

# for the *VAXen* at RMCS

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## **Abstract**

This document describes the operation of the DVItO VDU program, which allows TEX output files in device-independent .DVI form to be previewed on a variety of Visual Display Units (VDUs).

It is assumed that the reader is familiar with LATEX and has read the local LATEX User Guide[RMCS\s\do5(1)atexguide]. Familiarity with the *VAX/VMS* operating system is also assumed.

If you have a question that you can't answer by reading this document, ask Niel Kempson. He should also be informed of any possible DVItO VDU bugs or undocumented anomalies.

## **Acknowledgement**

The original DVItO VDU program was written by Andrew Trevorrow, University of Adelaide, Australia. This user guide is based on his original guide, written in plain TEX.

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# 1 Introduction

## 1.1 What L<sup>A</sup>T<sub>E</sub>X does with your Source File

When this document refers mostly to L<sup>A</sup>T<sub>E</sub>X, since that is the program most commonly used at this site; however, it may be assumed that this includes T<sub>E</sub>X and S<sub>L</sub>T<sub>-</sub>.1667emEX as well. of the T<sub>E</sub>X family is run (T<sub>E</sub>X, L<sup>A</sup>T<sub>E</sub>X or S<sub>L</sub>T<sub>-</sub>.1667emEX), it produces two output files. One of these is the *log file*, which records all the output that L<sup>A</sup>T<sub>E</sub>X sent to the terminal (and a lot more besides!) . On a VAX implementation of L<sup>A</sup>T<sub>E</sub>X, this file has the file type .LIS. However, it is the other file (of type .DVI) which is of most interest because this contains all the instructions to typeset your document; this file is in a *Device-Independent Format* which is common to every L<sup>A</sup>T<sub>E</sub>X site in the world. Details of the internal format of .DVI files are explained within the program DVItypex, which describes the definitive method for processing .DVI files, but need only concern those who are writing .DVI processing programs.

## 1.2 Previewing L<sup>A</sup>T<sub>E</sub>X Output

Before you can see what wonders L<sup>A</sup>T<sub>E</sub>X has wrought for you, it is necessary to process this .DVI file. As a first stage, you should use DVIt<sub>o</sub>VDU to produce a representation of your document on a graphics terminal, rather than waste paper unnecessarily. When you have finished previewing, you can use the DVILN03 and TEXPRINT commands to produce a printed document; the DVILN03 User Guide [RMCS\s\do5(d)vilguide] and the local L<sup>A</sup>T<sub>E</sub>X User Guide [RMCS\s\do5(t)atexguide] describe these commands.

Let's assume that you have a L<sup>A</sup>T<sub>E</sub>X source file called `myfile.tex`. You run this file through L<sup>A</sup>T<sub>E</sub>X by typing the command:

```
LATEX MYFILE
```

and if all is well, L<sup>A</sup>T<sub>E</sub>X creates the two files `MYFILE.DVI` and `MYFILE.LIS`. Even if no L<sup>A</sup>T<sub>E</sub>X errors are detected, you cannot be sure that the document is formatted correctly. There might be bad line breaks, bad page breaks, alignment problems, poor selection of fonts, not to mention spelling mistakes. Before DVIt<sub>o</sub>VDU came along, the only way to check your document was to continue through the L<sup>A</sup>T<sub>E</sub>X cycle and look for any errors in the printed output. This was time consuming and wasted a great deal of paper. Now you can use DVIt<sub>o</sub>VDU to look at `MYFILE.DVI` on a variety of commonly available VDUs.

DVIt<sub>o</sub>VDU reads a given .DVI file and translates the coded description of a page into some sort of visible representation on the screen. DVIt<sub>o</sub>VDU is an interactive program; you can enter commands to select a particular page for display, look at the overall format of the entire page and then request a smaller region for closer examination. The manner in which the page is displayed can be varied from a full, accurate representation to a terse, fast display for when fine details are unimportant. All the commands are described in detail in section ?.

## 2 Invoking DVIt<sub>o</sub>VDU

To preview `MYFILE.DVI`, just type the command:

```
DVITOVDU MYFILE
```

### 2.1 The command qualifiers.

The DVItO VDU command verb can be followed by a number of qualifiers, either before or after the .DVI file name. If the same qualifier appears more than once then the last value will be used. If a particular qualifier does not appear then DVItO VDU will use a default value. The default values are listed in table ?.

<b>Qualifier</b>	<b>Default Value</b>
/VDU	ReGIS