

2022

Driver Configuration Software <u>User Manual</u>

1.Introduction	1
1.1 Software Introduction	1
1.2 Operating System Requirements	
1.3 Software installation and startup	1
1.4 Programmer Hardware Wring Connection	2
2. Software Function	3
2.1 User	4
2.1.1 User login	4
2.1.2 Change password	4
2.1.3 Exit Login	4
2.2 Port Configuration	5
2.3 Read Write Parameters	5
2.4 Firmware Upgrade	10
2.5 About	10
3. Annex A	11
3.1 Modification record	11

1.Introduction

1. Software Introduction

Bridgelux Vesta Fusion and Pallas-A drivers can be programmed through "Bridgelux Driver Configuration". It allows users to configure the output current, minimum dimming ratio, dimming-to-off mode, and dimming voltage (Vesta Fusion also includes controls of dimming curve, dimming mode, fade time, CCT value, etc.)

2. Operating System Requirements

Operating System: Windows 7 Service Pack 1 or higher Software Environment: .NET Framework 4.8 Programming

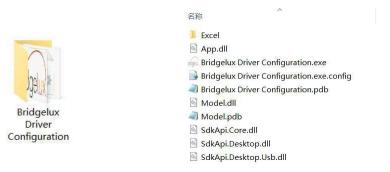
Tool: Bridgelux Driver Configuration V2.0.230728.zip

Note:

.NET Framework 4.8 must be installed.
 Download link: https://dotnet.microsoft.com/download

2. If your computer cannot automatically install the required driver program, please search for "CH340E Driver" on the internet to download and install the driver.

1.3 Software installation and startup



"Bridgelux Driver Configuration" folder is free-install software.

Just unzip the "Bridgelux Driver Configuration V2.0.230728.zip" to your local drive, and then, double click "Bridgelux Driver Configuration.exe" to start the software.

1.4 Programmer Hardware Wring Connection

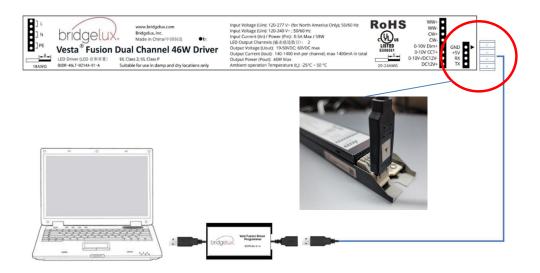


Figure 1 Programming connection diagram and connector orientation



Figure 2 Vest Fusion Driver Programmer

The USB male connector of Vest Fusion Driver Programmer is connected to the computer, the USB female connector is connected to the USB male to 2.54mm cable, and the 2.54mm terminal is connected to the driver. see figure 1.

2. Software Function

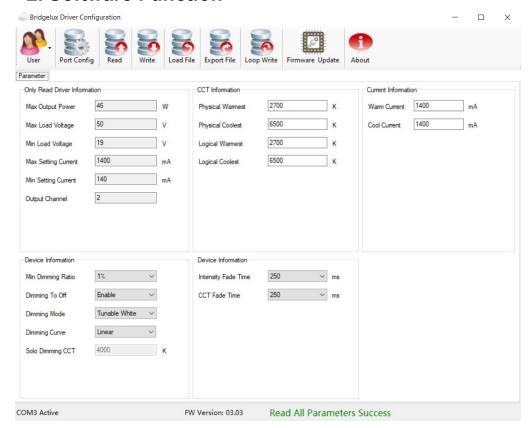


Figure 3

Bridgelux Driver Configuration Software UI include:

Title bar: Displays the software name.

Operating area: All operation buttons, including user menu, serial port configuration, read parameter, write parameter, load parameter file, export parameter file, loop write parameter, firmware upgrade, about software.

Parameter display area: Displays and edits parameter information.

Status bar: Displays serial port, firmware version, operation prompt information.

1. User

1. User login



Figure 4

- 1. Click User -> login.
- 2. Input "password" and then click "login".

Note: Default password "adp12346".

2.1.2 Change password



Figure 5

- 1. Click User->Change Password.
- 2. Input old password, new password and confirm password then click "Save".

2.1.3 Exit Login

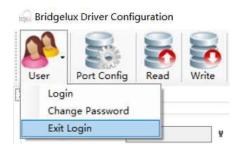
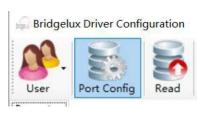


Figure 6

Click User-> Exit login, Exits the engineer permission.

2.2 Port Configuration



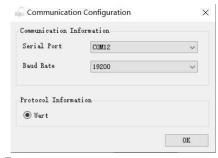
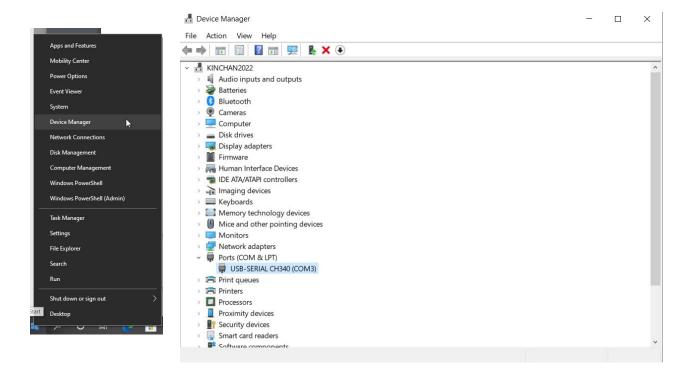


Figure 7

- 1. Click "Port Config".
- 2. Select programmer serial port, baud rate 19200 and then click "OK".

After plug the Bridgelux programming cable to one of the USB port on your PC. We have to find out which COM port has been assigned to this programming cable

- 1. Right click on "Windows" icon (at the bottom left corner)
- 2. click on "Device Manager"
- 3. From the pop-up window, scroll down to "Ports (COM & LPT)", you should find the "USB-SERIAL CH340 (COM X). Write down the COM port number as you will need it when you use the Bridgelux Configuration APP in next step.
 - For example, this PC assigned the USB-SERIAL CH340 to COM 3 (your PC may assign different COM port for your case)



2.3 Read Write Parameters

2.3a Vesta Fusion (Dual Channel Driver)

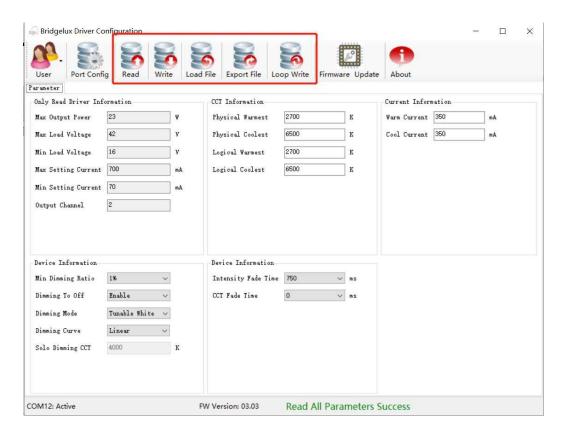


Figure 8

- 1. Click Read button. Read all parameters.
- 2. Click Write button. Write all parameters to driver.
- 3. Click Export File button. Export all parameter to file.
- 4. Click Load File button. Load external parameter file.
- 5. Click Loop Write button. Write all parameters to driver every 2.5s.

Only Read Driver Information						
Max Output Power	Maximum output power of the driver					
Max Load Voltage	Voltage Maximum load voltage of the driver					
Min Load Voltage	Minimum load voltage of the driver					
Max Setting Current	Maximum settable current of the driver					
Min Setting Current	Minimum settable current of the driver					
Output Channel	Number of drive output channels					
CCT Information						
Physical Warmest Configuration physical warmest and coolest color temperature of the color temperat						
Physical Coolest range.						
	The valid range 1500K-7000K, and the color temperature					
	should be the same as that of the lamp.					
Logical Warmest	Configuration logical warmest and coolest color temperature					
Logical Coolest	range.					
Logical Cooloct	The logical color temperature range should be within the					
	physical color temperature range.					
Current Information						
Warm Current	output current of Warm color channel.					
Cool Current	output current of Cool color channel.					
Device Information						
Min Dimming Ratio	Minimum dimming ratio, 1% 5% 10% is optional.					
Dimming To Off	Enable or disable dimming to OFF					
Dimming Mode	Configuration Dimming Mode.					
	Warm dimming: use "0-10V Dim+" voltage control both					
	intensity and color temperature simultaneously.					
	Tunable white: use "0-10V Dim+" voltage control intensity and					
	"0-10V CCT+" voltage control color temperature.					
	Flex: reserved for internal use only					
Dimming Curve	dimming curve, "logarithmic", "linear", "square" is optional					
Intensity Fade Time	Configuration fade time of intensity changing, the fade time of					
	the driver intensity from A to B.					
	0ms,250ms,500ms,750ms,1000ms,1250ms,1500ms is					
	optional.					
CCT Fade Time	Configuration fade time of CCT changing, the fade time of the					
	driver CCT from A to B.					
	0ms, 250ms, 500ms, 750ms, 1000ms, 1250ms, 1500ms is					
	optional.					

2.3 Read Write Parameters

2.3b Pallas-A (Single Channel Driver)

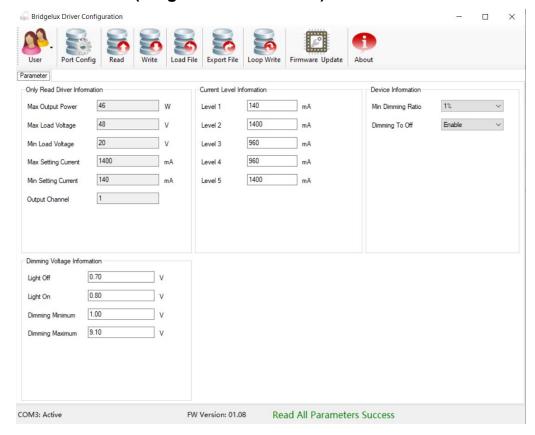


Figure 9

- 1. Click Read button. Read all parameters.
- 2. Click Write button. Write all parameters to driver.
- 3. Click Export File button. Export all parameter to file.
- 4. Click Load File button. Load external parameter file.
- 5. Click Loop Write button. Write all parameters to driver every 2.5s.

Only Read Driver Information					
Max Output Power	Maximum output power of the driver				
Max Load Voltage	Maximum load voltage of the driver				
Min Load Voltage	Minimum load voltage of the driver				
Max Setting Current	Maximum settable current of the driver				
Min Setting Current	Minimum settable current of the driver				
Output Channel	Number of drive output channels				
Current Information					
Level 1 – Level 4	Reserved for Bridgelux R&D use only				
Level 5	output current setting				
Device Information					
Min Dimming Ratio	Minimum dimming ratio, 1% 5% 10% is optional.				
Dimming To Off	Enable or disable dimming to OFF				
Dimming Voltage Information					
Light off	Configuration dimming off voltage.				
Light on	Configuration dimming on voltage.				
Dimming Minimum	Configuration dimming minimum voltage.				
Dimming Maximum	Configuration dimming maximum voltage.				

2.4 Firmware Upgrade

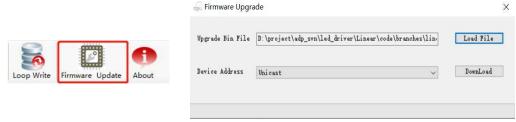


Figure 10

- 1. Click Firmware Update button, open firmware upgrade UI.
- 2. Click Load File button on the firmware upgrade UI, Load Upgrade Bin File.
- 3. Select device address "Unicast" or "broadcast" and then click download button.

 Note: Firmware upgrade is not supported, and will be extended in the future.

2.5 About





Figure 11
Click About button, open software information UI. see figure 11

3. Annex A

1. Modification record

Version	Description	Note
V1.0	Bridgelux Driver Configuration Software User	
	Manual Initial Version	
V2.0	Added Single Channel Driver programming info	