

TekCap for Windows

User Guide

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Tekran Instruments Corporation

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Tek-Cap for Windows

1 Introduction

This document describes Version 1.07 of Tektronix's data capture application called **Tek-Cap for Windows**. The program provides an alternative to Tektronix's earlier DOS-based data capture application. (**Telix** and **DataCap**) Tektronix provides **Windows** based versions at no charge with each Model 2537A and can provide the DOS version on request..

1.1 Windows or DOS?

There are a number of factors to consider in deciding whether to use either the Windows or the DOS-based data capture programs provided with the Model 2537A analyzer.

1.1.1 Advantages of DOS

- 1 DOS is a reliable platform for data capture.
- 2 Barring a hardware failure, a DOS-based computer will always reboot automatically after a power failure.
- 3 DOS systems are less prone to lock up during use.

1.1.2 Disadvantages of DOS

- 1 DOS-based PC systems (and copies of DOS as well) are becoming rarer and more difficult to find.
- 2 Many modern components within PC's will not work under DOS and require Windows drivers.

1.1.3 Advantages of Tekcap for Windows

- 1 The Windows version operates more reliably and with less system disruption on systems that are running Windows.
- 2 It allows multiple concurrent data capture sessions to be run.
- 3 Each session requires its own dedicated COM port and will log to a separate screen window and to a separate file.

Note: *Running the DOS version of data capture in a DOS session under Windows is the least reliable approach and is not recommended.*

2 Installation

The program can be supplied on a CD-ROM, an emailed ZIP file, or downloaded as a ZIP file from our website at <http://www.tekran.com>

The PC must be running Windows 98 SE or later.

2.1 Installation from ZIP File

- 1 Unzip the file into a temporary directory using PkZip, WinZip or other similar utility.
- 2 Follow CD ROM Installation, below.

2.2 Installation from downloaded File or CD-ROM

- 1 Start the **SETUP.EXE** program. (This program may be initiated automatically when the CD is loaded. If not, simply double click on this file name to start installation.
- 2 If this particular CD contains several programs to install a menu will be displayed. Select the **Tekcap for Windows** option.
- 3 The default values for all prompts may be used during installation. The default program directory for installation is: **C:\Program Files\TekCapW**
- 4 A shortcut to the program file **TekCapW.exe** will be placed onto your desktop and in your Start-Programs menu tree.

2.3 Automatic Start-up

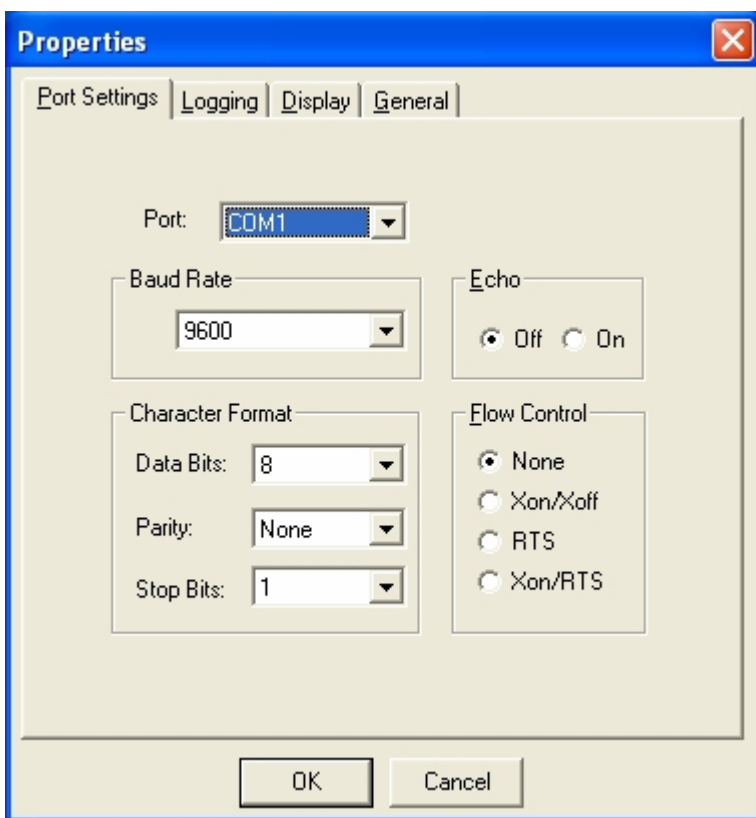
If you would like the program to begin logging automatically every time the PC is booted, simply drag a copy of the shortcut icon onto your **Startup** group.

3 Configuring the Program

The first time the program is run, it will recognise that it has not yet been configured and will display a message to this effect. Configuration is straightforward and involves making selections from the available properties in each tabbed dialog. All selections are stored in an initialization (.INI) file that is read each time the program is started.

It is possible to have several simultaneous logging sessions. Each would have its own uniquely named .INI file with that instrument's port and logging information contained within it. See **Multiple Instance Configuration** for details.

3.1 Port Settings



Port

The **COM** port to which the Model 2537A will be connected.

Maximum Speed & Connection Preferences

The baud rate and data characteristics of the Model 2537A are normally set for **9600, 8, None, 1**

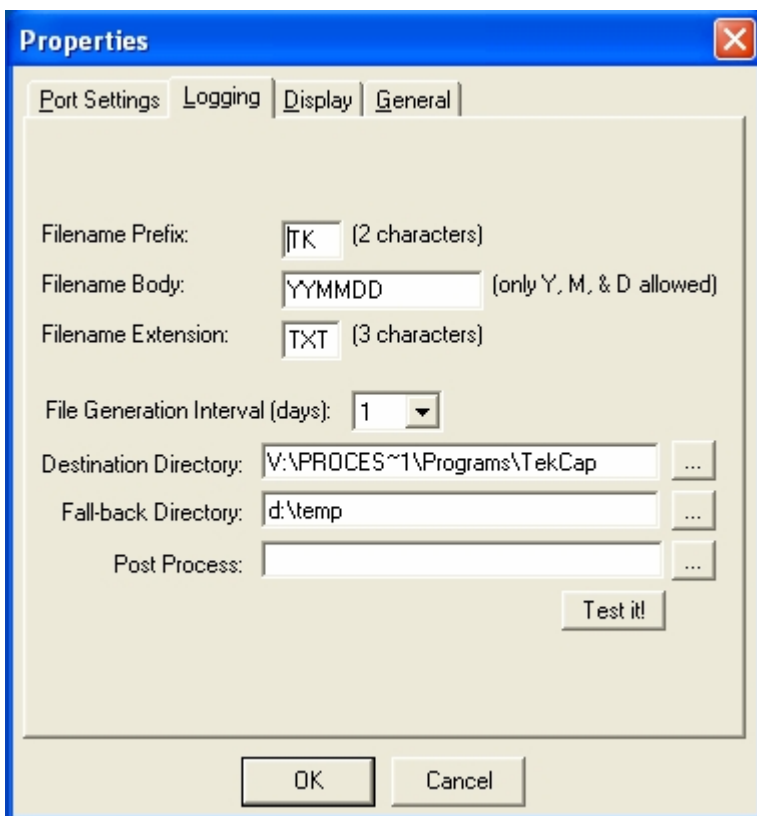
Echo

Set to **OFF**

Flow Control

Set to **None**

3.2 Logging



Filename Prefix, Body, and Extension

Log files are automatically created in the destination directory at the specified interval. Each file is given a name based on prefix, body, and extension components. The prefix is limited to two (2) characters, the body isn't really limited but should contain only date-specific tokens, and the extension is limited to three (3) characters. The date tokens tell Tekcap how to create the filename. Valid tokens are listed below:

Y	= day of year
YY	= 2 digit year
YYY	= 2 digit year, followed by day of year
YYYY	= 4 digit year
YYYYY	= 4 digit year, followed by day of year
M	= 1 digit month
MM	= 2 digit month
MMM	= 3-character form of month name
MMMM	= full month name
D	= 1 digit day
DD	= 2 digit day
DDD	= 3-character form of day of week
DDDD	= full day of week name

Example: YYMMDD will expand to **041228** if the file was created on December 28, 2004.

The prefix and extension are used to differentiate files from different studies, or when one PC is used to log the data from several different instruments. Many people use the 3 digit serial number

of the instrument as the extension. (e.g. **Tk031231.575** could be a data file for instrument with serial number **575**, created on December 31st, 2003.)

File Generation Interval

A log file is created and data is saved to it for the duration specified. Once the time interval is elapsed, the file is closed and a new file opened with the naming determined by filename prefix, body, and extension components, as explained above. Choose your date tokens carefully so that the file name can be generated uniquely at each interval.

Destination Directory

This is the directory into which data is placed. Each session may have its own directory. See **Multiple Instance Configuration** for details.

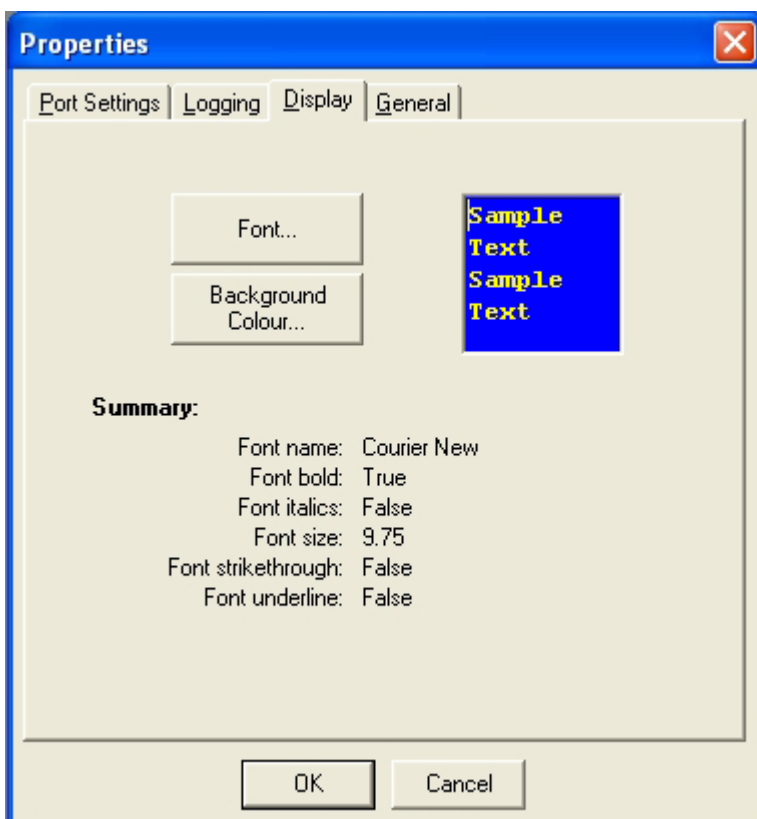
Fall-back Directory

Tekcap attempts to commit data coming from the communication port to a file on the disk as soon as it arrives. If, however, there is a problem that prevents the data from successfully being written, Tekcap will attempt to save it to a file called **Tekcap.dat** in the specified Fall-back directory. This feature was implemented to help in cases where the main logging file resides on a central server where network problems may prevent successful file saving.

Post Process

Tekcap will close the log file immediately after the specified interval has elapsed. It is at this time that no open files exist and the opportunity to process or move data is optimum. The Post Process field is where the name of a program or batch file can be specified for this purpose. Pressing the “**Test it!**” button simply executes the program, allowing quick and easy testing. If nothing is specified in this field, the new log file is created and logging resumes as before.

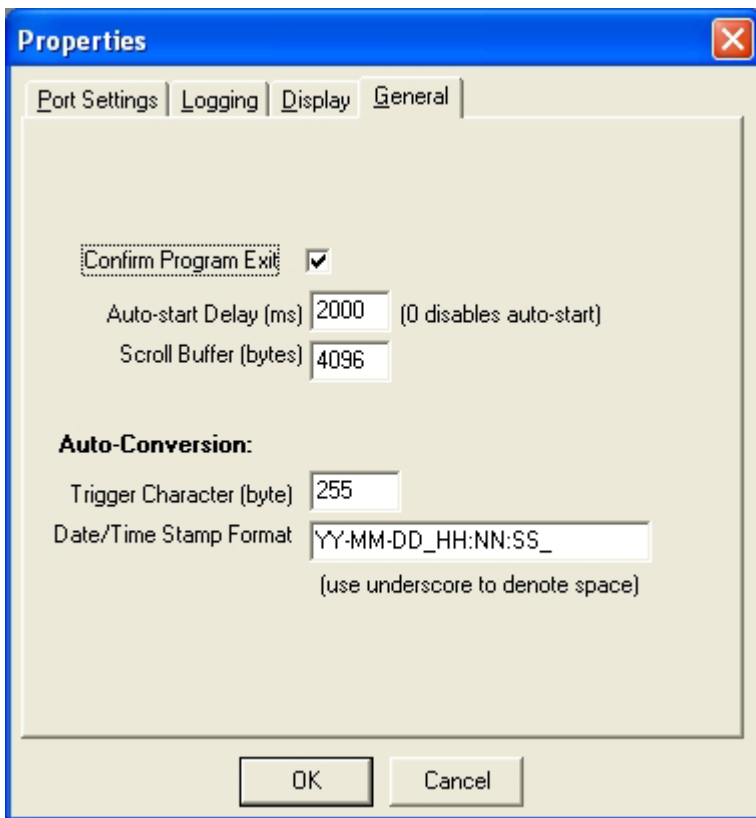
3.3 Display Properties



Font & Background Colour

This properties tab allows simple changes to the appearance of the program. Pressing the “Font” or “Background Colour” buttons launches the standard Windows font and colour selection dialogs. Besides cosmetics, changing background/font colours can help immensely when multiple instances of the program are running.

3.4 Logging & Port Display



Confirm Program Exit

Exit confirmation will be requested if this option is checked. If not, the program will terminate immediately after “Exit” is chosen on the main toolbar, or the “X” is clicked at the top-right of the window.

Auto-start Delay

Creating a small delay between when the program starts and when data logging begins can help in cases where small changes in settings are required (fine tuning). If a delay isn’t present, data logging must be stopped before properties can be changed.

Scroll Buffer

The number of bytes specified here determines how much data will be shown on the screen.

Auto-Conversion

This feature is for future use – not applicable to the model 2537A analyzer. It allows a specific ASCII trigger character in the data stream, usually a non printing control character, to automatically expand into a date/time string, based on the current PC system clock.

4 Multiple Instance Configuration

It is sometimes desirable to log data from multiple instruments with a single computer. This can be done with Tekcap for Windows by launching a copy of the program per instrument. However, to keep things like **COM** port settings, window position, font and background colours, etc. in order, each running copy of the program must save its settings to a unique initialization (**INI**) file. It follows, then, that when Tekcap is launched it must be told which **INI** file to use. Normally, when no **INI** file is specified, Tekcap will use a file called **TekCapW.ini**, located in the same directory as the program itself. To specify a unique **INI** file, a command-line parameter must be used as follows:

TekCapW [/INI=filename]

For example,

TekCapW /INI=C:\Program Files\TekCapW\TekCap007.ini
TekCapW /INI=C:\Program Files\TekCapW\TekCap012.ini

The above two lines would launch 2 copies of Tekcap, one using **TekCap007.ini** and the other using **TekCap012.ini** to supply initialization information. All that is required is to put this information into a shortcut so that launching the programs can be made easier. So, to setup multiple instances of Tekcap for the purpose of logging data from multiple instruments, do the following:

1. Install the program once and verify that it works with a single instrument. The first time the program is run it will "complain" about not being able to locate an **INI** file. Just press **OK** and change the default properties as required. Tekcap will create an **INI** file called **TekCapW.ini** in the same directory from which the program was executed.
2. Navigate to the Tekcap program directory (usually **C:\Program Files\TekCapW**) and Copy/Paste as many **TekCapW.ini** files as there will be instruments, minus one, naming each one uniquely.
3. Make a shortcut to **TekCapW.exe** on the Desktop and name it **Instrument1**, or some other meaningful name that appropriately identifies the instrument.
4. Right-click the icon that was just created and choose **Properties** from the menu.
5. In the **Target** textbox, go to the end of the line and place the command-line parameter required to make Tekcap use one of the alternate **INI** files created in step 2, above. See the above example for guidance.
6. If you want this instance to auto-start after reboot, copy this shortcut to the **Startup** group.
7. Repeat steps 3-6 as required.