CONEX-PSD

Two-Axis Position & Power Sensing device

Newport®

Controller GUI Manual

V2.0.x

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Two-Axis Position & Power Sensing Device CONEX-PSD

1.0 Introduction

1.1 Purpose

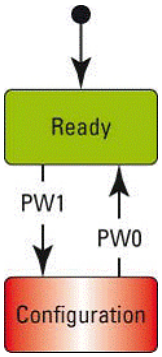
The purpose of this document is to provide instructions on how to use the CONEX-PSD Controller graphical user interface (GUI).

1.2 Overview

The CONEX-PSD Controller GUI is a graphical user interface, that allows the user to interact with the CONEX-PSD controller.

1.3 Controller State Diagram

The CONEX-PSD controller is defined by the following state diagram.



Controller's LED display:

CONFIGURATION: **SLOW BLINK RED**.

READY: **SOLID GREEN**.

2.0 Installation

2.1 Install CONEX-PSD Graphical User Interface

Following are steps to install CONEX-PSD GUI:

- For 32 bit, Select and launch “CONEX-PSD Utility Installer Win32.exe”. For 64 bit, Select and launch “CONEX-PSD Utility Installer Win64.exe”.
- A window opens up showing Install welcome page.
- Click on “Next”.
- A window opens up allowing destination folder selection. By default it is showing C:\.
- Click on “Next”.
- Ready to install window opens up. Click “Install”.
- Then installation starts, wait for completion. Click on “Finish” to finalize the installation.

32 bit installer will be installed “Newport.CONEXPSD.CommandInterface.dll” in GAC_32 folder and 64 bit installer will be installed the dll in GAC_64 folder.

NOTE

LabVIEW user can add reference of command interface dll from GAC during VI creation.

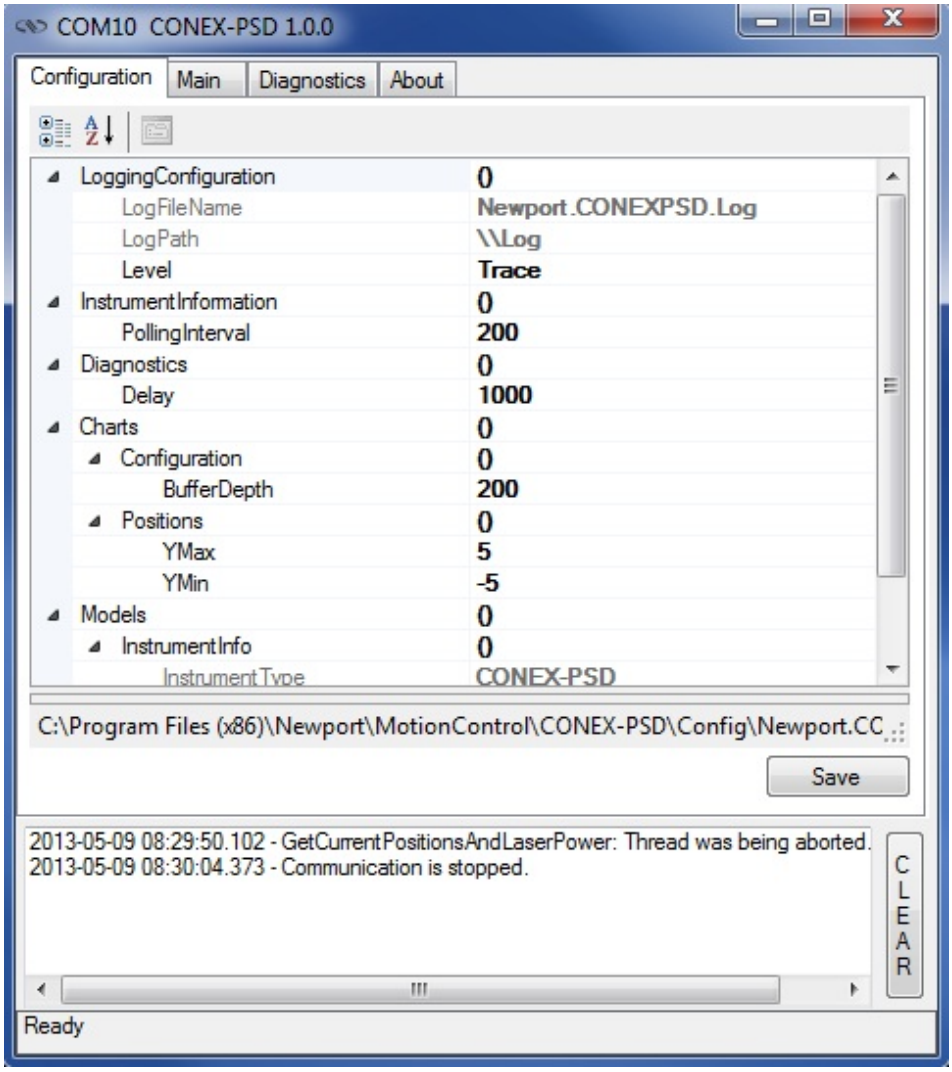
2.2 Launch GUI

From Windows “START” menu, select “All Programs\Newport\Motion Control\CONEX-PSD\ CONEX-PSD Utility”.

3.0 User Interface

3.1 Configuration

The Configuration tab allows the user to view and / or change information related to the logging configuration and the instrument settings. Read only values are displayed for the log file name and the log file path. The logging level may be changed to any of the settings in the drop-down list on the right hand side. Trace is the most detailed of the settings and when this setting is selected the controller GUI logs everything. Critical Error is the least detailed of the settings and when this setting is selected the controller GUI will only log errors that are defined to be critical.



The polling interval defines the number of milliseconds between each time the controller GUI polls the CONEX-PSD for the latest information. The user may change the polling interval by entering a value.

The **Save** button allows to save the current settings to the configuration file.

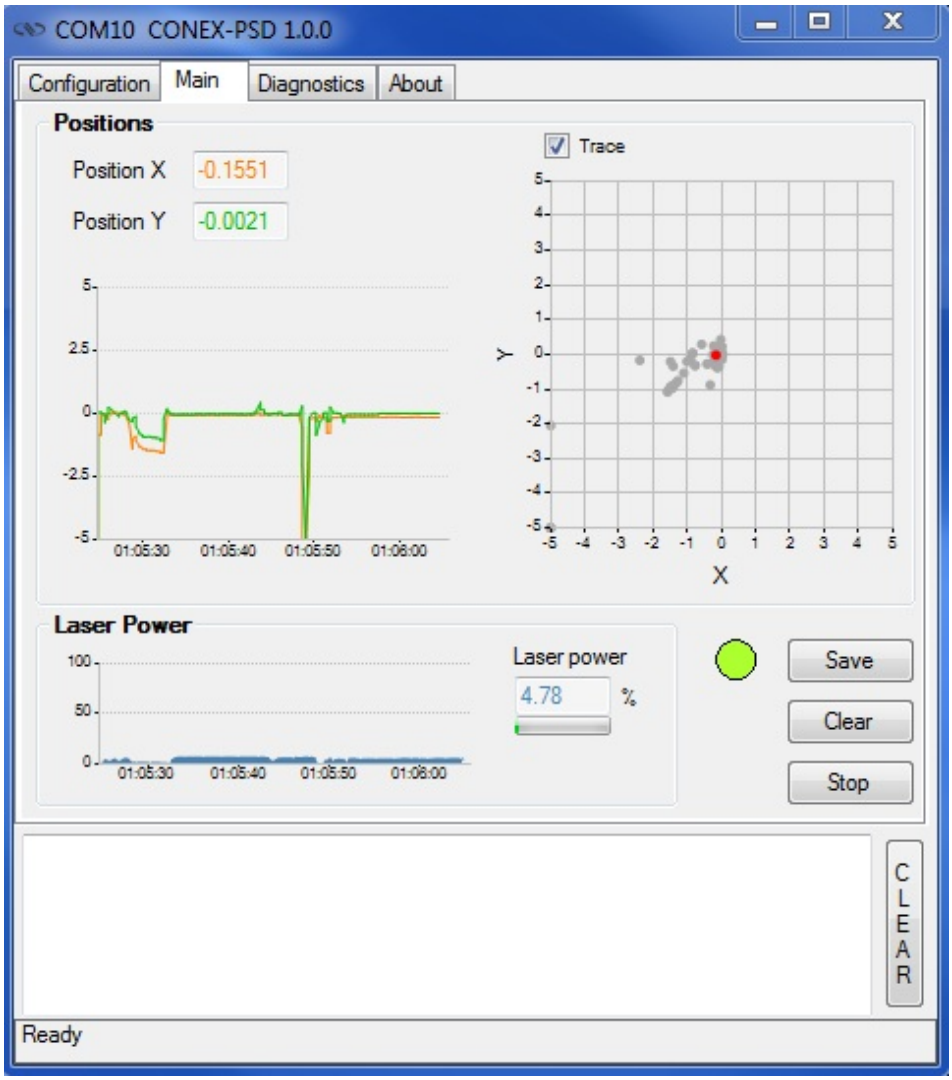
Configurable settings

The following table describes all the settings that can be change by the user.

Parameter	Description	Values	Default
LoggingConfiguration			
Level	Logging level. Trace is the most detailed of the settings and when this setting is selected the controller GUI logs everything. Critical Error is the least detailed of the settings and when this setting is selected the controller GUI will only log errors that are defined to be critical.	Trace Detail Equipment Message Info Warning Error Critical Errror	**Trace**
InstrumentInformation			
PollingInterval	The polling interval defines the number of milliseconds (delay) between each time the controller GUI polls the instrument for the latest information.	An Integer	**200**
Diagnostics			
Delay	The delay defines the number of milliseconds between each sent command from a text file.	An Integer	**1000**
Models\InstrumentInfo			
CommunicationChannel	The communication channel	USB	**USB**
Charts			
BufferDepth	BufferDepth defines the maximum number of points displayed in the chart.		**200**
YMax	YMax defined the maximum Y limits of the position charts. This parameter can be used to perform a zoom.		**5**
YMin	YMin defined the minimum Y limits of the position charts. This parameter can be used to perform a zoom.		**-5**

3.2 Main

The Main tab displays the main controls in the controller GUI like a virtual front panel. It is updated each time the polling interval timer expires.



"Controller status led"

A single led shows the current controller state. When you move the mouse over the led, the controller state is displayed in an information balloon.

"Save button"

This button allows save the current buffer of points (X, Y and Laser power).

The result file is saved in the "\data" folder from the current controller GUI directory.

The saved datas are: Date, Time, X position, Y position and Laser power.

"Clear button"

This button allows clear all charts.

"Stop button"

This button allows stopping the chart refreshing.

“Positions”

Two text boxes display the current positions X and Y.

A chart shows the X and Y positions in relation to the time.

A XY chart display the position (X, Y) of the optical beam.

NOTE

The chart limits can be modified from the “Configuration Tab”

The buffer depth can be modified from the “Configuration Tab”.

“Laser Power”

A text box displays the current laser power in percentage.

A chart shows the laser power in relation to the time.

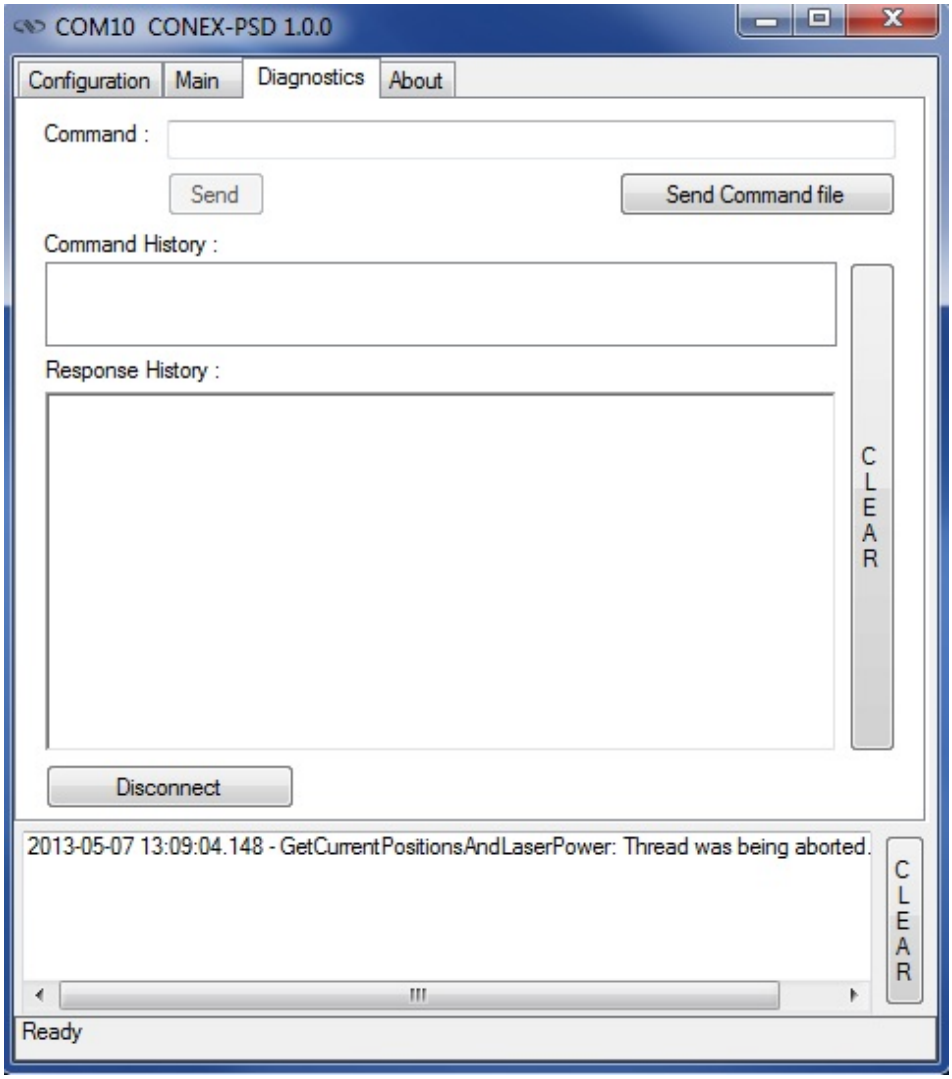
NOTE

The buffer depth can be modified from the “Configuration Tab”.

3.3 Diagnostics

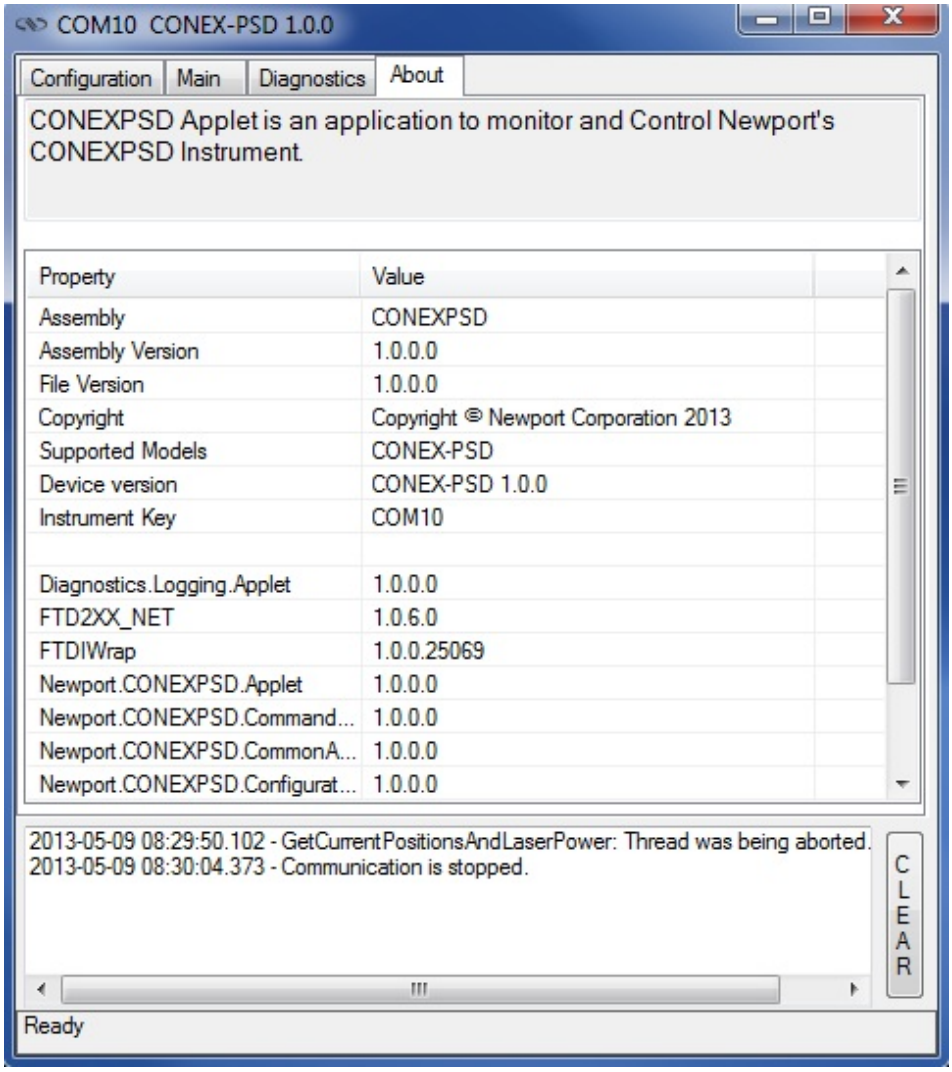
The Diagnostics tab allows the user to enter instrument commands and to view the history of commands sent and responses received. This list of commands and the syntax of each command can be found in the user's manual for the instrument.

A file of commands can be sent line by line to the instrument with the "Send Command file" button.



3.4 About

The About tab allows to display information about the controller GUI and the connected instrument. It displays the controller GUI name, version, and copyright information.



Service Form

Your Local Representative

Tel.: _____

Fax: _____

Name: _____

Company: _____

Address: _____

Country: _____

P.O. Number: _____

Item(s) Being Returned: _____

Model#: _____

Return authorization #: _____
(Please obtain prior to return of item)

Date: _____

Phone Number: _____

Fax Number: _____

Serial #: _____

Description: _____

Reasons of return of goods (please list any specific problems): _____

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