

Free Evaluation copy of
The Timing Diagrammer
by SynaptiCAD

The Timing Diagrammer is an easy-to-use CAD environment for drawing timing diagrams. Signals and clocks are drawn faster and more accurately than pencil and paper versions. Timing parameters like delays, setups, and holds actively move and monitor signal transitions. The parameter values can be quickly edited using a custom spreadsheet, and the timing diagram automatically adjusts to reflect any parameter changes. And documentation is virtually painless using the "copy to clipboard" and printing features.

This is a **free evaluation copy** of The Timing Diagrammer (see Legal Stuff and Disclaimer of Warranty). It is a fully functional version except for a few limitations:

- limit of 5 signals or clocks
- limit of 5 delays, setups, holds, or free parameters
- disabled save, merge, print, and copy to clipboard (although sample clipboard files are included).

There are no limitations in the professional version of the Timing Diagrammer package

Legal Stuff:

You should read the following terms and conditions carefully. By using this software you indicate your acceptance of these terms and conditions.

You may use the evaluation version of The Timing Diagrammer to evaluate the usefulness of the The Timing Diagrammer for up to 30 days. If after 30 days you find it useful, please purchase the professional version. You may copy and distribute the evaluation version of The Timing Diagrammer freely, provided that it is distributed in its complete, original and unmodified form, together with any copyright notices that appear in the software or documentation, and that you request or receive no payment or donation in exchange for distributed copies. No portion of **The Timing Diagrammer** may be distributed together with, or as part of, any other product without the express written consent of SynaptiCAD.

Disclaimer of Warranty:

This software and the accompanying files are distributed "as-is" and without any warranties either expressed or implied. The user accepts full liability for any damages of any kind arising out the use of this software.

The Timing Diagrammer highlights:

- Completely modeless drawing: the **left mouse button** always draws and edits waveforms. The **right mouse button** performs all the not-so-common drawing features like adding text or delays to your drawing.
- **Delays** that force relative transition times of signals.
- **Holds** and **Setups** that monitor the time between two signal transitions.
- **Custom spreadsheet** for editing timing parameter values. Parameters can be

- mathematical expressions containing variables.
- **Clocks** draw themselves.
 - **Continuous digital measurements**.
 - **Button Bar** with quick access to common functions.
 - **Object-oriented drawing** environment.
 - **Copy to clipboard** function is great for putting timing diagrams in documents(disabled in evaluation version).
 - Signals and clocks can be **hidden**.
 - **Status bar** gives tips and information without reducing the size of your workspace.
 - **Extensive on-line help** with Quick and Ultra-Quick overviews to get you started.

System requirements:

- IBM compatible 386 or better
- Microsoft Windows 3.1

Installing the Evaluation Version

Before installing The Timing Diagrammer please read the Disclaimer of Warranty and the Legal Stuff sections of this file. To install the evaluation version of The Timing Diagrammer do the following:

- Insert the evaluation diskette in your drive. If you downloaded timing10.zip then unzip its contents into one directory.
- In Windows, from **Program Manager**, choose the **File/Run** menu option.
- Type:

A:\INSTALL

where A: is the name of the drive with The Timing Diagrammer diskette. If you are working for the zip file then type:

A:\nameWhereUnzippedFiles\INSTALL

File List

This is a list of files that should appear in your directory after a successful installation:

timeval.exe: Executable for The Timing Diagrammer
helptim.hlp: The Timing Diagrammer help file
bwcc.dll: Support file for The Timing Diagrammer
sampparm.clp: Sample clipboard file of parameters
samptim1.clp: Sample clipboard file of timeline,
signal names and waveforms
samptim2.clp: Sample clipboard file of signal names
and waveforms
samptim3.clp: Sample clipboard file of waveforms with border
samptim4.clp: Sample clipboard file of waveforms without border
tutorial.tim: Timing Diagram file for the tutorial
new13.tim: Timing Diagram showing some of the new features for v1.3
multdely.tim: Timing Diagram showing reconvergent fanout example
orderme.wri: Order form

tutorial.wri: Tutorial File
read_me.wri: This file

Tutorial information

A short tutorial has been included on the evaluation disk. The tutorial demonstrates how The Timing Diagrammer can help detect timing errors in digital designs. It teaches you how to draw timing diagrams using The Timing Diagrammer's delays, setups, clocks and signals. It also covers the waveform editing features, measurement and quick access buttons. To print the tutorial instructions do the following:

- Install The Timing Diagrammer.
- Double click on the "Tutorial" icon in The Timing Diagrammer program box.
- Choose the File/Print menu option to print the tutorial instructions.

New Features - Version 1.3

- Drag transitions from either min or max edge for more control over edge placement.
- Multiple delays can force a single transition (4 reconciliation methods available).
- Parameter label text is completely customizable (and can use control codes).
- Control codes can be placed in text strings so that you put edge times in your text that automatically update.
- Drag & drop control over parameter location in your timing diagram (Select parameter in drawing window and drag up or down).
- Transitions can have overlapping uncertainty regions (option can be turned off).
- Trailing insignificant zero's in time values are removed by default (option can be turned off).
- Option to hide parameter labels when zoomed out to where parameter is less than 2 pixels wide.
- Added Options dialog to simplify setting several options at once.
- Able to import & export to spreadsheets in comma separated value format
- Able to read Chronology libraries (formulas are not supported, just values)
- Added option to capture waveforms only (without a border) in Copy-To-Clipboard.

New Features - Version 1.2

- Reconvergent Fanout (common delay path checking).
- Edit parameters in the drawing window using the Parameter Properties Dialog Box. (Just double click on the parameter).
- Exact placement of signal transitions with the Edge Placement Dialog box. (Just double click on a signal transition).
- Locked edge option so that a signal transition cannot be dragged or shoved from its current position.
- New "display time units" setting so that you can enter values at a convenient level and still have the resolution of a smaller "base time unit".
- New "constants" for entering formulas. Mark a numeric constant with a single quote. For example, 5+'2'*F0 is interpreted as 5(display time units)+2(constant)*F0(a free parameter).
- Improved scrolling speed.

- Minor bug fixes.

Odering Information

Print the OrderMe.wri file. There should be an icon in The Timing Diagrammer program box that will help you do this. If you have any questions call or write to SynaptiCAD:

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