

2025

Driver Configuration Software

User Manual

V5.0

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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 V3.0.240515.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.

If your computer cannot automatically install the tool required driver, please click on the link below to download the driver and manual installation: https://www.wch.cn/downloads/file/65.html?time=2023-03-17%2016:47:34&code=DZOI4uB6P0dEfCxL0bp5AGLyOaggJMAb025ICJEt?time=2023-10-

17%2011:00:38&code=lc43aw5DHnM7D4DwNJcfowsWUTSrDyl8XoYGGj7O

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File	Acti	on View Help
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· 4	DES	KTOP-738NGRF
>	4	Audio inputs and outputs
>	\$	Batteries
>	_	Computer
>	-	Disk drives
>	-	Display adapters
>	2	DVD/CD-ROM drives
>	-	Floppy disk drives
>		Floppy drive controllers
>	-	Human Interface Devices
>	-	DE ATA/ATAPI controllers
>		Keyboards
>		Mice and other pointing devices
>		Monitors
>	-	Network adapters
~	10	Other devices
		😰 USB Serial
>		Ports (COM & LPT)
>		Print queues
>		Processors
>		Software devices
>	4	Sound, video and game controllers
>	2	Storage controllers
>	۲.,	System devices
>	Ψ	Universal Serial Bus controllers

Driver not installed



Driver installation complete

1.3 Software installation and startup



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

Just unzip the "Bridgelux Driver Configuration V3.0.240515.zip" to your local drive, and then, double click "Bridgelux Driver Configuration.exe" to start the software.

1.4 Programmer Hardware Wring Connection (depends on driver)



Figure 2 Pallas-A Driver Programmer

The USB male connector Pallas-A Driver Programmer is connected to the computer.

2. Software Function

Iser Port Co	onfig Read	Write	Load File E	xport File	Loop Write	Firmware U	pdate About			
meter										
nly Read Driver Info	mation		Driver Inf	formation			Driver Information			
ax Output Power:	25W		Level 1		500	mA	End Life	Disable	~	
av Load Voltago:	551/		Louid 2		500	mA	End I fe Time	50.0		KHourn
ak Ludu vulaye.	554		Level 2		500		Ciù Die fille		_	KHOUIS
in Load Voltage:	8V		Level 3		500	mA	Fade In	Disable	~	
ax Set Current:	1250mA		Dimming	Curve	Linear	~	Fade In Time	50	~	ms
in Set Current:	125mA		Min Dim	ming Ratio	1.0	~ %	Dimming Fade Time	50	~	ms
utput Channel:	1		Dimming	To Off	Enable	~				
			-							
			Print Par	rt Number	-	Prin	t			
ntection Information			Print Par	rt Number	mation	Prin	t Voltage Information			
otection Information	n		Print Par Constant	rt Number t Lumen Infor	mation	Prin	Voltage Information	0.70		
otection Information	n 105	°C	Print Par Constant Constant	rt Number t Lumen Infor nt Lumen	mation Disable	Prin	Voltage Information	0.70		v
otection Information TP Start TP End	n 105 115	* *	Print Par Constant Constant	nt Number t Lumen Infor nt Lumen Ratio(%	mation Disable	- Prin	Votage Information Light Off Light On	0.70		v v
otection Information TP Start TP End TP Min Output	n 105 115 100.0	*c *c %	Print Par Constant Constant level 1 2	t Lumen Infor t Lumen Infor Ratio(% 100.0 100.0	mation Disable	Prin Prin Z.0 6.0	Votage Information Light Off Dimming Minimum	0.70 0.90 1.00		v v v
otection Information TP Start TP End TP Min Output TC	n 105 115 100.0 Disable	*c *c *	Print Par Constant Constant level 1 2 3	t Lumen Infor t Lumen Ratio(% 100.0 100.0 100.0	mation Disable	Time(KHours 2.0 6.0 8.0	Votage Information Light Off Dimming Minimum Dimming Maximum	0.70 0.90 1.00 8.00		v v v
otection Information TP Start TP End TP Min Output TC TC Start	105 115 100.0 Disable 14.981	*C *C %	Print Par Constant Constant level 1 2 3 4	t Lumen Infor t Lumen Ratio(% 100.0 100.0 100.0 100.0	mation Disable	Time(KHours 2.0 6.0 8.0 10.0	Votage Information Light Off Dimming Minimum Dimming Maximum ALIX Votage	0.70 0.90 1.00 8.00		v v v v
otection Information TP Start TP End TP Min Output TC TC Start	105 115 100.0 Disable 14.981 c.93c	*c *c % ¥	Print Par Constant Constant level 1 2 3 4 5 5	t Lumen Infor tt Lumen Infor tt Lumen Ratio(%) 100.0 100.0 100.0 100.0 100.0	mation Disable	Prin Prin 2.0 6.0 8.0 10.0 15.0	Voltage Information Light Off Dimming Minimum Dimming Maximum AUX Voltage	0.70 0.90 1.00 8.00 12.0	~	v v v v
otection Information TP Start TP End TP Min Output TC Start TC End	105 115 100.0 Disable 14.981 6.836	°C °C % ΚΩ ΚΩ	Print Par Constant Constant Ievel 1 2 3 4 5 6 7	t Lumen Infor t Lumen Infor tt Lumen Ratio(% 100.0 100.0 100.0 100.0 100.0 100.0	mation Disable	Time(KHours 2.0 6.0 8.0 10.0 15.0 20.0 25.0	voltage Information Light Off Dimming Minimum Dimming Maximum AUX Voltage	0.70 0.90 1.00 8.00 12.0	×	v v v v v
otection Information TP Start TP End TP Min Output TC TC Start TC End TC Min Output	105 115 100.0 Disable 14.981 6.836 100.0	*C *C % ΚΩ ΚΩ	Print Par Constant Constant Ievel 1 2 3 4 5 6 7	tt Lumen Infor tt Lumen Ratio(% 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	mation Disable	Prin Prin 2.0 6.0 8.0 10.0 15.0 20.0 25.0	voltage Information Light Off Dimming Minimum Dimming Maximum AUX Voltage	0.70 0.90 1.00 8.00 12.0		v v v v

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



password	
-	

Figure 4

1. Click User -> login.

2. Input "password" and then click "login". Note: Default password "adp12346".

2.1.2 Change password

Bridgelux Driver Configuration	G Change Password	×
	old Password	
User Port Config Read Write	new Password	
Login	Confirm Password	
Change Password		
Exit Login	Save	Cancel
Exit Login	Save	Cancel

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



communication 1		
Serial Port	COM12	~
Baud Rate	19200	~

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

	S	0	5			•			L.	ć
User Port Conf	fig Read Wr	rite Lo	ad File Export File Lo	op Write Firm	ware Update	About				
rameter Only Read Driver Inf	formation		CCT Information			Current Infor	mation			
Max Output Power	23	W	Physical Warmest	2700	к	Warm Current	350		mÅ	
Max Load Voltage	42	v	Physical Coolest	6500	ĸ	Cool Current	350	_	mÅ	
w'	10		To do 1 Warren	9200						
min Load Voltage	16	Y	Logical warmest	2100	N					
Max Setting Current	700	mA	Logical Coolest	6500	K					
Min Setting Current	70	mA								
Output Channel	0									
output channel	2									
Device Information-	2		Device Information							
Device Information-	1%	~	Device Information Intensity Fade Time	750	√ ms					
Device Information Min Dinming Ratio Dinming To Off	1% Enable	> >	Device Information Intensity Fade Time CCT Fade Time	750 0	∼ ns za ∨					
Device Information Min Dimming Ratio Dimming To Off Dimming Mode	2 1% Enable Tunable White	> > > >	Device Information Intensity Fade Time CCT Fade Time	750 0	28 V 28 V					
Device Information Min Dimming Ratio Dimming To Off Dinming Mode Dimming Curve	1% · · · · · · · · · · · · · · · · · · ·	> > > >	Device Information Intensity Fade Time CCT Fade Time	750	v ns v ns					
Device Information Min Dinming Ratio Dinming To Off Dinming Mode Dinming Curve Solo Dinming CCT	2 1% Enable Tunable White Linear 4000	× × × K	Device Information Intensity Fade Time CCT Fade Time	750	ns v ns					

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 Inf	ormation
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
CCT Information	
Physical Warmest	Configuration physical warmest and coolest color temperature
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.
	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. Solo dimming: use "0-10V Dim+" voltage control the intensity of
	both channels simultaneously.
	Warm dimming: use "0-10V Dim+" voltage control both
	intensity and color temperature simultaneously.
	I unable white: use "0-10V Dim+" voltage control intensity and
	"0-10V CC1+ Voltage control color temperature.
Dimming Curve	dimming curve, "logarithmic", "linear", "square" is optional
Solo Dimming CCT	CCT when the dimming mode is at Solo Dimming
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
CCT Fade Time	Configuration fade time of CCT changing, the fade time of the
	0ms 250ms 500ms 750ms 1000ms 1250ms 1500ms is
	optional.

2.3 Read Write Parameters

Bridgelux Drive	r Configuration									-		
¥9. 🖢		5		5	-		<i>S</i>	•				
Jser Port	Config Read	Write	Load File	Export File	Loop Write	Firmwa	are Update	About				
ameter					- D		- 18 H					
nly Read Driver I	formation		Driver	Information				Driver Information				
lax Output Power	25W		Level	1	500		mA	End Life	Disable	~		
lax Load Voltage	55V		Level	2	500		mA	End Life Time	50.0		KHours	
the Local Vehaces	001		Lovel	-	500	-		End die finite	Disable		TTI IDUIO	
in Load voitage:	av		Levei	3	500		ma	Fade in	Lisable			
lax Set Current:	1250mA		Dimmi	ng Curve	Linear	~		Fade In Time	50	~	ms	
Ain Set Current:	125mA		Min D	imming Ratio	1.0	~	%	Dimming Fade Time	50	Ý	ms	
utput Channel:	1		Dimmi	ng To Off	Enable	Ŷ						
			Print F	Part Number			Print					
intection Informat	on		Const	nt Lumen Info	mation			Voltage Information				
	105	15	Const	ant Lumon	Dieable	~		Light Off	0.70		V	
IF Start	105		Corist	ant cumen	Disable		1 1	Light Oil	0.00			
TP End	115	*C	1	100.0)	2.0	(Hours)	Light On	0.50		v	
TP Min Output	100.0	%	2	100.0		6.0		Dimming Minimum	1.00		V	
ITC	Disable	~	3	100.0		8.0		Dimming Maximum	8.00		٧	
ITC Start	14.981	КΩ	4	100.0		10.0		AUX Voltage	12.0	~	V	
ITC End	6.836	ΚΩ	6	100.0		20.0						
TC Min Output	100.0	%	7	100.0		25.0						
LP Value	25.0	w										

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 Inf	ormation
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 2	Reserved for Bridgelux R&D use only
Level 3	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 Inf	formation
Light off	Configuration dimming off voltage.
Light on	Configuration dimming on voltage.
Dimming Minimum	Configuration dimming minimum voltage.
Dimming Maximum	Configuration dimming maximum voltage.
AUX Voltage	12 / 24V

2.4 Firmware Upgrade

			💭 Firmware Upgr	ade	×
9	() ()	•	Upgrade Bin File	$\label{eq:def:D:project/adp_svnled_driver} D: \project/adp_svnled_driver/Linear/code/branches/linear/code/linear$	Load File
Loop Write	Firmware Update	About	Device Address	Uni cast 🗸	DownLoad

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



b	ridael	UX.
Bridge	lux Driver Configuration	
V2.0.2 Operat Softwa	20218 :ing System: Windows 7 SP1 or h are Environment: .NET Framework	ni gher (4. 8
URL:	https://www.bridgelux.com/	

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	
V3.0	Minor revision	
V4.0	Minor revision	
V5.0	Revised programming cable physical description	