ConLAS

Laser Source

Software instructions

(V1.1)

© ConLAS(SN: 201502003)		
Port No. 4 - Connect	Disconnect	☐ Monitor Window
Pump ON Power of Pump (mW) 400 Pump OFF Step (mW) 10	Set Set	400.00 mW 26.00 dBm
0mA Current of Pump (mA)	600mA	1200mA 780 mA
0V Voltage of Pump (V)	2∨	4V 1.35 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.46 °C
State of Connection: ON; State of Pump: ON		

CONTENTS

1	Outline3	•
2	Software installation4	ł
2.1	Software installation conditions4	
2.2	Installation Steps4-	.7
3	Software application8	}
3.1	The port number confirmation8-	-10
3.2	Start-up Screen10)
3.3	Moudle connection11	1
3.4	Source on12	2
3.5	Power setting12	2
3.6	Current value saving	13
3.7	Source off1	13
3.8	Window monitoring	14

1.Outline

- 1.1This part includes the installations and instructions of the software "ConLAS";
- 1.2ConLAS is designed for applying to the software for VENUS series laser source including bentchtops and modules, and having graphical user interface, is operated under the Microsoft Windows systems;
- 1.3As ConLAS is being used, make sure the serial port cable which is controlling the single amplifier or a serial port hub or USB to a serial port hub which is controlling multiple amplifiers are connected between the computers and the modules. We recommend Z-TEK USB and DB9 tielines and please setup the tielines driver correctly; as to the modules have been built-in USB interfaces, you can connet USB-A to USB-B cables between computer and module directly;
- 1.4As to the modules with built-in USB interfaces, you need to install USB drivers under the place of "\USB serial port drivers";

1.5If you have any problems, please don't hesitate to contact us.

2. Software installation

2.1 Software installation conditions: MicroSoft Windows XP (SP2 aboved) or Win7, Win8;

2.2 Software installation steps:

steps	instructions		
1	Insert a disk, or perating "setup.exe" under the content of setup.		
2	Showing the interface as follows, then click the button"next step"		
3	Showing the information of user and product, then click the button "next step" ConLAS Setup User Information Enter your user information and click Next to continue. Name: ConLAS Company: YANTAI YATAI PHOTOELECTRICITY EQUIPMENT CO., LTD (Back Next) Cancel		

	Choosing the installation paths, the default path is : C:\Program Files\Laser Source or user-defined installation paths.
	So ConLAS Setup
	Installation Folder Where would you like ConLAS to be installed?
	The software will be installed in the folder listed below. To select a different location, either type in a new path, or click Change to browse for an existing folder.
4	Install ConLAS to:
	C:\Program Files\ConLAS
	Space required: 6.91 MB Space available on selected drive: 64.64 GB
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel
	Creating the shortcut
	🐱 ConLAS Setup
	Shortcut Folder Where would you like the shortcuts to be installed?
	The shortcut icons will be created in the folder indicated below. If you don't want to use the default folder, you can either type a new name, or select an existing folder from the list.
	Shortcut Folder:
5	ConLAS
	 Install shortcuts for current user only Make shortcuts available to all users
	< <u>Back</u> <u>Cancel</u>

	Being ready to install		
	So ConLAS Setup		
	Ready to Install You are now ready to install ConLAS 1.0		
6	The installer now has enough information to install ConLAS on your computer. The following settings will be used: Install folder: C:\Program Files\ConLAS Shortcut folder: ConLAS Please click Next to proceed with the installation. < <a>Back Sext > Cancel		
	Starting to install		
	S ConLAS Setup		
	Installing ConLAS Please wait		
7	Installing Files C:\WINDOWS\system32\comdlg32.ocx		

steps	instructions		
1	Insert a disk, or perating "setup.exe" under the content of setup.		
2	Showing the interface as follows, then click the button"next step"		
3	Showing the information of user and product, then click the button "next step" ConLAS Setup User Information Enter your user information and click Next to continue. Name: ConLAS Company: YANTAI YATAI PHOTOELECTRICITY EQUIPMENT CO., LTD		
4	Choosing the installation paths, the default path is: C:\Program Files\Laser Source or user-defined installation paths.		

	S ConLAS Setup		
	Installation Folder Where would you like ConLAS to be installed?		
	The software will be installed in the folder listed below. To select a different location, either type in a new path, or click Change to browse for an existing folder.		
	Install ConLAS to:		
	C:\Program Files\ConLAS Change		
	Space required: 6.91 MB Space available on selected drive: 64.64 GB		
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel		
	Creating the shortcut		
	😼 ConLAS Setup		
	Shortcut Folder Where would you like the shortcuts to be installed?		
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5	Shortcut Folder:		
5	ConLAS		
	 Install shortcuts for current user only Make shortcuts available to all users 		
	(<u>B</u> ack <u>N</u> ext > <u>C</u> ancel		
6	Being ready to install		

	ConLAS Setup	
	You are now ready to install ConLAS 1.0	
	The installer now has enough information to install ConLAS on your computer.	
	The following settings will be used:	
	Install folder: C:\Program Files\ConLAS	
	Shoreda Tolder. Contexas	
	Please click Next to proceed with the installation.	
	< <u>B</u> ack <u>Next</u> > <u>C</u> ancel	
	Starting to install	
	SconLAS Setup	
	Installing ConLAS Please wait	
7	Installing Files C:\WINDOWS\system32\comdlg32.ocx	
,		
	<u>Cancel</u>	



3. Software application

3.1. The port number confirmation

After installing the USB serial port connections correctly, the system will assign a port number which would be used to connect modules and computers. Please check as follow:

3.1.1. "my computer"—— "attribute"—— "system attribute":



3.1.2.Click "Hardware":

ystem Properties 🛛 🖓 🔀			
System Restore Automatic Updates Remote General Computer Name Hardware Advanced			
Device Manager			
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.			
Device Manager			
Drivers Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers.			
Driver Signing Windows Update			
Hardware Profiles			
Hardware profiles provide a way for you to set up and store different hardware configurations.			
Hardware Profiles			
OK Cancel Apply			

3.1.3. Click "Device Manager":

B Device Manager	
File Action View Help	
 61JXVN1 Computer Disk drives Display adapters DVD/CD-ROM drives Human Interface Devices Keyboards Mice and other pointing devices Monitors Monitors Network adapters Ports (COM & LPT) Processors SCSI and RAID controllers Sound, video and game controllers Storage volumes System devices Universal Serial Bus controllers 	

3.1.4.Click"Port(COM and LPT)"to check the port number:

B Device Manager	
File Action View Help	
Image: Second	

As shown in the image above, the port number is 4. When you use ConLAS for the first time, you need to input number 4 in the select box and the port number will be remembered. when you use ConLAS again in the same computer, the port number is the default.

© ConLAS		
Port No. 4 Connect	Disconnect	🗖 Monitor Window
Pump ON Power of Pump (mW) 0 Pump OFF Step (mW) 10	▲ Set	0.00 mW
	Save Default	dBm
OmA Current of Pump (mA)	600mA	1200mA
Voltage of Pump (V)	2V	4VV
0 °C Temprature of Pump (°C)	20 °C	40 °C
State of Connection: OFF; State of Pump: OFF		

3.2. Start-up Screen

The port is not opened, indicator light is red, the status line shows "connection Status: OFF; source state: OFF".

3.3. Moudle connection		
© ConLAS(SN: 201502003)		
Port No. 4 J Connect	Disconnect	🗆 Monitor Window
Pump ON Power of Pump (mW) 0 Pump OFF Step (mW) 10	Set	0.00 mW
	Save Default	dBm
OmA Current of Pump (mA)	600mA	1200mA 22 mA
Voltage of Pump (V)	2V	4V 1.18 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.48 °C
State of Connection: ON; State of Pump: OFF		

Please click "Connect" to make sure the connection is successful between computer and module. If the connection is successful, the indicator light is green, the titlebar shows serial numbers ,the connection status shows ON as well as the Pump Current, Pump Voltage and Pump Temperature will be shown.

If there is no electricity or setting wrong port number or improper connection, the software"ConLAS" will give you the tip as follow: please check out whether something is wrong with the electricity or port number or connecting line.

© ConLAS		X
Port No. 4 Connect	Disconnect	🗆 Monitor Window
Pump ON Power of Pump (mW) 0 Pump OFF Step (mW) 1	Set	0.00 mW
	Save Default	dbm
Current of Pur ConLAS	600mA	1200mA
Voltage of Pi	2V	4V V
Temprature of Pump (C)	20 °C	40 °C
State of Connection: OFF; State of Pump: OFF		1

3.4. Source on

© ConLAS(SN: 201502003)		
Port No. 4 - Connect	Disconnect	in Monitor Window
Pump ON Power of Pump (mW) 0 Pump OFF Step (mW) 10	Save Default	0.00 mW dBm
OmA Current of Pump (mA)	600mA	1200mA 22 mA
Voltage of Pump (V)	2V	4∨ 1.18 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.49 °C
State of Connection: ON; State of Pump: ON		

When it is connected successfully between the software"ConLAS" and the module, please click "Pump ON" to make sure the module is working. Then, the area which shows the power is bright, regarding to the connection status and the source status, both of them show "ON".

If you have already saved the power value before, the output power value is the default. 3.5. Power setting

@ ConLAS(SN: 201502003)		
Port No. 4 Connect	Disconnect	🦳 Monitor Window
Pump ON Power of Pump (mW) 400 Pump OFF Step (mW) 10	Save Default	400.00 mW 26.00 dBm
0mA Current of Pump (mA)	600mA	1200mA 780 mA
0∨ Voltage of Pump (V)	2V	4∨ 1.35 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.46 °C
State of Connection: ON; State of Pump: ON		

You can set the power pump value in the input box after the laser being turned on, you can also change the single step adjustment precision through inputting the value in the box. When you finish setting up all the parameters, the power value and all the parameters of Pump will be shown in the interface of ConLAS.

3.6.Current value saving

© ConLAS(SN: 201502003)		
Port No. 4 - Con	nect Disconnect	ㄷ Monitor Window
Pump ON Power of Pump (mW) Pump OFF Step (mW)	400 ★ Set	400.00 mW
The default pump power has been set to: 400mW	Save Default	26.00 dBm
0mA Current of Pump (mA)	600mA	1200mA 783 mA
0V Voltage of Pump (V)	2V	4∀ 1.35 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.48 °C
State of Connection: ON; State of Pump: ON		

Click the button"Save Default", the current output power value will be saved, when you turn on the laser again, the current output power value is the default. 3.7. Source off

© ConLAS(SN: 201502003)		
Port No. 4 Connect	Disconnect	🗖 Monitor Window
Pump ON Power of Pump (mW) 0 Pump OFF Step (mW) 10	▲ Set	0.00 mW
	Save Default	_ · _ ɑɒm
OrmA Current of Pump (mA)	600mA	1200mA 22 mA
Voltage of Pump (V)	2V	4V 1.19 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.46 °C
State of Connection: ON; State of Pump: OFF		

Click the button"Pump OFF", the output power value is 0, as well as the area which shows the power is grey and the souce status shows"OFF".

3.8. Window monitoring

@ ConLAS(SN: 201502003)		
Port No. 4 Connect	Disconnect	r Monitor Window
Pump ON Power of Pump (mW) 400 Pump OFF Step (mW) 10	▲ Set	400.00 mW 26.00 dBm
0mA Current of Pump (mA)	600mA	1200mA 780 mA
Voltage of Pump (V)	2V	4∨ 1.35 V
0 °C Temprature of Pump (°C)	20 °C	40 °C 24.47 °C
Sending		Receiving
636 -> AA 55 22 0 0 0 637 -> AA 55 22 0 0 0 638 -> AA 55 22 0 0 0 639 -> AA 55 22 0 0 0 639 -> AA 55 22 0 0 0	 ▲ 636 <- 55 A ← 55 A ← 637 <- 55 A ← 638 <- 55 A ← 639 <- 55 A ▲ 	A 22 A F 3 8C 9 48 5 90 1 1 0 86 1 A 22 A C 3 93 9 48 5 90 1 1 0 8A 1 A 22 A C 3 8F 9 47 5 90 1 1 0 85 1 A 22 A C 3 8F 9 4A 5 90 1 1 0 88 1
State of Connection: ON; State of Pump: ON		

As to the users who develop the software by themselves, you can open"window monitoring" at the bottom of the interface, which is convenient to develop and debug by showing the hexadecimal numbers.