



# Faramir Paint Shop Pro Script Pack

version 3.1.2005.06.20

work in progress

## Install procedure

1. unzip those scripts in `..\Paint Shop Pro x\` directory.
2. delete previous "Faramir\*.pspscript" files from the `/Scripts-Trusted` directory.
3. if you use a non english version of Paint Shop Pro.
  - move the file "Python Libraries\FaramirSupportFunctions.py" into your language "Python libraries directory".
  - add the "Scripts-Trusted" directory to your "Preferences/Files location/Scripts trusted".

## Personalizing the scripts to your needs

Most of my scripts feature a **Parameters section** that is located just below the header. This section allows you to personalize the script to your need.

### Example: Faramir Export

#### **Default values:**

```
# Signature options
bSignatureEnable = 1
szSignatureText = u'Photographer © $EXIFYear'
szSignatureFont = u'Arial'
nSignaturePosition = 8
```

#### **Changed values:**

```
# Signature options
bSignatureEnable = 1
szSignatureText = u'Daffy Duck / ISO: $EXIFISO - Shutter: 1/$EXIFShutter / $EXIFYear'
szSignatureFont = u'Comic sans MS'
nSignaturePosition = 1
```

Those new values will place the signature at the top center in Comic sans MS font. The EXIF directive will be translated at runtime.

## User manual – Scripts help

### *Faramir Export*

Purpose: export your pictures to a “shareable” format. (smaller, signed, framed...)

Target: users that need to quickly share a lot of pictures.

Batch compatible: YES

#### Details:

This script does the following optional steps:

- **EXIF orientation:** rotates your image according to the EXIF information. (compatible camera required)
- **Crop to desired aspect ratio:** fits your pictures to your paper/screen aspect ratio.
- **Stairway interpolation:** resizes the images using small steps to prevent aliasing.
- **Border and drop shadow:** adds a border and a drop shadow around the picture.
- **Signature:** signs your picture. It can include EXIF information on the fly.
- **Image save:** saves the image in JPEG. The filename is appended with a ‘\_small’ suffix.

Parameters:

Parameter	Value	
<b>Autorotate</b>		
bAutorotate	0 or 1	Activates the automatic EXIF rotation.
<b>Crop options</b>		
bCropEnable	0 or 1	Activates the automatic cropping.
dCropRatio	1 to 1.5 to *	Final image aspect ratio.
nCropPosition = 4	4 (center)	Cropping position. (0 top left / 8 bottom right)
<b>Resize options</b>		
bResizeEnable	0 or 1	Activates the stairway interpolation resizing.
bResizeByMin	0 or 1	Resizes the image by it's smaller side.
nResizeTarget = 512	1 to 512 to *	Final image size.
nResizeList	LPA	Parameter array required to compute the number of steps to resize the image efficiently.

<b>Border options</b>		
bBorderEnable	0 or 1	Activates the border creation.
nBorderWidth	1 to 35 to *	Border width.
<b>Drop shadow options</b>		
bDropShadowEnable	0 or 1	Activates the drop shadow.
<b>Signature options</b>		
bSignatureEnable	0 or 1	Activates the signature.
szSignatureText	u'Photographer © \$EXIFYear'	Signature text. Can include EXIF directives.
szSignatureFont	u'Arial'	Signature font.
nSignaturePosition	8 (bottom right)	Signature position.
nSignatureSizeList	LPA	Parameter array required to compute the text size.
bSignatureShadowEnable	0 or 1	Activates the signature shadow
nSignatureShadowList	LPA	Parameter array required to compute the shadow position offset.
<b>Flatten all layers when done</b>		
bFlattenAll	0 or 1	Flatten the layers at the end of processing.
<b>Save options</b>		
bDeleteEXIF	0 or 1	Removes EXIF data from the final image.
bSaveEnable	0 or 1	Activates the image saving.
nCompressionFactor	1 to 5 to 99	JPEG compression factor. (1 = best quality)
nChromaSubSampling		
szSaveExtension	u'_small'	Suffix appended to the filename.

### ***Faramir Focus Split***

Purpose: build an image from 100% crops of the original image. (focus quality, noise or post processing comparison)

Target: advanced users that benchmark their lenses or their workflow.

Batch compatible: YES

### ***Faramir Pano Rotate***

Purpose: simulate a rotation around the panoramic picture axis.

Target: panoramic photographers that need to rotate their pictures

Batch compatible: NO, rotation offset is manually inputted to

#### Procedure:

- Measure the desired rotation offset using one of PSP tools. Ie: selection box from source to target
- Run the script.
- Enter the rotation offset. (positive offset shifts the image to the right)

### ***Faramir Pano Split***

Purpose: split an image into multiple sheets.

Target: panoramic photographers that need to print their pictures on multiple sheets.

Batch compatible: YES

### ***Faramir Portrait Blur***

Purpose: give an ethereal / romantic look to your portraits.

Target: photographer that like ethereal / romantic portraits.

Batch compatible: YES but not optimal

#### Procedure:

- Run the script.
- Tweak the opacity of the Blur layer.
- Flatten all the layers.

### ***Faramir Provia***

Purpose: simulate the color saturation of Fujifilm Provia film.

Target: photographers that like the popping color of the Provia film.

Batch compatible: YES but not optimal

#### Procedure:

- Run the script.
- Tweak the opacity of the Provia layer.
- Flatten all the layers.

### ***Faramir Smart USM Mask***

Purpose: smartly enhance the sharpness of your pictures using an edge mask.

Target: users that need to tweak the sharpness of their pictures.

Batch compatible: YES but not optimal

#### Procedure:

- Run the script.
- Tweak the opacity of the Darken and Lighten layers.
- Use the airbrush on the mask to tone down the USM effect.
- Flatten all the layers.

### ***Faramir Smart USM***

Purpose: quickly smartly enhance the sharpness of your pictures.

Target: users that need to tweak the sharpness of their pictures.

Batch compatible: YES but not optimal

#### Procedure:

- Run the script.
- Tweak the opacity of the Darken and Lighten layers.
- Use the airbrush on the mask to tone down the USM effect.
- Flatten all the layers.

### ***Faramir Stacker***

Purpose: stacks all the opened images to enhance the noise and dynamic range.

Target: advanced users that shoot long exposures.

Batch compatible: NO

### ***Faramir Stairway Percent***

Purpose: resize the pictures without jaggies or aliasing.

Target: users that resize their pictures.

Batch compatible: NO

#### Procedure:

- Run the script.
- Enter the resizing percentage. (values below 100% shrink the image)
- *Interactive mode only: enter the number of resizing steps.*

## ***Faramir Stairway***

Purpose: resize the pictures without jaggies or aliasing.

Target: users that resize their pictures.

Batch compatible: NO

### Procedure:

- Run the script.
- Enter the resizing percentage. (values below 100% shrink the image)
- *Interactive mode only: enter the number of resizing steps.*

## ***Faramir Velvia***

Purpose: simulate the color saturation of Fujifilm Velvia film.

Target: photographers that like the popping color of the Velvia film.

Batch compatible: YES but not optimal

### Procedure:

- Run the script.
- Tweak the opacity of the Provia layer.
- Flatten all the layers.

## Developer manual – Support functions help

### ***FaramirStairwayInterpolation***

```
# *****  
# Function:      FaramirStairwayInterpolation  
# Author:       Fabrice Roux aka Faramir.fr  
# Purpose:      rescales the current image in multiple steps in order to preserve  
#               image quality and prevent aliasing  
# Returns:  
# Parameters:   Environment - PSP environment :)  
#               nOrigX - original image width  
#               nOrigY - original image height  
#               nDestX - destination image width  
#               nDestY - destination image height  
#               nSteps - number of steps from original to destination  
# Notes:  
# *****
```

### ***FaramirSupportCheck***

```
# *****  
# Function:      FaramirSupportCheck  
# Author:       Fabrice Roux aka Faramir.fr  
# Purpose:      Checks the current Faramir support function pack version. This will  
#               allow to detect support script pack version mismatch.  
# Returns:  
# Parameters:   Environment - PSP environment :)  
#               nRequiredVersion - the minimum required version of the support pack  
#               nIdealVersion - the ideal version required to have the best results  
# Notes:  
# *****
```

## ***FaramirPSPVersionCheck***

```
# *****
# Function:      FaramirPSPVersionCheck
# Author:       Fabrice Roux aka Faramir.fr
# Purpose:      Checks the current Paint Shop Pro version. This will
#               allow to detect major version mismatch.
# Returns:
# Parameters:   Environment - PSP environment :)
#               nRequiredVersion - the minimum required version of PSP
#               nIdealVersion - the ideal version required to have the best results
# Notes:
# *****
```

## ***FaramirExifAutoRotate***

```
# *****
# Function:      FaramirExifAutoRotate
# Author:       Fabrice Roux aka Faramir.fr
# Purpose:      Automatically rotate the current image according to EXIF orientation
#               It requires a camera with an orientation sensor + all EXIF information.
# Returns:      rotation applied to the image
# Parameters:   Environment - PSP environment :)
# Notes:
# *****
```

## ***FaramirSplit***

```
# *****
# Function:      FaramirSplit
# Author:       Fabrice Roux aka Faramir.fr
# Purpose:      Splits the current image into n images according to the aspect ratio.
# Returns:
# Parameters:   Environment - PSP environment :)
```

```

#           nSplitX - number of horizontal chunks
#           nSplitY - number of vertical chunks
#           dAspectRatio - aspect ratio of the target images
#           bSaveEnable - automatic image save (--> image_00_01.jpg)
#           bFileClose - automatically close the saved image to save some RAM
#   Notes:   The SelectAll + Crop is required to workaroud a PSP bug.
# *****

```

### ***FaramirProRata***

```

# *****
#   Function:   FaramirProRata
#   Author:    Fabrice Roux aka Faramir.fr
#   Purpose:   computes a proportional value included in [nMinValue, nMaxValue]
#   Returns:   the computed value
#   Parameters: nMeasure - the measure (width, height,...)
#               lParams contains:
#                 ValMin - the lower limit of the value
#                 ValMax - the higher limit of the value
#                 MesMin - the measure that gives the min value
#                 MesMax - the measure that gives the max value
#   Notes:
# *****

```

### ***FaramirEXIFtoString***

```

# *****
#   Function:   FaramirEXIFtoString
#   Author:    Fabrice Roux aka Faramir.fr
#   Purpose:   replace the EXIF directive by their respective value in order to build
#               a variable signature string.
#               'Photographer (c) $EXIFYear' --> 'Photographer (c) 2005'
#   Returns:   the string with EXIF fields
#   Parameters: Environment - PSP environment :)

```

```
#          szControlString - the string with EXIF directives
# Notes:    Current date and time is used if EXIF field is empty
# *****
```

### ***FaramirStringDefault***

```
# *****
# Function:  FaramirStringDefault
# Author:    Fabrice Roux aka Faramir.fr
# Purpose:   returns a default value if the parameter string is empty
# Returns:   the parameter string or the default string
# Parameters: szParameter - the string that controls everything
#            szDefault - the default string value
# Notes:
# *****
```

### ***FaramirPanoramaRotate***

```
# *****
# Function:  FaramirPanoramaRotate
# Author:    Fabrice Roux aka Faramir.fr
# Purpose:   rotates a 360° panoramic image
# Returns:
# Parameters: Environment - PSP environment :)
#            nPixelOffset - offset to apply to the panoramic image
#            bVerticalRotation - option to rotate a vertical panorama
# Notes:
# *****
```

### ***FaramirPosition***

```
# *****
# Function:  FaramirPosition
# Author:    Fabrice Roux aka Faramir.fr
# Purpose:   calculates the points required for cropping or adding text
```

```

# Returns: dictionary containing 2 crop points, 1 text point and 1 text alignment
# Parameters: Environment - PSP environment :)
#             nPosition - one of the 9 possible pre defined positions (0-8)
#             nMarginX - horizontal margin of the current image
#             nMarginY - vertical margin of the current image
#             nSizeX - target crop horizontal size
#             nSizeY - target crop vertical size
#             nTextOffset - offset to compensate the text size
# Notes:
# *****

```

### ***FamirStacker***

```

# *****
# Function: FaramirStacker
# Author: Fabrice Roux aka Faramir.fr
# Purpose: stacks all the opened images in either sum or average mode
# Returns:
# Parameters: Environment - PSP environment :)
#             bAverageMode - flag to activate the averaging stacking mode (denoiser)
# Notes:
# *****

```

### ***FamirExtractNumber***

```

# *****
# Function: FaramirExtractNumber
# Author: Fabrice Roux aka Faramir.fr
# Purpose: extract the numeric value out of an EXIF string
# Returns: the numeric value or 0 if unable
# Parameters: szString - string containing the value. (ie: 'F/5.6 (343)' -> 5.6)
# Notes:
# *****

```