



# QR Code® Generator Plugin for Adobe® Photoshop®

## Manual

Version: 2.0

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QR Code® Generator Plugin for Adobe® Photoshop® - Create scalable and sizable QR Codes directly in your composition.

You can generate them in custom sizes without any aliasing effects and so recognition is optimized. The QR Codes are generated offline, no internet connection is required.

You have 4 levels to choose the reconstruction rate (redundancy level) depending on your needs. It's recommended to use "high quality" for Design & Art QR Codes.

QR Codes can be generated as:

- URL (Link, Facebook like, Twitter follow, googleplus profiles, Youtube channels)
- Contact information (vCard 2.1 and MeCard Format)
- Calender events
- Wifi networks
- Geo location
- SMS
- Phone number
- Plain text

**Questions? Contact our customer support:**

[support@EVENX.com](mailto:support@EVENX.com) or visit <http://www.evenx.com>

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## I. Overview

### **System requirements**

- Windows PC ( *Windows Vista x32/x64, Windows7 x32/x64*)  
and
- Adobe® Photoshop® CS/CS2/CS3/CS4/CS5/CS6 (32/64bit compatible)  
or Adobe® Photoshop® Elements 4/5/6/7/8/9/10

### **Supported modes**

- Color modes: 8/16/32 bit/Channel RGB/CMYK/LAB/Multichannel/Grayscale Mode
- Character encoding: UTF-8

### **Installation and uninstall**

To install the plugin execute the delivered file and follow the instructions. Please restart your host application afterwards.

You can access the plugin via filter menu (**Filters->EVENX->QR Code Generator**).

To uninstall the plugin start the uninstaller in the Windows-list of installed programs.

It is not necessary to uninstall trial or older version prior update installation. Our installer will detect former versions and remove them automatically.

### **Upgrade policy**

Our policy is to let our customers participate in our innovations.

**Purchasing a product includes a 1-Year-Upgrade-Support.**

Every update will be automatically delivered to our customer base.

We will send the upgrade directly to the email address you provide with you order.

### **Trial version restrictions**

There are no restrictions or limits in using the Trial version of this plugin. Within this version the string „powered by EVENX.com“ is added to every generated QR Code. This enlarges the resulting code.

Please buy full version to remove this string.

### **Trademarks**

QR Code is registered trademark of DENSO WAVE INCORPORATED.

Adobe and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Windows, Windows 2000, Windows XP, Windows Vista and Windows 7 are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

## II. GUI Description

Main Dialog:

The screenshot shows the 'QR Code® Generator' dialog box. Callout boxes highlight the following features:

- Interaction mode:** zooming, panning, moving QR Code.
- Content type:** Text, URL, SMS, Phone number, Contact (selected), Calendar event, Wifi network, Geo location.
- Content fields:** adapting on selected content type.
- New layer:** creates QR Code on separate layer.
- Module size:** in pixel units.
- Reconstruction rate:** (tolerated reading errors) L..7%, M..15%, Q..25%, H..30%.
- Border:** (default is 4) in module units.
- Preview zoom controls:** located at the bottom left of the preview window.
- Add variable:** a button to insert variables into the content field.
- Data controls:** loading, saving, clear forms, clear all forms.
- Position:** relative/absolute, offset adjustment sliders.
- Color settings:** adjust foreground and background code color.
- Background blending:** merges background with existing pixels in layer.
- Coding content:** shows the data encoded in the QR Code.

**Preview zoom controls**

**Add variable**  
(focus on text field enabled button)  
insert data from list (format %VAR%)  
**p** full path and filename  
**n** filename without extension  
**ne** filename and extension  
**e** extension of file  
**d** directory path of file  
**dp** parent directory of file  
**t** change date/time of file  
**tc** creation date/time of file  
**ta** access date/time of file  
**tn** now (current date/time)  
**w** document width  
**h** document height  
**win** document width in inch  
**hin** document height in inch  
**wcm** document width in cm  
**hcm** document height in cm  
**dpi** document dpi (pixel per inch)  
**dr** document ratio

**Data controls**  
 loading  
 saving  
 clear forms  
 clear all forms

**Position**  
 - relative/absolute  
 (important for scripting)  
 - offset adjustment sliders

**Color settings**  
 adjust foreground and background code color  
**Background blending**  
 merges background with existing pixels in layer  
**0%** transparent QR background  
**100%** full overlay

**Coding content**  
 shows the data encoded in the QR Code

### Dialog „Add Variable...“

If you have selected a variable, that contains a time, you can set the time format

**List of variables**  
select one to insert

**Available time and date formats**  
Dropdown list is enabled, if time variable is selected to insert

<b>M</b>	month {1..12}
<b>MM</b>	month {01..12}
<b>MMM</b>	month {jan..dec}
<b>MMMM</b>	month {january..december}
<b>d</b>	day {1..31}
<b>dd</b>	day {01..31}
<b>ddd</b>	day {mon..sun}
<b>dddd</b>	day {monday..sunday}
<b>yy</b>	year 2 digits
<b>yyyy</b>	year 4 digits
<b>hh</b>	hour 2 digits
<b>mm</b>	minute 2 digits
<b>ss</b>	second 2 digits
<b>t</b>	time marker {A P}
<b>tt</b>	time marker {AM PM}

**Insert button**  
adds selected field variable to content field

**Finished**  
close dialog if you're done

If your file contains a supported EXIF header, a variable called „exif tag“ shows up in the list. Then you can specify the type of EXIF data you want in the dropdown.

**Select EXIF tag:** Model

- ImageWidth
- ImageLength
- BitsPerSample
- PhotometricInterpretatic
- Make
- Model**
- Orientation
- SamplesPerPixel
- XResolution
- YResolution
- ResolutionUnit
- Software
- DateTime
- YCbCrPositioning
- Compression
- XResolution
- YResolution
- ResolutionUnit
- ExposureTime
- FNumber
- ISOSpeedRatings
- ExifVersion
- DateTimeOriginal
- DateTimeDigitized
- ComponentsConfiguratic
- CompressedBitsPerPixel
- ShutterSpeedValue
- ApertureValue
- ExposureBiasValue
- MaxApertureValue

### III. Best Practice Guides

These lessons give you detailed description how to to use the QR Code Generator Plugin.








#### **(A) Best Practice Guide for creating a QR Code**

1. Select the target layer and execute the plugin (**Filters->EVENX->QR Code Generator**).
2. Choose the **Type** of QR Code you want to generate. These types are available
  - Plain text
  - URL (Link, Facebook like, Twitter follow, googleplus profiles, Youtube channels)
  - Contact information (VCard and MeCard Format)
  - Calender events
  - Wifi networks
  - Geo location
  - SMS
  - Phone number
3. Fill in the fields and see in preview, how you QR Code changes and grows.
4. Select you preferred **Reconstruction rate**. *(This determines, how many of the code can be destroyed but still maintain readability.)*  
 It's recommended to use "high quality" for Design QR Codes. This results in a larger, but well manipulatable code.
5. Select the **Size** of your code. *(This value can be set between 1 and max. The algorithms doesn't use any aliasing, so QR Code recognition will be the best possible.)*
6. Set **Foreground(code)** and **Background color**. Also you can change the **Background merging** of the QR Code.
7. **Move** the QR code to the position you want. *(You can use either the horizontal and vertical sliders or the mouse, interaction mode set to move.)*
8. Select wheter you want the code created on the current layer or on a new layer.
9. Press **OK** and the code is generated on the active layer.

## **(B) Best Practice Guide for creating a custom QR Code**

Follow the instruction described in (A)Best Practice Guide.

Ensure to have selected "high quality" as **Reconstruction rate**.

	<p><b>Hue and Saturation</b></p> <p>Changing the colors is a very simple way of altering the boring QR Code look. Select the color or area you want to change and go to menu <i>Image -&gt; Adjustment -&gt; Hue/Saturation (CTRL + U)</i>. Experiment to find a suitable (and still readable) QR Code design.</p>
	<p><b>Outer Glow</b></p> <p>Before adding outer glow you have to put the code against a dark background. Then add a layer style to this layer(<i>by clicking the FX button at the bottom of the layers window or double clicking on the layer</i>). In the style options check <i>Outer Glow</i>. Now try finding a valuable result changing spread, size and blend mode.</p>
	<p><b>Gradient Overlay</b></p> <p>Adding some gradient is a very effective way of altering the boring QR Code look. Copy the black colored squares of the QR Code into a new layer and add a layer style to this layer(<i>by clicking the FX button at the bottom of the layers window or double clicking on the layer</i>). In the style options check <i>Gradient Overlay</i>. Customize this gradient and get a very unique look. Choose dark colors to ensure readability, alternative you can reduce the effect blending value (opacity).</p>
	<p><b>Inner Glow</b></p> <p>Copy the black colored squares of the QR Code into a new layer and add a layer style to this layer(<i>by clicking the FX button at the bottom of the layers window or double clicking on the layer</i>). In the style options check <i>Inner Glow</i>. Customize colors/size/choke to get a unique look. Choose dark colors to ensure readability, alternative you can reduce the effect blending value (opacity). Experiment with other layer effect styles to get quick but amazing design results.</p>
	<p><b>Accented Edges</b></p> <p>This is a way to change the complete look of the QR Code. It's very important to take care of the the readability of the resulting art QR Code. Select the area you want to change and go to menu <i>Filter -&gt; Brush Strokes -&gt; Accented Edges</i> . Experiment to find a suitable (and still readable) code design.</p>
	<p><b>Rounding Edges</b></p> <p>Round edges smooths the technical and industrial-like look of QR Codes. Select the black colored squares and smooth this selection (<i>Select -&gt; Modify -&gt; Smooth</i>). To fill the resulting selection add a new layer and choose <i>Edit -&gt; Fill -&gt; Black</i>. Don't forget to uncheck the visibility of the original code.</p>
	<p><b>Enhance with logo</b></p> <p>This way of altering your QR Code recommends generating it with a high error correction level (Q or H). Then your QR Code can resist up to 30% destruction but remains readable. These 30% can be used to superimpose a logo or other graphic enhancement.</p>

### **(C) Best Practice Guide for creating a QR Code Calender event for a different timezone**

Imagine you have to create a QR Code for a Wedding invitation. You are in the United States and the Wedding ceremony will be celebrated in Paris, Western Europe on May, 15<sup>th</sup> at 14:00 CET.

You are in timezone Eastern Standard Time (EST GMT-5) and the target timezone is European Central Time (ECT GMT+1).

1. Select the target layer and execute the plugin (**Filters->EVeNX->QR Code Generator**).

2. Choose the **Type** of QR Code you want to generate.  
In this guide we will select Calender event.

3. As timezone you have to set the **Target timezone** of the Wedding ceremony.  
Select **ECT GMT+1** in the **Timezone** dropdown and verify, if the **Daylight saving flag** is set to on, as daylight saving is in effect on May in Paris. In our example the saved value will be 12:00 UTC  
(*Inside QR Codes all time values are converted and saved as Unified Time Code values (UTC)*).

4. Fill in the remaining fields and see in preview, how you QR Code changes and grows.

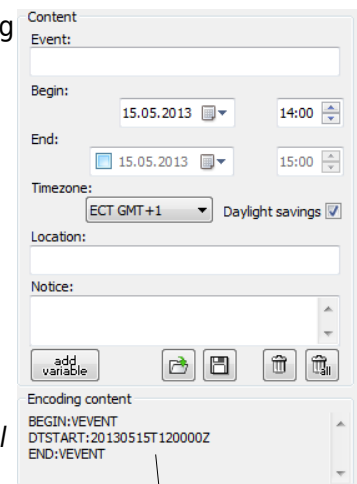
5. Select you preferred **Reconstruction rate**.  
(*This determines, how many of the code can be destroyed but still maintain readability.*)  
It's recommended to use "high quality" for Design QR Codes.  
This results in a larger, but well manipulatable code.

6. Select the **Size** of your code. (*This value can be set between 1 and max. The algorithms doesn't use any aliasing, so QR Code recognition will be the best possible.*)

7. Set **Foreground**(code) and **Background color**. Also you can change the **Background merging** of the QR Code.

8. **Move** the QR code to the Position you want. (*You can use either the horizontal and vertical sliders or the mouse, interaction mode set to move.*)

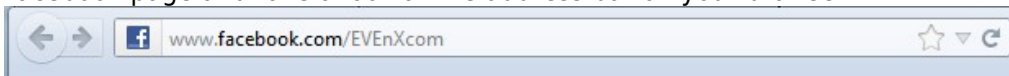
9. Press **OK** and the code is generated on the active layer.



Resulting  
UTC time  
is 12:00:00

### **(D) Best Practice Guide for adding Facebook Fan Page link**

1. Select the target layer and execute the plugin (**Filters->EVEnX->QR Code Generator**).
2. Choose the **Type** of QR Code you want to generate.  
 In this guide we will select **URL ->Facebook like**.
3. **Retrieve** your Facebook FAN PAGE ID. To retrieve it, simple browse to the main site of your Facebook page and take a look at the address bar on your browser.



If you have set up a Custom Fan Page, the ID you need is everything behind the slash in your web address bar, i.e.

<http://www.facebook.com/EVEnXcom>

Otherwise, if you haven't set up a Custom Fan page, your FAN PAGE ID contains a little bit more:

<http://www.facebook.com/pages/EVEnXcom/18904524>

This is the ID you have to use for setting up a QR Code. Use EVERYTHING behind the domain address.

4. Insert your retrieved(yellow) string to the field **FAN PAGE ID**.
5. Select you preferred **Reconstruction rate**. *(This determines, how many of the code can be destroyed but still maintain readability.)*  
 It's recommended to use "high quality" for Design QR Codes. This results in a larger, but well manipulatable code.
6. Select the **Size** of your code. *(This value can be set between 1 and max. The algorithms doesn't use any aliasing, so QR Code recognition will be the best possible.)*
7. Set **Foreground(code)** and **Background color**. Also you can change the **Background merging** of the QR Code.
8. **Move** the QR code to the position you want. *(You can use either the horizontal and vertical sliders or the mouse, interaction mode set to move.)*
9. Press **OK** and the code is generated on the active layer.



### **(E) Best Practice Guide for scripting file names into multiple images to QR Code placed in the right-lower corner**

This Guide uses Adobe® Action Script for multiple images to add QR Codes containing their filename.

1. **Start** recording an action, select the target layer and execute the plugin (**Filters->EVENX->QR Code Generator**).
2. Choose the **Type** of QR Code you want to generate.
3. For adding the filename, select the **Content field** and fill in the variable formatted like: **%ne%**. You can also push the button **[Add variable..]** and select variable from the list.

**Free text:**  
%ne%

**Encoding content:**  
2012-03-26 img 025.jpg

1246 characters left to encode.

**Add variable**  
insert data from list (format %VAR%)  
**p** full path and filename  
**n** filename without extension  
**ne** filename and extension  
**e** extension of file  
**d** directory path of file  
**dp** parent directory of file  
**t** change date/time of file  
**tc** creation date/time of file  
**ta** access date/time of file  
**tn** now (current date/time)  
**w** document width  
**h** document height  
**win** document width in inch  
**hin** document height in inch  
**wcm** document width in cm  
**hcm** document height in cm  
**dpi** document dpi (pixel per inch)  
**dr** document ratio

**Variable symbol**  
type it  
or choose from list

Filename will be added to the QR Code

4. Select your preferred **Reconstruction rate**. (This determines, how many of the code can be destroyed but still maintain readability.) It's recommended to use "high quality" for Design QR Codes. This results in a larger, but well manipulatable code.
5. Select the **Size** of your code. (This value can be set between 1 and max. The algorithms doesn't use any aliasing, so QR Code recognition will be the best possible.)
6. Set **Foreground(code)** and **Background color**. Also you can change the **Background merging** of the QR Code.
7. Set **Position** switch to **Relative**. (This is important for scripting images of different size and ratio.)
8. **Move** the QR code to the lower right position. (You can use either the horizontal and vertical position sliders or the mouse with interaction mode set to move.)
9. Press **OK** and the code is generated on the active layer. **Stop** recording action. Now you can use this Action Script on multiple images, every time the correct filename will be inserted.