



...SNS-HDR Lite 2...

...February 10, 2017...

...Verified as of February 10,2017...

Home page with program description, system requirements, recommended system configuration, and related links: <http://www.sns-hdr.com/> ...Web page may be in Polish so use a Google or Bing browser translator, if needed.

Sebastian Nibisz has generously made available his core algorithms for image blending/tone-mapping in his free Lite program Version 2. A tremendous opportunity to utilize tone-mapping presets with little or no user input that will produce photo-realistic images if one has the interest to use a console/command-line program or the available GUI as an adjunct to a favored image editor, such as Picture Window Pro. **NOTE: a 64-bit Windows operating system is required for Version 2 which may reduce processing times by half or more of those times experienced using Version 1.**

Part 1: SNS-HDR_Lite.exe...

Download SNS-HDR Lite [current version: SNS-HDR Lite v2.1.3.1, 9.6MB] from:

http://www.sns-hdr.com/files/SNS-HDR_Lite.exe

This download when executed will (1) install by default SNS-HDR Lite files in a "C:/Program Files/SNS-HDR Lite 2/" folder with a non-user accessible SNS-HDR 'dcraw.exe' version 9.27.1.1 which is used to convert supported input camera RAW files.

This is a Windows Console or Command-Line program with the following options (switches) essentially unchanged from v1.4.22:

```
The command line syntax:
SNS-HDR Pro.exe [OPTION_1] ... [OPTION_N] SOURCE_IMAGE_1 ... [SOURCE_SIMAGE_N]

Processing options:
-da          Disable alignment
-dd          Disable ghosts reduction
-pm          360 Panorama mode

Image size reduction options:
-x1 -x2, ..., -x8

Presets options:
-default -interior -landscape -ldr -natural -neutral -night

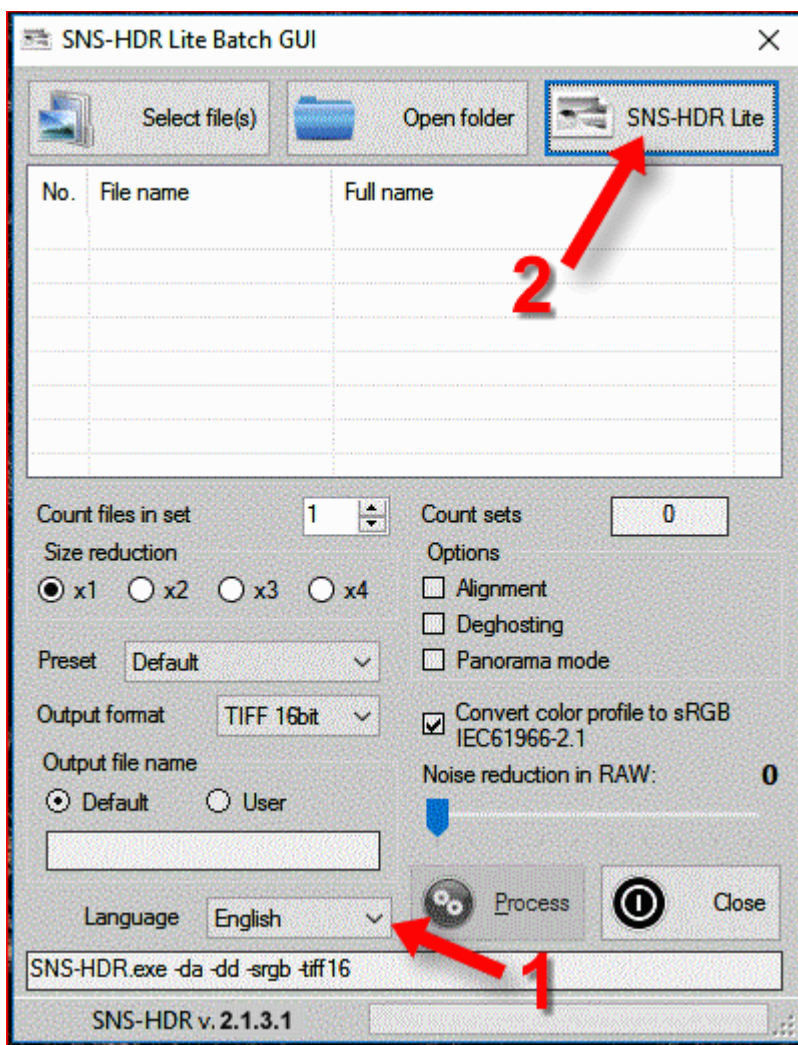
Output image options:
-jpeg        JPEG format (default)
-tiff8       TIFF 8-bit format
-tiff16      TIFF 16-bit format
-srgb        Convert image to sRGB color space
-o PATH      Output file name
-ee PATH     Opening image in external editor

Example:
SNS-HDR Pro.exe -pm -landscape -jpeg -srgb -o H:\DstImage.jpg H:\SrcImage.tif
Press any key to continue . . .
```

Part 2: SNS-HDR_Lite_GUI.zip ...[SNS-HDR Lite Batch GUI.exe]...

Download SNS-HDR Lite GUI [current version: SNS-HDR Lite Batch GUI v1.0.0.0, 35KB] from:
http://www.sns-hdr.com/files/SNS-HDR_Lite_GUI.zip

The GUI will allow you to access the Lite 2 tone mapping Presets and batch processing of multiple single exposure images or multiple exposure image sets.



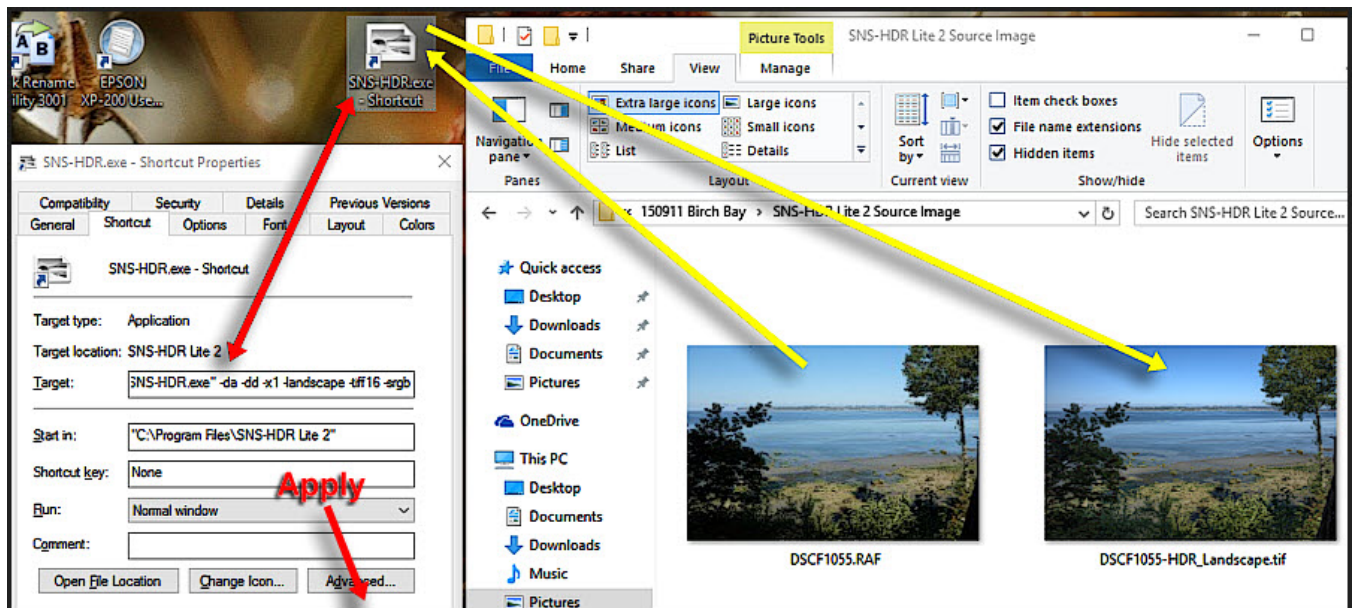
This download when 'Extract'-ed to a selected folder and a desk top application link to 'SNS-HDR Lite Batch.exe' provides a user GUI [graphical user interface] to select program options and load image files. Open the GUI: (1) select English from the drop menu and (2) select the 'SNS-HDR Lite' button, then browse to and select the 'SNS-HDR.exe' file in the "C:/Program Files/SNS-HDR Lite 2/" folder. 'SNS-HDR v.2.1.3.1' should appear in the lower left frame corner. These selections will be remembered the next time the GUI is opened.

Note: When using this GUI with SNS-HDR Lite 2: (1) the Presets: Dramatic or Soft, if selected from the Preset drop menu are not available and will be the same as selecting/processing with the Default preset; (2) the option to open the processed image in an 'external editor' is not available, (3) 'Noise reduction in RAW' is "0" regardless of selected setting; and (4) the processed image is placed in the input image(s) folder with suffix "-HDR(number of images in a set)_Preset name" by default.

Part 3: Using SNS-HDR Lite 2 without a GUI...

- ...1) Create a Desktop program link to "C:\<path>\SNS-HDR.exe"
- ...2) Right click on the Desktop shortcut and left click 'Properties'
- ...3) Add desired program 'Options' after "C:\<path>\SNS-HDR.exe" of the Target box and left click Apply
- ...4) Drag and Drop from a 'Source Folder' an input image or image exposure set
- ...5) Program will execute [load, merge, tone-map] and save the Output Image in the 'Source Folder' with the suffix *-HDR_TonemapPreset.*

In the following illustration, selected program Options are: 1) as there is only one Source Image, disable alignment and disable ghosts reductions; 2) no size reduction; 3) landscape tone-map preset; and 4) 16-bit tiff, sRGB output:



Hint: Rather than use the Win10 File Explorer dialog as illustrated... use the File Open dialog of a previously opened, 'Restore Down' Picture Window Pro 'active' session so that when the Output Image appears, it can be double clicked and opened directly into the work space.

Part 4: ddraw.exe for SNS-HDR for camera RAW file input...

For SNS-HDR Lite/Home/Pro Version 2, 'ddraw.exe' is no longer user accessible in the program folder. Version 2.1.3.1 uses 'ddraw9-27' for the latest [supported camera RAW file conversions](#)... A favored approach is described in **Part 5A** as 'ddraw' does not always provide the 'best' conversions when 'gallery quality' prints are preferred... particularly in the case of Fujifilm X-Trans sensor camera RAF file conversions.

If of further interest, a Windows stand-a-lone console program compile for 'ddraw.exe' [v9-27] can be downloaded here:

<http://www.sns-hdr.com/files/ddraw.exe>

Use the method described in **Part 3** to convert camera RAW files to un-sharpened, full-size 16-bit, sRGB tiffs with options: "C:\<path>\ddraw.exe" -v -w -6 -T in the Desktop shortcut's Property Target box.

Part 5: Favored workflows using SNS-HDR Lite and PWP... ...general descriptions/comments...

- A. RAW file conversions to tiff...
While SNS-HDR Lite 2 will convert/process **dcraw.exe** supported camera raw file formats, to avoid excessive: (1) interpolation artifacts; (2) chromatic aberration/purple-fringe artifacts; and (3) chroma/luma noise, it may be preferred to convert the raw file(s) to tiff(s) in an external editor [camera manufacturer's software or PWP] where these objectionable characteristics can be directly addressed and reduced to a preference... ...then use the resulting tiff(s) file(s) as input to the SNS-HDR Lite 2 image blending/tone-mapping algorithms.
- B. SNS-HDR Lite 2 input images can be: **dcraw.exe** supported camera raw file formats, jpegs, or tiffs. Image sets for blending/tone-mapping must have the same file format and should essentially 1:1 register [pixel to pixel and overall pixel dimensions] for best results.
- C. Consider blending image areas from more than one SNS-HDR Lite 2 preset image version if a preset shows a visual element in the scene more preferentially by using PWP's Composite-Blend transform and/or 1:1 Cloning. For example, image areas from a Default or Night image version into a Natural or Landscape image version.
- D. Care is needed when using the 'PWP Composite-Blend' transform to ensure that the Input and Overlay images have 1:1 registration... **...an out-of-camera JPEG, a camera manufacturer's Raw conversion, a PWP Raw Dialog conversion, and a SNS-HDR Raw conversion can have differing overall dimensions depending upon how each treats edge pixels...** ...sometimes these edge pixel dimensions can be asymmetrical requiring offset cropping for 1:1 registration... ...If you have the patience consider Composite-Blending two SNS-HDR images resulting from the same Input image or image set, perhaps: one with a Neutral or LDR [Low Dynamic Range]; and another with a Default or Night preset...
- E. ...reserved for possible future comments...