Computer Vision 2 User Guide

August 2026

Version 2.0

META FIDE

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Introduction

1 What Is Computer Vision?

Computer Vision is a DaVinci Resolve plugin that redraws your footage as a grid of text characters for that unmistakable retro computer look. Each cell of the image grid is measured and replaced with the ASCII character that best matches it, so the image stays recognizable while the video detail is reduced to text.

The plugin is available in the Edit and Fusion Pages.

The version 2 adds exciting new features. They include an edge detection mode that draws line direction instead of brightness, depth driven character scaling, source color sampling, dithering, image lift-gamma-gain controls, and more.

2 Requirements

Computer Vision requires DaVinci Resolve or DaVinci Resolve Studio version 15 or above running on Linux, macOS, or Windows. For streamlined UI in the Edit page make sure to use the version 21 and above. This user guide assumes users are familiar with the basic operation of DaVinci Resolve.

3 Free and Pro Features

Computer Vision and Computer Vision Pro come with separate installers.

The following controls are Pro (non-free) features. They are marked **(Pro)** throughout this guide.

Edge Mode and **Edge Threshold** — edge detection rendering.

Use Source Color — per character color sampled from the video.

Dithering — randomized character noise.

Depth Map and **Depth** — depth driven character scaling.

All other features, including typographic tracking, the geometric style, custom character sets, ink and background color selection, and the lift, gamma, and gain input controls, etc. are available in the free version.

Installation

1 Installing the Plugin

Quit DaVinci Resolve before installing the plugin. It is recommended to run the installer with administrative privileges. Computer Vision 2 will overwrite the original Computer Vision.

1.1 macOS

Double click the installation package and follow the instructions.

1.2 Windows

Double click the installation package and follow the instructions.

1.3 Linux

In the command line, navigate to the installer and execute:

```
sudo bash ComputerVision2Installer.sh
```

or

```
sudo bash ComputerVisionPro2Installer.sh
```

2 Removing the Plugin

Quit DaVinci Resolve and use Windows Add/Remove Programs.

You can also manually delete the Computer Vision files from the Fusion support folders:

macOS

```
/Library/Application Support/Blackmagic Design/DaVinci Resolve/Fusion/Fuses/
```

```
/Library/Application Support/Blackmagic Design/DaVinci Resolve/Fusion/Templates/Edit/Effects/
```

Windows

```
C:\ProgramData\Blackmagic Design\DaVinci Resolve\Support\Fusion\Fuses\
```

```
C:\ProgramData\Blackmagic Design\DaVinci Resolve\Support\Fusion\Templates\Edit\Effects\
```

Linux

```
/opt/resolve/Fusion/Fuses/
```

```
/opt/resolve/Fusion/Templates/Edit/Effects
```

You can also remove the Computer Vision font which contains geometric shapes not useful outside of Computer Vision.

Getting Started

1 Edit Page

Computer Vision is available in the Effects Library under Fusion Effects. Drag it onto any clip or an Adjustment Clip in the timeline and adjust the controls in the Inspector's Settings tab.

The Edit page version does not support the Depth Map input. This is a DaVinci Resolve limitation.

2 Fusion Page

On the Fusion page the plugin appears in the Effects panel as Meta Fide / Computer Vision. This Fuse version supports the depth driven character scaling, via the second input to the node.

3 A Good Starting Order

Set the Character Count first. It determines how many characters span the frame and therefore how much of the original image “shows through.” Adjust Leading and Tracking if desired. Finally use the input adjustments to push the picture’s values into a range where the character rendered image reads well. Many clips benefit from some additional contrast.

Controls Reference

Controls are listed in the order they appear in the tool panel.

1 Text Control

Font / Style — Typeface and style used to render the characters. Any installed font is available, including the custom Computer Vision font.

ASCII Style — Preset character string used to map brightness to a character. Round, Square, Numerical, Alphabet Plus, and Geometric are available. Geometric uses block shapes rather than letterforms. ASCII style dropdown is available when Custom Character Set field is clear.

Custom Character Set — Type your own set of characters to use instead of the ASCII Style preset. The set is sorted internally from dark to light, so the order you type it in does not matter. See also "Sort Custom Characters" below. Disabled while Edge Mode is on.

Character Count — Number of characters across the frame. This is the main resolution control: lower values give larger, coarser characters, higher values preserve more of the original image detail.

Leading — Vertical spacing between rows of characters.

Tracking — Horizontal spacing between characters.

Edge Threshold (Pro) — Minimum edge strength required to draw a glyph in Edge Mode. Cells below the threshold stay blank, so raising it isolates the strongest contours. Only active when Edge Mode is checked.

Edge Mode (Pro) — Switches from brightness based representation to edge detection. The mode picks direction shaped characters, dash, slash, pipe, and backslash, that follow the contours in the image. Great for logos and large text. When checked it disables ASCII Style, Custom Character Set, and Invert Text.

Sort Custom Characters —Custom Character Set you enter is automatically sorted by the typical density of ASCII glyphs based on their position in the alphabet. Uncheck this option when you're using a font of your own design. In that case, type your characters in the order of visual density starting with the most dense glyph on the left. For example: @oc:.

Anti Aliasing — Smooths character edges when on, for a cleaner result. Turn it off for a sharper, blockier look reminiscent of vintage computer display.

2 Color

Text Color — "Ink" color. Hidden when Use Source Color is on.

Background Color — "Paper " color. Only active when Enable Background is on.

Enable Background — Fills the frame with the Background Color instead of leaving it transparent. Keep it off when you want to composite the characters over lower layers.

Invert Text — Flips the visual density of the characters. It gives best results when the background color is lighter than the text color. Hidden in Edge Mode and when Use Source Color is on.

Use Source Color (Pro) — Tints each character with the color sampled from the video at that cell. The result reads as a color image rendered in multi-color type rather than a monochrome terminal.

3 Input Adjustments

These controls shape the picture before it is mapped to characters.

Lift — Raises or lowers shadow levels in the source image.

Gamma — Adjusts source image midtone brightness. This is an effective control for spreading detail across the character string.

Gain — Raises or lowers source image highlight levels.

Contrast — Increases or decreases source image contrast.

4 Effects

Character Density — Scales the size of each rendered character within its cell. Higher values fill more of the cell resulting in a stylish overlap.

Dithering (Pro) — Randomly jitters character selection for a noisier, less mechanical look. In Edge Mode it jitters across the direction glyphs. In ASCII mode it jitters along the brightness of the character string. There is no effect at zero.

Depth Map (Pro) — Whenever a RGB or Alpha image is connected to the node's second input the values in the image are used to scale the rendered characters creating a unique depth effect. The most size reduction takes place where the image is darkest.

The RGB/Alpha toggle button selects the connected Depth Map input's RGB luminance or its Alpha channel to drive the effect.

Depth (Pro) — Scaling of the depth effect. Only active with a Depth Map input connected.

5 Fusion Node Inputs

Input 1 — Main video input.

Input 2 — Depth Map (Pro) — Optional second input. Connect a depth pass to drive the Depth effect.

6 Help

Get Help — Opens online help in your browser.

7 Custom Fonts

The use of custom fonts is best illustrated with Computer Vision font that is installed along with the plugin. It contains several ranges of geometric shapes which take Computer Vision beyond mere ASCII text.

To try these exciting looks first uncheck Sort Custom Characters and copy-and-paste the following strings into Custom Character Set entry field, one string at a time.

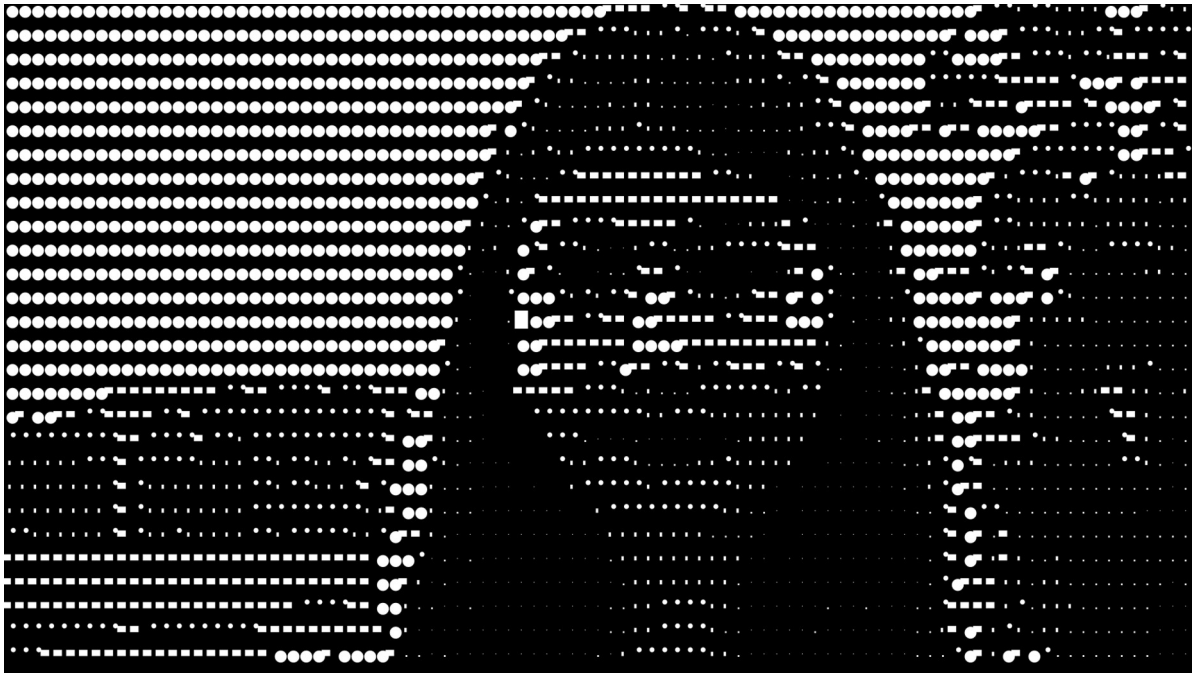
Horizontal lines: ABCDEFGH

Vertical lines: abcdefgh

Squares: IJKLMNO

Circles: ijklmnop

Random shapes (example bellow): PQRSTUVW



Troubleshooting

1 No output from the plugin

Make sure that the font set in Font dropdown menu exists on your system.

2 Effect Not Strong Enough

In Fusion you can push any numerical input box beyond its default range by typing a desired value.

3 A Control Is Grayed Out

Edge Mode, Edge Threshold, Use Source Color, Dithering, Depth Map, and Depth are Pro features. They are visible in the free version but cannot be adjusted.

Edge Threshold is also disabled whenever Edge Mode is off, and Background Color is disabled whenever Enable Background is off.

4 The Depth Controls Missing

Check that you are on the Fusion page. The Edit page version of the plugin has no Depth Map input because Resolve does not pass a second image input to an Edit page effect..

5 The Depth Controls Doing Nothing

If you are on the Fusion page, confirm that a depth pass is connected to the Depth Map (green) input. Check that the Depth Map control is set to the channel your depth map actually contains (RGB or Alpha)

6 My Custom Characters Are Ignored

Custom Character Set has no effect while Edge Mode is on. Turn Edge Mode off to return to the custom character set.

7 The Text Color Control Disappeared

Use Source Color replaces the flat text color with color sampled from the picture, so the Text Color control is hidden while Use Source Color is on.

8 Playback Is Slow

High Character Count values and Source Color take more resources to render.

9 Further Help

Click the Get Help button in the tool panel, or visit the Meta Fide support page.