

Document Version History

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Chapter 1

Introduction

1.1 Overview of the `ti kz-3dpl ot` Package

The `ti kz-3dpl ot`

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Author Alain Matthes

url <http://www.texample.net/tikz/examples/annotated-3d-box/>

Notes

Chapter 2

Overview of 3d in tikz-3dplot

transformation, yielding a 3d representation. Lines and nodes can readily be drawn by using these 3d coordinates.

This coordinate transformation is accessible through

3.2 The `ti kz-3dplot` Commands

This section lists the various commands provided by the `ti kz-3dplot` package.

S\tdplotsetro

angle θ projecting from the current rotated coordinate system z^0 axis.


```

\draw[dashed, color=red] (0) -- (Px);
\draw[dashed, color=red] (0) -- (Py);
\draw[dashed, color=red] (0) -- (Pz) -- (Py);
\draw[dashed, -- (Px-1;
\draw[dashed, color=red] (0) -- (Px-1;
\draw[dashed, -- (Pxz1;
\draw[dashed, color=red] (0) -- (Pxz1;\draw[dashed, color=red] (0) -- (Pxyz1;
\draw[dashed, color=red] (0) -- (Pxy())-532(--)-531((Py);)]TJ0-9.464Td[ (\draw[dashed, )-\draxy1 -- (Px;
\draw[dashed, color=red] (0) -- (Px;\draw[dashed, color=red] (0) -- (Px;

```


For a given perspective assigned by the main coordinate frame, a \view

// color When the option *parametric //* is used then this can be some

Syntax: `\tdplotinandcos{sintheta}{costeta}{theta}`

Parameters:

`sintheta` A macro (eg. `\sintheta`) to store the sine of `theta`.

`costheta` A macro (eg. `\costheta`) to store the cosine of `theta`.

`theta`

Here, the rotated coordinate frame is shifted by amount (P) within the main% coordinate frame. The node labelled θ_{bad} does not accept any% positioning coordinates.

Case B:

```
\tdplotsetmaincoords{60}{110}
\begin{tikzpicture}[scale=3, tdplot_main_coords]

    \draw[thick, ->] (0,0,0) -- (1,0,0) node[anchor=north]{$x$};
    \draw[thick, ->] (0,0,0) -- (0,1,0) node[anchor=west]{$y$};
    \draw[thick, ->] (0,0,0) -- (0,0,1) node[anchor=south]{$z$};

% \coordinate (P) at (3,3,3);
\tdplotsetrotatedcoords{0}{0}{0}

    \draw[thick, ->] (0,0,0) -- (1,0,0) node[anchor=north]{$x$};
    \draw[thick, ->] (0,0,0) -- (0,1,0) node[anchor=west]{$y$};
    \draw[thick, ->] (0,0,0) -- (0,0,1) node[anchor=south]{$z$};
```


