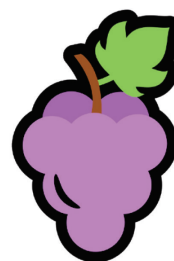


# GRAPECLI™ USER MANUAL

Version 0



Pop3Dart

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## 1 About GrapeCLI

GrapeCLI converts a lenticular sequence to an image for lenticular print. It is based on algorithms described in the “Lenticular Imaging” book (Weissman, 2018).

GrapeCLI is a command-line version of Grape. It is intended for users who prefer to use Grape without user interface or wish to integrate Grape in their custom system.

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## 2 Installation

Download the archive from the Pop3Dart website and extract its contents. The contents should include GrapeCLI.exe, demo sequence folder, demo job file, this manual, and the license file. Create an empty folder and copy these files to it.

GrapeCLI runs on Windows 64-bit machines.

## 3 Using GrapeCLI

### 3.1 *Preparation and function*

To use GrapeCLI, you need two additional items in the GrapeCLI folder:

1. A job file called ‘job.txt’,
2. A folder containing your sequence called ‘sequence’.

If both items are valid, GrapeCLI will create a file called ‘inter.tif’ which contains the interlaced image. This file will be added to the current folder. Grape will also create a log file, which lists its execution steps with time stamps (useful for estimation of execution times). The log file will also list errors if there are any.

### 3.2 *The job file*

The GrapeCLI job file has the same structure and syntax as the Grape job file. This is the job file supplied with the GrapeCLI package:

```
hppi:720
vppi:120.0
lpic:60.12
fw:180.0
fh:180.0
marginh:5.0
Direction:LR
Images format:jpg
Alignment pattern position:ext
```

The meaning of the parameters and the requirements on their values are listed in Table 1. Refer to the Grape user manual for more information.

*Table 1: The GrapeCLI job parameters*

Name	Description	Type	Values
hppi	Horizontal printing density (1/inch)	numeric	[100, inf)
vppi	Vertical printing density (1/inch)	numeric	[20, inf)
lpic	Lens lpi calibration value (1/inch)	numeric	[5, inf)
fw	Picture width (mm)	numeric	[10, inf)
fh	Picture height (mm)	numeric	[10, inf)
margins	Top and bottom margins width (mm)	numeric	[0, inf)
Direction	Sequence direction (for 3D)	alphanumeric	'LR', 'RL'
Images format	The format of the sequence images	alphanumeric	'jpg', 'png', 'tif'
Alignment pattern position	Position of the alignment patterns adjacent to the picture. Can be external, internal, or external-centerd.	alphanumeric	'int', 'ext', 'ec'

Job file with missing or invalid values will cause GrapeCLI to exit. The errors will be listed in the log file.

### 3.3 Links

Pop3Dart website: [www.pop3dart.com](http://www.pop3dart.com)

Author's email address: [itsikw@pop3dart.com](mailto:itsikw@pop3dart.com)

### 3.4 Grape icon credits

Artist: Alex T

Webpage: <http://www.iconarchive.com/show/fresh-fruit-icons-by-alex-t/grapes-icon.html>

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