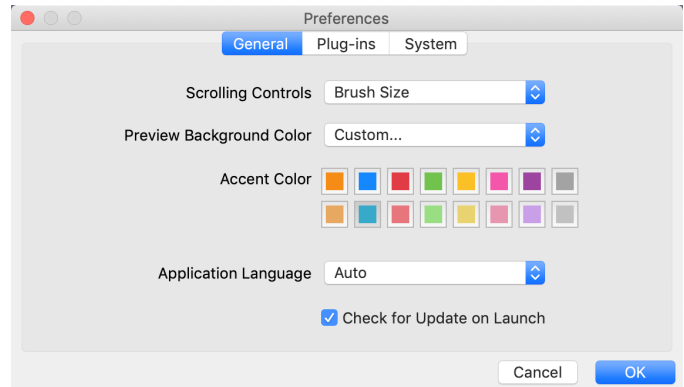
GENERAL SETTINGS

The General settings tab adjusts basic settings for the HDR workspace, including background color, scrolling controls and more.

Scrolling Controls

Lets you select how the mouse scroll wheel or scrolling gesture works. The options are:

- **None:** Default.
- **Preview Zoom:** Adjusts the zoom of the preview window. Scrolling up increases the zoom, scrolling down decreases the zoom.
- **Preview Pan:** Pans the image, like using the pan tool or navigator. It is important that the panning is comfortable, not too fast or slow or jerky.
- **Brush Size:** Adjusts the size of the current tool if relevant, such as a brush tool.



Preview Background Color

You may select the color of the background behind the preview image. The default color is black. There is options for black, white, light gray, dark gray and custom. The custom option has a color picker where you can select your own background color.

Accent Color

Lets you choose the display color for highlighted items (folders, tabs, selections) in the HDR interface.

Application Language

Lets you change the display language for ON1 HDR 2020. Auto will use your system's default language.

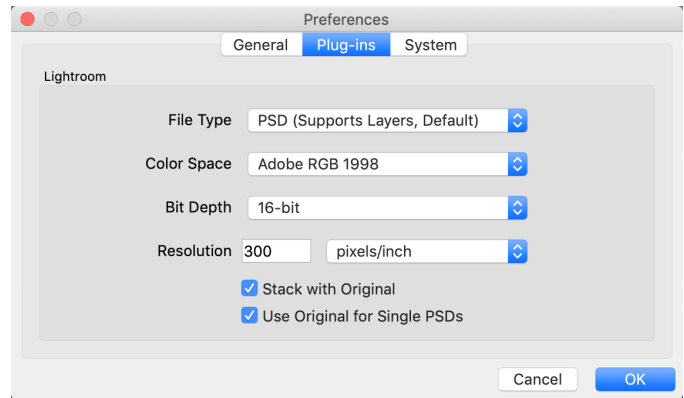
Check for Update on Launch

Enabled by default, the product will communicate with ON1's software update server when you start ON1 Photo; if an update is available it will prompt you to download or skip.

PLUG-INS

The Plug-Ins tab is specific to using HDR as a plug-in Lightroom. This preference lets you choose the specific options for files opened via the Plug-In Extras menu in Lightroom:

- **File Type:** The file type drop-down menu determines what type of file will be created. The default is PSD, which maintains layers. You can also select JPG or TIFF if you prefer those formats and are not concerned about maintaining layers. The last option is same as source, which maintains the file type of the original file, except for Lightroom raw files, which are saved as PSDs.
- **Color Space:** Sets the working color space; Adobe RGB, sRGB or ProPhoto RGB.
- **Bit Depth:** Sets the file bit depth, either 8-bit or 16-bit per pixel.
- **Resolution:** The resolution drop-down menu determines the resolution of the file.
- **Stack with Original:** When enabled, the new image is stacked with the original image.
- **Use Original for Single PSDs:** When enabled, if you select a single PSD file, it will be edited directly, rather than having a copy made.



SYSTEM

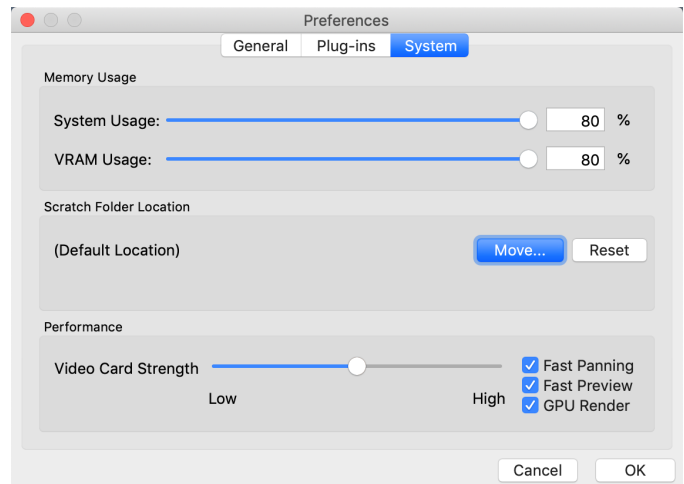
The System tab sets performance-related characteristics of HDR 2020.

Memory Usage

- **System Usage:** Specifies the amount of RAM that is used by the application. The maximum (default value) is 80%.
- **VRAM Usage:** Specifies the amount of video memory (VRAM) that is used by the application. The maximum (default) is 80%.

Scratch Folder Location

This setting lets you move or reset your memory cache, which helps speed editing operations while you're running HDR. This is helpful if your system drive has limited space and wish to use a faster external drive as a cache. This cache information is purged each time you quit the application.



Performance

The Performance section is designed to help you optimize HDR for your specific setup. The adjustments you can make are as follows:

- **Video Card Strength** balances updating the preview of the image and the movement of brushes and gradient tool overlays. If your brush is sticking try turning it down. If you have a high-end video card try turning it up for faster preview updating.
- **Fast Panning** reduces the preview quality (makes it less sharp) while panning the photo to improve performance of panning.
- **Fast Preview** reduces the preview quality (makes it less sharp) while painting or making other adjustments to improve paintbrush performance. This is off if you have a high-end video card.
- **GPU Render** uses the GPU (video card) to render preset thumbnails, exporting, printing, sharing and caching. This can greatly improve performance. It is on by default for systems that support it. It may be disabled on lower-end GPUs.



ON1 HDR 2020 User Guide

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