

handstroke: L^AT_EX Package for Hand-Written Underline*

Yegor Bugayenko
yegor256@gmail.com

2026-07-12, 0.3.0

1 Introduction

A plain, ruler-straight underline blends into the text and is easy to miss. This package draws the line as if it were sketched by hand: it wavers a little, stands apart from the typeset letters, and catches the reader's eye where an ordinary rule would go unnoticed. Reach for the `\handstroke` command whenever a word or a phrase truly deserves attention:

Don't forget to
encrypt the data
before sending them
over the network, it's
important!

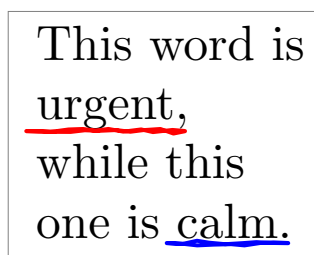
```
1 \documentclass{article}
2 \usepackage[paperwidth=14em]{geometry}
3 \usepackage[colored]{handstroke}
4 \pagestyle{empty}
5 \begin{document}\raggedright
6 Don't forget to \handstroke{encrypt}
7 the data before sending them over the
8 network, it's \handstroke{important}!
9 \end{document}
```

`\handstroke` The `\handstroke` command takes a single argument and underlines it, much like the familiar `\u1`. The only difference is the shape of the line: instead of a straight rule, `\handstroke` sketches an uneven handstroke that looks hand-drawn and stands out on the page.

By default the handstroke is drawn in gray. Load the package with the `colored` option to paint it in color instead, and pass `color=<name>` to choose which one (orange by default), as in `\usepackage[colored, color=red]{handstroke}`.

A single stroke may also be recolored on its own, without touching the rest of the document, by giving `\handstroke` an optional `color=<name>` argument. This overrides both the gray default and whatever the package-wide `color` option asked for, but only for that one line:

*The sources are in GitHub at [yegor256/handstroke](https://github.com/yegor256/handstroke)



This word is
urgent,
 while this
 one is calm.

```

1 \documentclass{article}
2 \usepackage[paperwidth=8em]{geometry}
3 \usepackage{handstroke}
4 \pagestyle{empty}
5 \begin{document}\raggedright
6 This word is
7 \handstroke[color=red]{urgent},
8 while this one is
9 \handstroke[color=blue]{calm}.
10 \end{document}

```

2 Package Options

`colored` The `colored` package option makes the line be colored, with the help of the [xcolor](#) package.

`color` The `color` package option (orange by default) defines the color of the line.

3 Implementation

First, we parse package options with the help of the [pgfopts](#) package:

```

1 \RequirePackage{pgfopts}
2 \pgfkeys{
3   /handstroke/.cd,
4   colored/.store in=\handstroke@colored,
5   color/.store in=\handstroke@color,
6   color/.default=orange,
7   color,
8 }
9 \ProcessPgfPackageOptions{/handstroke}

```

Then, we load the [xcolor](#) package, if coloring is required via the `colored` package option:

```

10 \makeatletter
11 \ifdefined\handstroke@colored
12   \RequirePackage{xcolor}
13 \fi
14 \makeatother

```

Then, we load the [tikz](#) package, together with a few required libraries that provide the coordinate arithmetic and the random-steps decoration used below:

```

15 \RequirePackage{tikz}
16 \usetikzlibrary{calc}
17 \usetikzlibrary{decorations.pathmorphing}

```

`\handstroke` Finally, we define the `\handstroke` command itself. It typesets its argument inside a `tikz` node and then draws a wavering rectangle path just beneath the baseline, so that only the lower edge shows and reads as an underline. The optional first argument accepts a `color=<name>` key that overrides the ink for this one stroke only:

```

18 \makeatletter

```

```

19 \pgfkeys{
20   /handstroke/stroke/.cd,
21   color/.store in=\handstroke@ink,
22 }
23 \newcommand\handstroke[2] [] {%
24   \ifdefined\handstroke@colored%
25     \let\handstroke@ink\handstroke@color%
26   \else\def\handstroke@ink{gray!80}\fi%
27   \pgfkeys{/handstroke/stroke/.cd, #1}%
28   \tikz[baseline=(text.base)] {
29     \node[inner sep=0em, outer sep=0em] (text) {#2};
30     \begin{scope}
31       \path[use as bounding box]
32         (text.east) rectangle (text.west);
33       \draw[decorate,
34         decoration={random steps,
35           amplitude=0.05em, segment length=0.3em},
36         line join=round,
37         line cap=round,
38         line width=.08em,
39         draw=\handstroke@ink]
40         ($(text.west) + (-0.2em, -.46em)$)
41         rectangle
42         ($(text.east) + (+0.2em, -.46em)$);
43     \end{scope}
44   }%
45 }
46 \makeatother
47 \endinput

```

Change History

v0.1.0			better clarity.	2
General: Initial version		2	v0.3.0	
v0.2.0			General: The color option can now	
General: The package was renamed			be passed to the \handstroke	
from stroke to handstroke			command to recolor a single	
for the sake of disambiguation and			line.	2

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

B		P	
<code>\begin</code>	30	<code>\handstroke@colored</code>	4, 11, 24
D		<code>\handstroke@ink</code> ...	21, 25, 26, 39
<code>\def</code>	26	<code>\path</code>	31
<code>\draw</code>	33	<code>\pgfkeys</code>	2, 19, 27
E		<code>\ProcessPgfpPackageOptions</code>	9
<code>\end</code>	43	I	
<code>\endinput</code>	47	<code>\ifdefined</code>	11, 24
H		M	
<code>\handstroke</code>	<u>18</u>	<code>\makeatletter</code> ...	10, 18
<code>\handstroke@color</code> .	5, 25	<code>\makeatother</code> ...	14, 46
		N	
		<code>\node</code>	29
		R	
		<code>\RequirePackage</code>	1, 12, 15
		T	
		<code>\tikz</code>	28
		U	
		<code>\usetikzlibrary</code> .	16, 17