

Guide to the Digimarc Barcode Plug-in

for Adobe Photoshop

Contents

Introducing Digimarc Barcode Plug-in for Adobe Photoshop.....	3
Suggested Training	3
System Requirements.....	3
Digimarc Support	3
Launch the Plug-in	3
Sign In to Digimarc Print & Audio	3
The Projects Panel.....	4
Select a Project or Digimarc Barcode	4
Enhancement Basics.....	5
Multi-Channel Enhancement for Print.....	6
Multi-Channel Enhancement for Packaging.....	7
Single Channel Enhancement	8
Single Channel Enhancement with a Binary Pattern	9

Introducing Digimarc Barcode Plug-in for Adobe Photoshop

The Digimarc Barcode Plug-in is a plug-in for Adobe® Photoshop® that enables production designers and prepress specialists to enhance all types of print media with Digimarc Barcode.

Before using the Digimarc Barcode Plug-in, you must have a Digimarc Print & Audio account with the required permissions. If you don't have access, contact Digimarc to be granted Enhance permissions. For more information, see the [Guide to Digimarc Print & Audio](#).

Suggested Training

Before using the Digimarc Barcode Plug-in, we highly recommend that you complete the training courses in the [Center of Digimarc Education](https://code.digimarc.com/) (<https://code.digimarc.com/>) for an understanding of Digimarc Barcode technology:

- **Introduction to Digimarc** provides an overview of Digimarc Corporation, who we are, and what we do.
- **Enhancement** addresses the enhancement of product packaging with Digimarc Barcode.

Note

Log in to the [Center of Digimarc Education](#) with the username and password you use for the plug-in.

System Requirements

Digimarc Barcode Plug-in requires:

- macOS 10.15 (Catalina), macOS 10.14 (Mojave), or macOS 10.13 (High Sierra)
- Adobe Photoshop 2020 (21.x), CC 2019 (20.x), or CC 2018 (19.x)

Digimarc Support

For help using the Digimarc Barcode Plug-in, contact support.

- [Digimarc Support Website](#)
- [Send email to Digimarc Support](#)

Launch the Plug-in

Open the plug-in by navigating to **File > Automate > Digimarc Barcode Plug-in**.

Sign In to Digimarc Print & Audio

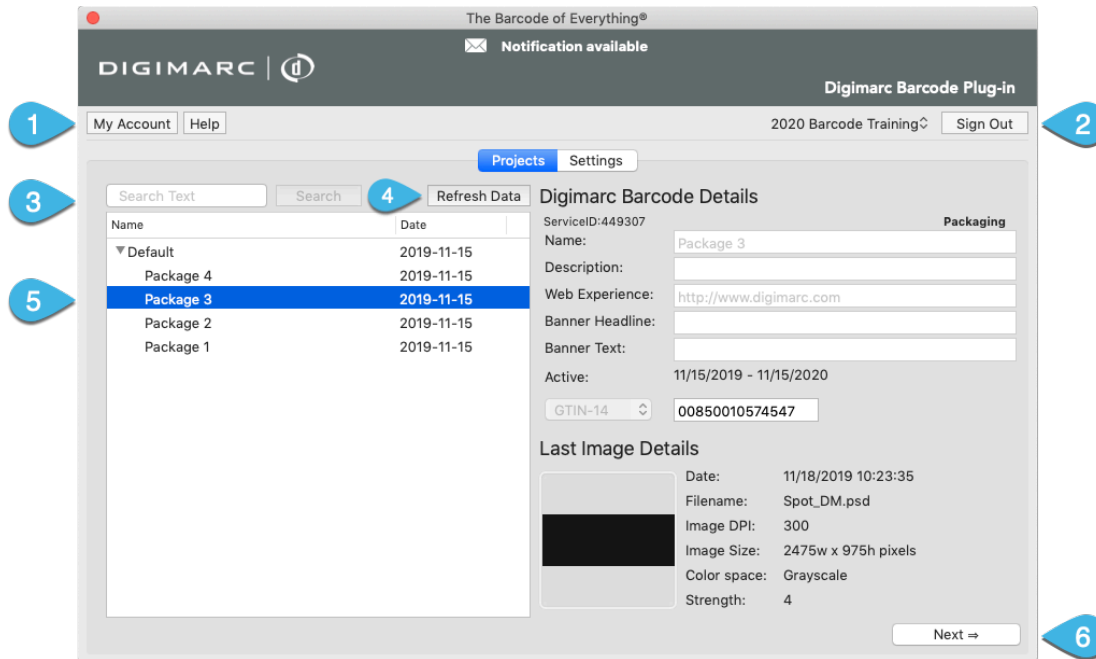
When you launch Digimarc Barcode Plug-in for the first time, or if you have previously signed out, click **Sign In** to connect to the Digimarc Print & Audio module. Enter a Username and Password associated with the account that has access to the GTIN- 14 or UPC-E code to be added to the artwork. Select **Save password to keychain** to store your password for later use, and then click **Sign In**.

Note

If you have difficulty signing in, contact Digimarc.

The Projects Panel

After you sign in, the Digimarc Barcode Plug-in opens to the Projects panel. From here, you can search for the Digimarc Barcode you want to enhance the image with.



- 1 My Account opens Digimarc Print & Audio in your browser.
- 2 The current Digimarc Print & Audio account name is shown here. Click the account name to select a different account. Click Sign Out to log out of Digimarc Print & Audio.
- 3 Enter part of a project name, GTIN-14, or UPC-E, and then click Search.
- 4 Refresh Data retrieves new data from Digimarc Print & Audio.
- 5 From the list, select the Digimarc Barcode to enhance the image with.
- 6 Click Next or the Settings tab to enter the enhancement settings.

Select a Project or Digimarc Barcode

- Click a project name to view its name and description in the Project Details.
- Click a Digimarc Barcode to select it and view its name, description, and other details in the Digimarc Barcode Details.

Enhancement Basics

From the Projects panel, select a Digimarc Barcode to apply to the current image, and then click the Settings tab or Next ⇒ to go to Settings.

There are three color spaces:

- **CMYK** is for process color images when you select the CMYK channels in Photoshop before launching the plug-in.
 - For Digimarc Barcode for Print, the plug-in applies the selected Digimarc Barcode in the CMY channels.
 - For Digimarc Barcode for Packaging, the plug-in applies the selected Digimarc Barcode in the CMY, MYK, or CMYK channels.
- **Grayscale** is for when the image is grayscale or when you select a single CMYK, RGB, or spot color channel before launching the plug-in.
The plug-in applies Digimarc Barcode only in the selected channel.
- **RGB** is for RGB images when you have selected the RGB channels in Photoshop before launching the plug-in.

Note

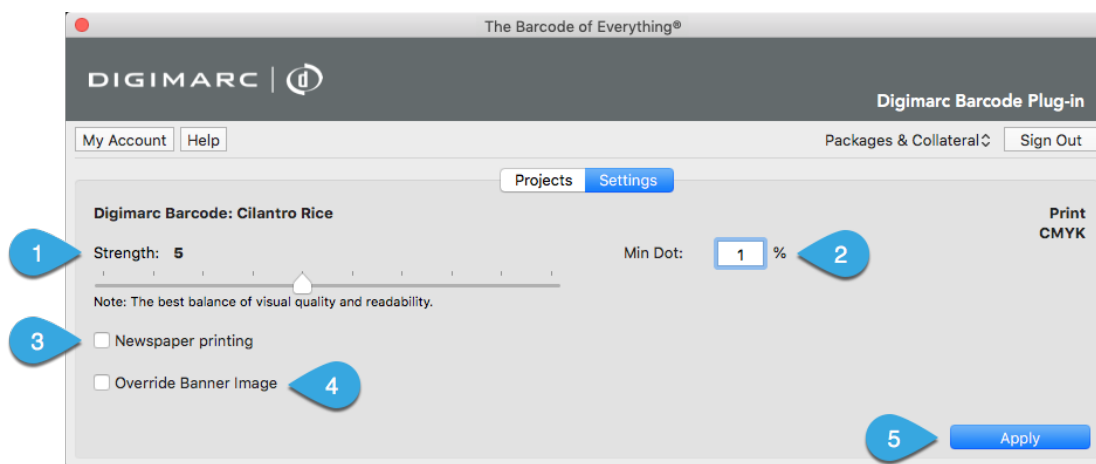
Only Digimarc Barcode for Print can be applied to RGB images.

Multi-Channel Enhancement for Print

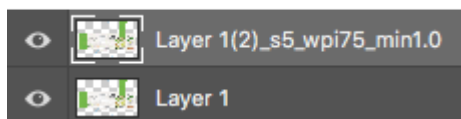
If you don't see all of the controls listed below, contact Digimarc to ensure you have Enhance permissions.

If the Digimarc Barcode you selected from the Projects panel is for Print, the following enhancement settings are shown:

- 1 Select the **Strength**. This option controls the strength of Digimarc Barcode. A higher, or stronger, enhancement strength will be more easily detected by machines and may be more visible to consumers.
- 2 Select the **Min Dot %** to specify the minimum dot as supplied by your printer.
- 3 Enable the **Newspaper printing** option if the enhanced image will be printed in a newspaper. Digimarc adjusts the enhancement accordingly. This option is available only for CMYK images.
- 4 Enable the **Upload Banner Image** or **Override Banner Image** option:
 - If the barcode has no banner image, **Upload Banner Image** enables you to upload a new banner image.
 - If the barcode has an existing banner image, **Override Banner Image** enables you to replace the existing banner image.
- 5 Click **Apply** to close the plug-in and apply the selected Digimarc Barcode.



The plug-in duplicates the selected layer in Photoshop and applies Digimarc Barcode to the new layer, leaving the original layer unchanged. The new layer name indicates the settings used to apply Digimarc Barcode. For example, the layer created by the above settings would look like:



Note

The WPI setting is an advanced parameter used only in certain circumstances. The Min Dot setting appears only if it is not zero.

Multi-Channel Enhancement for Packaging

If you don't see all of the controls listed below, contact Digimarc to ensure you have Enhance permissions.

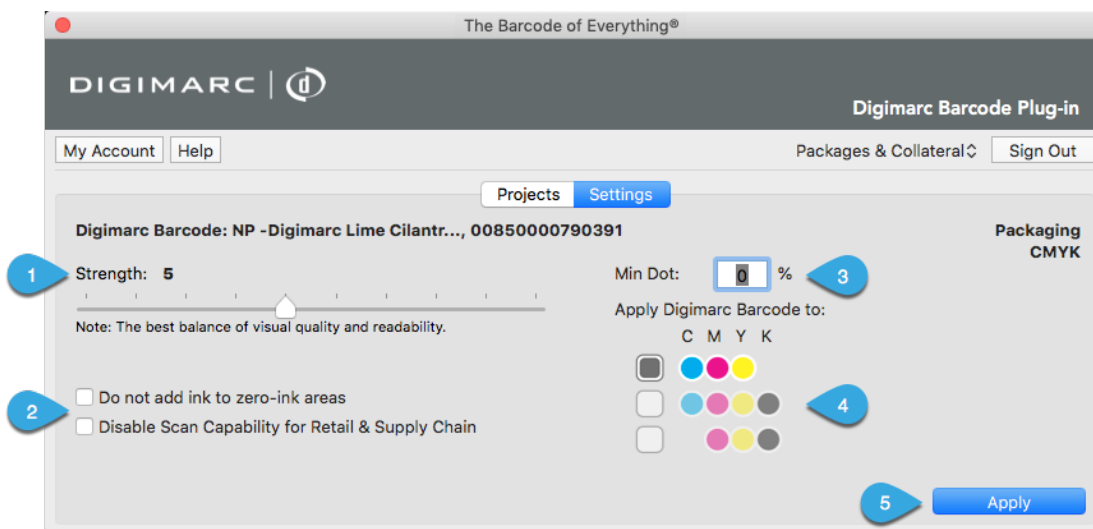
To apply Digimarc Barcode to a CMYK (process color) image:

- 1 Select the **Strength**. This option controls the strength of Digimarc Barcode. A higher, or stronger, enhancement strength will be more easily detected by machines and may be more visible to consumers.

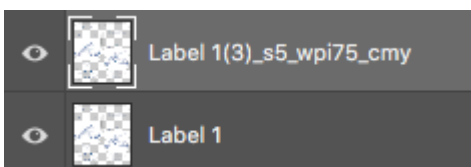
Note

Depending on the barcode type, you might need to enhance at a higher or lower strength for Digimarc Barcode to scan effectively. For example, a Packaging + Custom Field type might require enhancing at a higher strength because it includes more data than the standard Packaging type. Experiment with different strengths and confirm the results in Digimarc Verify.

- 2 Enable **Don't add ink to zero-ink areas** if you don't want enhancement applied in areas that are the color of the substrate. Enable **Disable Scan Capability for Retail & Supply Chain** if you want to enhance the image only for mobile devices and not for retail scanning.
- 3 Select the **Min Dot %** to specify the minimum dot as supplied by your printer.
- 4 Select the color channels to enhance: **CMY**, **CMYK**, or **MYK**. If Disable Scan Capability for Retail & Supply Chain is checked, only CMY is available.
- 5 Click **Apply** to close the plug-in and apply the selected Digimarc Barcode.



The plug-in duplicates the selected layer in Photoshop and applies Digimarc Barcode to the new layer, leaving the original layer unchanged. The new layer name indicates the settings used to apply Digimarc Barcode. For example, the layer created by the above settings would look like:



Note

The WPI setting is an advanced parameter used only in certain circumstances. The Min Dot setting appears only if it isn't zero.

Single Channel Enhancement

If you don't see all of the controls listed below, [contact Digimarc](#) to ensure you have Enhance permissions.

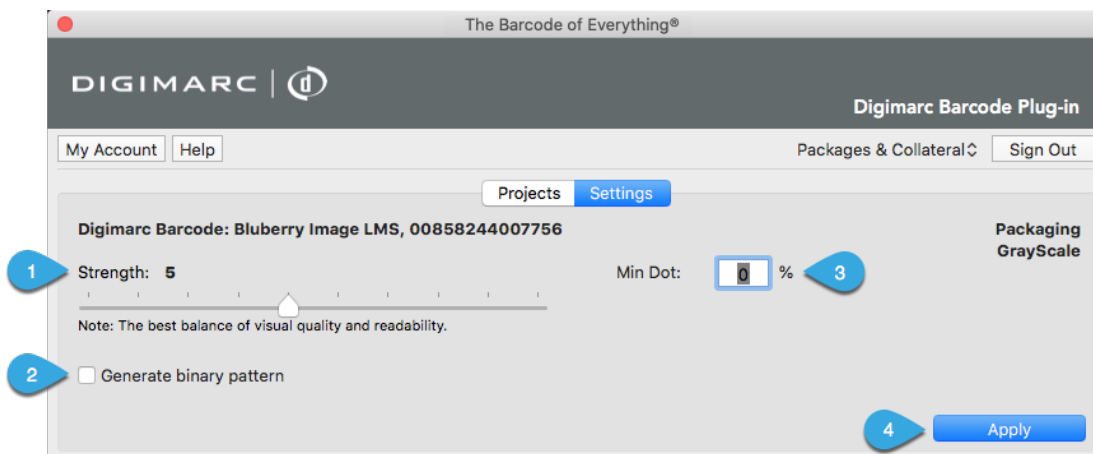
To apply Digimarc Barcode to a single channel:

- 1 Select the **Strength**. This option controls the strength of Digimarc Barcode. A higher, or stronger, enhancement strength will be more easily detected by machines and may be more visible to consumers.

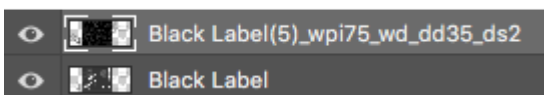
Note

Depending on the barcode type, you might need to enhance at a higher or lower strength for Digimarc Barcode to scan effectively. For example, a Packaging + Custom Field type might require enhancing at a higher strength because it includes more data than the standard Packaging type. You can experiment with different strengths and confirm the results in Digimarc Verify.

- 2 Enable **Generate binary pattern** if you want to apply a binary pattern. When enabled, binary pattern controls are displayed.
- 3 Select the **Min Dot %** to specify the minimum dot as supplied by your printer.
- 4 Click **Apply** to close the plug-in and apply the selected Digimarc Barcode.



The plug-in duplicates the selected layer in Photoshop and applies Digimarc Barcode to the new layer, leaving the original layer unchanged. The new layer name indicates the settings used to apply Digimarc Barcode. For example, the layer created by the above settings would look like:



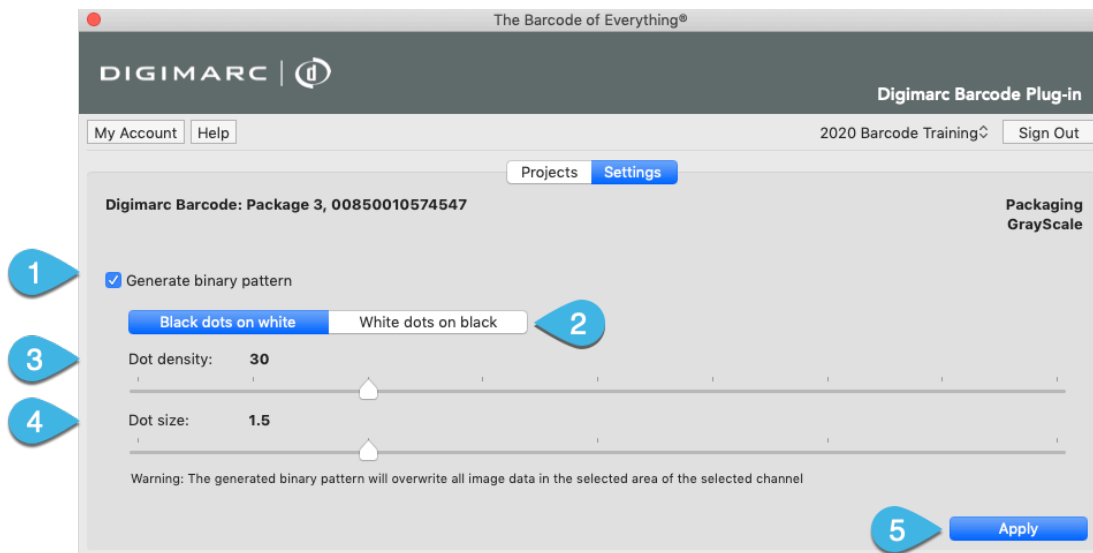
Note

The WPI setting is an advanced parameter used only in certain circumstances. The Min Dot setting appears only if it isn't zero.

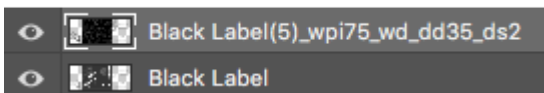
Single Channel Enhancement with a Binary Pattern

To apply Digimarc Barcode in a single channel using a binary pattern:

- 1 Enable **Generate binary pattern**. Binary pattern controls are displayed.
- 2 Choose **Black dots on white** to set a positive binary pattern or **White dots on black** to set a negative binary pattern.
- 3 Select the **Dot Density** to set the density of the dot pattern.
- 4 Select the **Dot Size** to set the size of the dot pattern.
- 5 Click **Apply** to close the plug-in and apply the selected Digimarc Barcode.



The plug-in duplicates the selected layer in Photoshop and applies Digimarc Barcode to the new layer, leaving the original layer unchanged. The new layer name indicates the settings used to apply Digimarc Barcode. For example, the layer created by the above settings would look like:



Note

The WPI setting is an advanced parameter used only in certain circumstances. The Min Dot setting appears only if it isn't zero.