Técnica Industrial Oswaldo Filizola Ltda.

Reference Manual
DynaView Standard/Pro Software version 2.6.5

rev. nov/10

Introduction

Técnica Industrial Oswaldo Filizola Ltda. thanks you for purchasing this software. This product was designed to be a reliable tool for testings, with advanced features and a friendly interface. Please feel free to contact us.

Setup

This software requires a computer with Windows 2000, XP, Vista, Vista x64 or Windows 7 and a minimum of 512MB RAM (1GB recommended) and a free serial port. Installation in older Windows versions is not possible.

To install, insert CD in drive and run Setup.exe, then follow screen instructions.

After installation set serial ports at Control Panel (Control Panel > Device Manager) as follows:

	force or stress transducer with display	force or stress transducer without display	motor driver (version M only)	Starrett mod. 797B caliper
speed	9600	9600	9600	4800
data bits	8	8	8	7
parity	none	even	none	even
stop bits	1.0	1.0	1.0	1.0
control	xon/xoff	none	xon/xoff	xon/xoff

Transducer connection (transducer with display only)

Force transducer is connected to PC by means of a serial cable included with product. This cable has a DB9F connector (PC) at one end and free contacts at the other for the indicator screwless terminals.

Cable end with DB9F connector must be connected to PC serial port.

Cable end with free contacts, if not connected to indicator at factory, must be connected as follows:

1. open back of indicator by removing the 2 screws;
2. insert cable through one of 4 cable passages;
3. depress the orange lever beside the terminal required and insert wire, as follows:
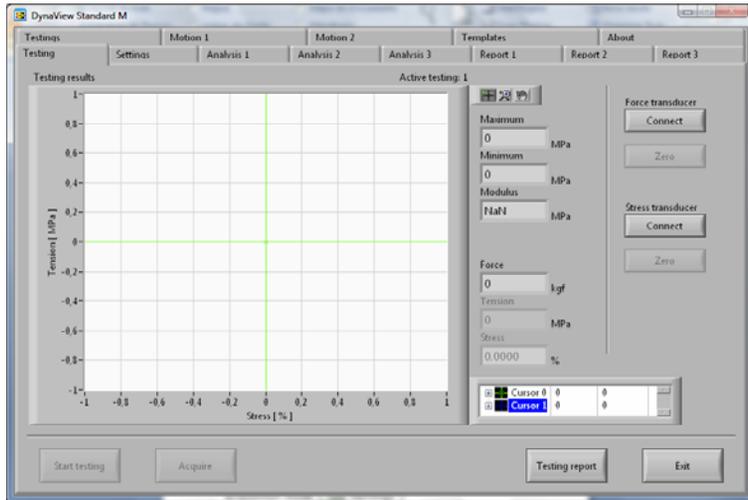
RED - RXD
WHITE OR YELLOW - TXD
GREEN – GND

4. fasten cable using a cable tie around the cable strain relief anchor;
5. reinstall the back of indicator.

Testing

This is the main software screen:

Available commands are:

Connect: connects to force or stress transducer. This command must be run before starting testings. Connection is closed when Exit is pressed.

Zero: zeroes transducer up to ±20% of nominal capacity.

Start testing: starts new data acquisition, according to options set in Settings tab (see Making a testing).

Acquire: acquires one more point in manual acquisition mode (see Settings).

Testing report: generates a report with all testings available in memory (up to 10) in html format and opens in default browser.

Exit: exits software. Data not saved by means of Testing report function will be lost.

Available indicators are:

Maximum and Minimum: maximum and minimum force or tension values for the current testing.

Speed: loading speed, in force or tension/s, average of the last 2 seconds.

Modulus: elastic modulus (Young´s modulus), calculated from a region of graph chosen by the user (see Calculating modulus).

Integral: graph area calculated by numerical integration. If force and strain units are N and mm respectively, value is converted to J (Joule).

This screen is shown clicking on Settings tab:
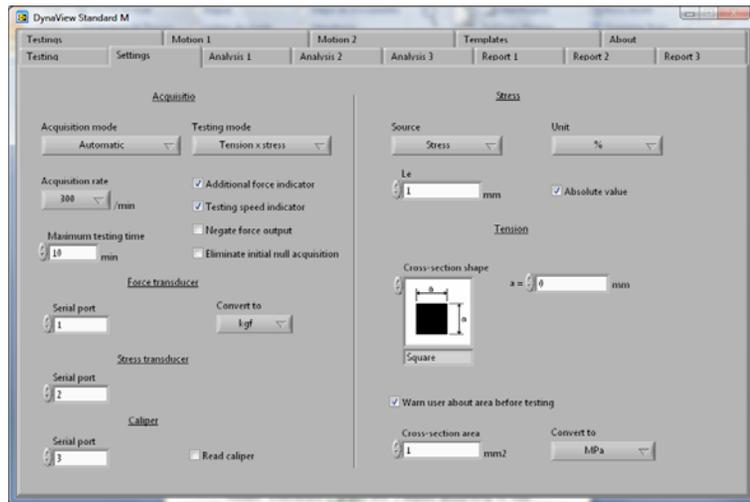
Available commands are:

Acquisiton>Acquisition mode: Manual acquisition is used in force x time or force x stress testings, in which acquisition of each point occurs when user presses *Acquire* button. In automatic mode, data acquisition is made automatically in frequency according to Acquisition rate (see below).

Acquisition>Testing mode: Sets testing in force x time, force x stress, tension x time or tension x stress modes. Indicators (graph etc) adjust according to this setting. Note that if this setting is changed from force to tension or vice-versa after testings, all testings in memory will be converted, including graphs and other indicators.

Acquisition>Acquisition rate: Sets data acquisition rate for the automatic mode.

Acquisition>Additional force indicator: Opens additional force indicator besides graph in tension testings.

Acquisition>Testing speed indicator: Opens additional force speed indicator (force or tension/s) besides the graph.

Acquisition>Maximum testing time: Sets maximum testing time for the automatic mode. If user does not stop acquisition, testing will be stopped when time set is reached.

Acquisition>Negate force output: Negates force or tension signal, thus inverting Y scale indication.

Force transducer>Serial port: Sets serial port to which force transducer (dynamometer) is connected. This number can be checked at Windows´ Control Panel.

Force transducer>Convert to: Sets force unit for automatic conversion. Indicators adjust according to this setting. Note that is this setting is changed after testings, all testings in memory will be converted, including graphs and other indicators.

Stress transducer>Serial port: Sets serial port to which stress transducer (extensometer) is connected. This number can be checked at Windows´ Control Panel.

Stress transducer>Source: Sets source of stress readings. If source is an extensometer select Stress, if source is testing machine select Displacement.

This manual available for public access contains only the initial pages. We will be glad to provide more information on request, please send us an email.