User Manual

Micro-Manager Device Adaptors for Prizmatix LED Illuminators

Ver. 1.0

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1 Introduction

Micro-Manager (μ Manager) is a popular free open source software package for control of automated microscopes. Together with the image processing application ImageJ, μ Manager provides a comprehensive, freely available, imaging solution.

Prizmatix LED light sources such as UHP-T-LED, UHP-F-LED and UHP-M series are in extensive use in various microscopy applications. This user manual describes how to install drivers and device adapters to enable the use Prizmatix LED products with µManager software.

2 Safety

2.1 General safety

Please make yourself familiar with the contents of these operating instructions before using the Prizmatix LED illuminator with the software.

For specific safety instructions please refer to the Safety chapter at the user manual of the specific Prizmatix product.

The following symbols are used for the warnings:

CAUTION! Failure to comply with the safety instructions can be hazardous to the user.

CAUTION! Failure to comply with the safety instructions can result in damage to the instrument.

Prizmatix products are NOT authorized for use as components in life support devices or systems.

3 Device Setup

Remove the device from the packaging and inspect the device for loose components or any signs of damage. Notify Prizmatix if the device appears damaged in any way: do not install or operate a damaged device.

The installation procedure of Prizmatix LED illuminator with USB control by Prizmatix software and / or μ Manager software comprises of three steps:

- Setup of Prizmatix LED Control software for Windows
- Setup of USB Device Drivers
- Setup of µManager Device Adaptors

3.1 Package contents list

The USB enabled Prizmatix LED system can come in various system configurations.

Software Installation CD	USB-A to USB-B Cable

	ltem	Description	Quantity
1	USB Cable	USB Type-A to USB Type-B cable for connection of USB unit to PC	1
2	CD with Software	Software and Drivers CD - Please download additional software drivers as described in the installation section	1



Connection of the Prizmatix LED CTRL to the computer

3.2 Prizmatix LED Control software for Windows Setup

Please refer to the specific LED illuminator user manual for installation instructions for Prizmatix LED control software.

3.3 USB Device Drivers setup

Please refer to the specific LED illuminator user manual for the Device Drivers installation instructions of specific Prizmatix LED illuminator product.

3.4 µManager Device Adaptors setup

3.4.1 Checking the COM Port

Before setting up the μ Manager Device Adaptors Please open the Device Manager (right click on the My Computer icon on the desktop and choose "Manage" from the list) and check that the Prizmatix DRV device appears in the list on the right panel. Write down the COM port number (100 in this example) it will be useful later.



3.4.2 Copying the Device Adaptor Files

The Device Adaptors files can be found at

C:\Program Files(x86)\Prizmatix LED CTRL\uManager_Device_Adaptors\ folder. The files are: mmgr_dal_Prizmatix_LED.dll msvcp100.dll msvcp100d.dll msvcr100.dll msvcr100.dll

Please copy these files into μ Manager folder:

```
C:\Program Files (x86)\Micro-Manager-1.4\
```

Note: You can easily find the μ Manager folder in following way: Right click the μ Manager icon on the Desktop

	Create shortcut Delete Rename	
4	Properties	-

Select Properties from the menu. In the Properties dialog box press the "Open File Location" button

Seneral Shortcut	Compatibility Security Details Previous Versions				
Micro-Manager 1.4					
Target type: Application					
Target location:	Micro-Manager-1.4				
<u>T</u> arget	\Program Files (x86)\Micro-Manager-1.4\ImageJ.exe"				
Start in:	"C:\Program Files (x86)\Micro-Manager-1.4"				
Shortcut key:	None				
<u>R</u> un:	Normal window 🔻				
Comment					
Open <u>File</u> Lo	Change Icon Advanced				

The μ Manager folder will be displayed.

3.4.3 Hardware Configuration Wizard

In order to use the hardware from the $\mu Manager$ software the device needs to be configured via the Hardware Configuration Wizard.

Open the μ Manager software and choose the Hardware Configuration Wizard from the "Tools" menu.

¥ N	Vicro	o-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_UHP-M 7 single.c
File	Too	Plugins Help	
	69	Refresh GUI Rebuild GUI	ntion settings Save Preset
Pleas		Script Panel Shortcuts Device Property Browser	
ROI Image		Stage Position List Multi-Dimensional Acquisition Mouse Moves Stage (Use Hand Tool) Pixel Size Calibration	c + - Edit Preset + - Edit
		Hardware Configuration Wizard	channels 🗌 Slow hist
			vizard to create new hardware configuration
		Options	
2		Options	

In the Hardware Configuration Wizard dialog box, select "Create new configuration" and click Next.



In the next screen, select "Prizmatix_LED" from the Available Devices list. Click on plus (+) to expand the list of available devices, select the device and click the "Add..." button.

	dd or remove devices				
installed Dev	vices:				
Name	Adapter/Library	Description	Status	Edit	Adding or Removing Devices
Core	MMCore/Default	Core controller	Default	Periphera	1. The list above displays all of the
				Remove	devices that will be handled by
					Micro-Manager in this
					configuration file.
					2. If you are making a new
					configuration file for the first
					a a sea
					time, please visit the
					time, please visit the Micro-Manager website
					Micro-Manager website (www.micro-manager.org) and
					Micro-Manager website (www.micro-manager.org) and look under Devices to find
vailable De	vices: list by vendo	or 🔻 Coi	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all
	inse by rende	or 🔻 🔽	mpact view	▼ Add	Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices.
Piezo	system_NV40_1 system_NV40_3	or 🔻 💽	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new
Piezo Piezo PI_GO	system_NV40_1 system_NV40_3 CS	or 🔻 Coi	mpact view	Add Help	Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready
Piezo Piezo PI_GO PI_GO	system_IVV40_1 system_IVV40_3 CS CS_2	or V [coi	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever youre ready (click 'Add' button). If you need
Piezo Piezo PI_GC PI_GC Polycl	system_NV40_1 system_NV40_3 CS	or v [coi	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever youre ready (click 'Add' button). If you need more help with deciding which
Plezo Piezo PI_GC PI_GC PI_GC Polycl Precis	system_NV40_1 system_NV40_3 CS CS_2 thromeV sExcite	or v [coi	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a
Plezo Piezo PI_GC PI_GC Polycl Precis	vsystem_IV40_1 vsystem_IV40_3 CS CS_2 hromeV sExcite	or v [coi	mpact view		Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever youre ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a particular device and click Help
Piezo Piezo PI_GC PI_GC Piezo Piezo Piezo Piezo Prior Prior Prizm	system_NV40_1 system_NV40_3 CS CS_2 hromeV sExcite Ecguey natix_LED ED_UHP_M_CTRL Prizm	natix Dual LED Coni			Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a
Piezo Piezo PI_GC PI_GC Piezo Piezo PI_GC Piezo Polycl Precis Prior Prizm	ssystem_NV40_1 ssystem_NV40_3 CS_2 hromeV sExcite	natix Dual LED Coni			Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever youre ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a particular device and click Help út really helps:).
Piezo PI_GC PI_GC Polyci Precis Prior Prizm	system_NV40_1 system_NV40_3 CS CS_2 hromeV sExcite Ecguey natix_LED ED_UHP_M_CTRL Prizm	natix Dual LED Coni			 Micro-Manager website (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a particular device and click Help út really helps:). 4. While adding a device you can

A New dialog box will be displayed. Click on the empty field in the Value column and choose the COM Port from the first step (device manager).

🛓 Device: LED_	CTRL Library: Prizmatix		📥 Device: LED_C	CTRL Library: Prizmati	ix_LED
Label LED_CTRL			Label LED_CTRL		
Initialization Prop	erties		Initialization Prope	erties	
Device	Property	Value	Device	Property	Value
LED_CTRL	Port		LED_CTRL	Port	COM100 -
					COM100
					СОМЗ
Port Properties (F	RS 232 settings)	Scan	Port Properties (R	S 232 settings)	Scan
		OK Cance			OK Cancel

The Port Properties (RS 232 settings) table will be automatically populated. Check that the settings are same as the picture below – especially the value of BaudRate=57600

Label LED_CTRL					
nitialization Prop	erties				
Device Property Value					
LED_CTRL					
Port Properties (R		Scan			
Device	Property	Value			
Device COM100	Property AnswerTimeout	Value 500.0000			
Device COM100 COM100	Property AnswerTimeout BaudRate	Value 500.0000 57600			
Device COM100 COM100 COM100	Property AnswerTimeout BaudRate DelayBetweenCharsMs	Value 500.0000 57600 0.0000			
Device COM100 COM100 COM100 COM100	Property AnswerTimeout BaudRate DelayBetweenCharsMs Handshaking	Value 500.0000 57600 0.0000 Off			
Device COM100 COM100 COM100 COM100 COM100 COM100	Property AnswerTimeout BaudRate DelayBetweenCharsMs Handshaking Parity	Value 500.0000 57600 0.0000 Off None			
Device COM100 COM100 COM100 COM100	Property AnswerTimeout BaudRate DelayBetweenCharsMs Handshaking	Value 500.0000 57600 0.0000 Off			

Click OK to proceed.

ep 2 of 6: Ad Installed Devi	d or remove devices					
Installed Devi	ces:			1	Adding or Removing Devices	
Name	Adapter/Library	Description	Status	Edit	Adding of Kemoving Devices	
Core	MMCore/Default		Default	Periphera		
LED_CTRL	LED_CTRL/Priz	Prizmatix LED C	. OK	Remove	 The list above displays all of the 	
				Keniove	devices that will be handled by	
					Micro-Manager in this	
					configuration file.	
					If you are making a new	
					configuration file for the first	
					time, please visit the	
					Micro-Manager website	
					Micro-Manager website	
					(www.micro-manager.org) and	
usible Devi	inger list buryand				(www.micro-manager.org) and	
	inde by rende	or • [con	npact view		(www.micro-manager.org) and look under Devices to find	
w		or • [con	npact view	Add	(www.micro-manager.org) and look under Devices to find instructions for setting up all	
Polychi	romeV	or • [con	npact view	Add	(www.micro-manager.org) and look under Devices to find instructions for setting up all your devices.	
Polychi Precist	romeV Excite	or • [con	npact view		(www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new	
Polychi Precist Prior Prior	conception of the second secon	or 🔹 con	npact view		(www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready (click 'Add' button). If you need	
Polychi Precist Prior PriorLe	romeV Excite ggacy ttix_LED		ŕ		 (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. You can begin adding new devices whenever you're ready (click 'Add' button. If you need more help with deciding which 	
Polychi Precise Prior PriorLe Prizma	romeV Excite egacy ttix_LED D_UHP_M_CTRL Prizm	natix Dual LED Cont	ŕ		(www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever you're ready (click 'Add' buttoni. If you need more help with deciding which devices to add, highlight a	
Polychi Precise Prior PriorLe Prizma • LED	romeV Excite Excite Utitx_LED UHP_M_CTRL Prizm CTRL Prizmatix LED	natix Dual LED Cont	ŕ		(www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever yourer ready (click 'Add' button!. If you need more help with deciding which devices to add, highlight a particular device and click Help	
Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior Prior	gacy ggacy ttx_LED _UHP_M_CTRL Prizm CTRL Prizmatix LED 25 26 26 26 26 26 26 26 26 26 27 27 26 27 27 27 27 27 27 27 27 27 27	natix Dual LED Cont	ŕ		 (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. You can begin adding new devices whenever youre ready (click 'Add' button. If you need more help with deciding which devices to add, highlight a particular device and click Help át really helps.). 	
Polychi Precise Prior Prior Prizma LED ProgRe PSRen RAMPS	gacy ggacy ttx_LED _UHP_M_CTRL Prizm CTRL Prizmatix LED 25 00teCamera	natix Dual LED Cont	ŕ		 (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever yourre ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a particular device and click Help át really helps). While adding a device you can 	
Polychi Precist Prior Prior Prior Prizma ProgRe ProgRe RamPS Ramp	igacy tits_LED 0_UHP_M_CTRL Prizm 0_CTRL Prizmatix_LED 0_S5 noteCamera 5	natix Dual LED Cont	ŕ		 (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. You can begin adding new devices whenever yourer ready (click 'Add' button'. If you need more help with deciding which devices to add, highlight a particular device and click Help út really helps:). While adding a device you can choose to allow the wizard to 	
Polychi Precise Prior Prior Prizma LED ProgRe PSRen RAMPS	romeV Exote Socie UUHP M_CTRL Prizm O_UHP M_CTRL Prizmatox LEO as TCTRL Prizmatox LEO as TCTRL Prizmatox LEO as DoteCamera 5	natix Dual LED Cont	ŕ		 (www.micro-manager.org) and look under Devices to find instructions for setting up all your devices. 3. You can begin adding new devices whenever yourre ready (click 'Add' button). If you need more help with deciding which devices to add, highlight a particular device and click Help át really helps). While adding a device you can 	

Click OK on the next 4 screens (Steps 2, 3, 4 and 5) to proceed.

On the last step, type-in a new configuration file name and click Finish.



The configuration process has been finished successfully. You can now use the device. There are several ways to use hardware devices with μ Manager. We will demonstrate the easiest way – through the Device Propery Browser

3.5 Using Prizmatix_LED Devices

3.5.1 Using through the Device Property Browser

Choose Device Property Browser from the Tools menu, The following dialog box will be displayed.

Device Property Browser		🖌 Device Property Browser
Show shutters	Refresh!	Show cameras Image: Constraint of the second se
Property	Value	Property Value
LED_CTRL-Description LED_CTRL-Name LED_CTRL-Power LED_CTRL-State Core-AutoFocus Core-AutoShutter Core-Camera Core-Camera Core-Focus Core-Focus Core-Focus Core-Initalize Core-SLM Core-SLM Core-Shutter Core-Stutter Core-XYStage	Prizmatix LED Controller LED_CTRL	LED_UHP_M_CTRL-Description Prizmatix Dual LED Controller for LED_UHP_M_CTRL-Name LED_UHP_M_CTRL LED_UHP_M_CTRL-Power-UV 100 Image: Comparison of the second
Device Adaptor for Priz	matix LED Controller	Device Adaptor for Prizmatix Dual LED
(single channel device)		Controller for UHP-M

The LED Power can be adjusted by changing the position of LED_CTRL-Power slider. this enables the use of the LED_CRTL-State as a shutter to switch the LED ON/OFF according to the power set by the slider.

3.5.2 Using the Configuration Presets

In order to simplify and streamline the usage of the devices μ Manager provides Configuration Presets. The presets appear in the μ Manager main window and are therefore very convenient to use. The figure below shows the Device Adaptor for Prizmatix LED Controller in the Configuration Presets area of μ Manager:

🛃 Micro-Man	ager 1.4.22 - C	:\Program F	iles (x86)\Micro-Manager-1.4\My_Pr	izmatix_LED 🗖 🗖 🗾 📈			
File Tools Plugins Help							
Snap	Camera setting	IS	Configuration settings	Save			
Live	Exposure [ms]	0	Group	Preset			
Album	Binning	-	Prizmatix_LED_PWR	PWR_1000			
Multi-D Acq.	Shutter		Prizmatix_LED_State	0			
Please <u>cite Micro-M</u> ROI Zoo	om Profile	Autofocus	Group: + - Edit	Preset: + – Edit			
Image info (from camera): 0 × 0 × 0, Intensity range: 0 bits, Online pix Contrast Metadata Comments Scale Bar Top-Left White Sync channels Slow hist Display mode: Grayscale Ignore % 2 Image Log hist							

Note: Additional information regarding Configuration Presets can be found at Micro-Manager User's Guide Paragraph 5.2 Grouping device properties: Configuration Presets.

To make a new configuration group (a new row in the **Configuration settings** table), click the Group '+' button at the bottom left of the Configuration Settings table.

e Tools Plu	Camera settings	Configuration settings		Save
Ive Image: String of the s	Exposure [ms] Binning Shutter Auto shutter Cla	Group	Preset	
	Imager so funding will contin Imager so funding will contin <td< td=""><td>Group: + -</td><td>Edit Preset +</td><td>-) Ec</td></td<>	Group: + -	Edit Preset +	-) Ec
Contrast Met	adata Comments			

A **Group Editor** window will appear that looks similar to the Device/Property Browser, but has a third column called 'Use in Group?'. Check the box in the 'Use' column for any property that you want to be included in this configuration group. Give the Group a name (e.g. "Prizmatix LED PWR") and click OK.

Here you can specify the prope in a configuration group. Show read-only properties Group name: Prizmatix LEC	Show cameras shutters shutters shages wheels, turrets, etc. of other devices	OK Cancel	Here you can specify the properties in a configuration group. Show read-only properties Group name: Prizmatix_LED_PW			how cameras shutters stages wheels, turre other device		OK Cancel
Property Name	 IP? Current Property Value	•	Property Name	Use	in Group?	Current Pro	operty Val	ue
LED CTRL-Power	a + 6	•	LED_UHP_M_CTRL-Power-UV	V		100 4	Ē	
LED_CTRL-State	0		LED_UHP_M_CTRL-Power-Vis			100 <	Ē	
Core-AutoFocus	-		LED_UHP_M_CTRL-State-UV			0		
Core-AutoShutter	1		LED_UHP_M_CTRL-State-Vis			0		
Core-Camera			Core-AutoFocus					
Core-ChannelGroup			Core-AutoShutter			1		
Core-Focus			Core-Camera					
Core-Galvo			Core-ChannelGroup					
Core-ImageProcessor			Core-Focus					
Core-Initialize	1		Core-Galvo					
Core-SLM			Core-ImageProcessor					
Core-Shutter			Core-Initialize			1		
Core-TimeoutMs	5000		Core-SLM					
Core-XYStage			Core-Shutter					
			Core-TimeoutMs			5000		

The new group Prizmatix_LED_PWR will appear at Configuration Presets table.



File Tools Plugins Help		Fil	e Tools Plu	ugins Help		
Camera settings Econue [ma] Abum Multo Aou Rease Abum Multo Aou Rease Abum Rease Abum Rease Abum Rease Abum Rease Abum Rease Abum Persea and Abum Persea Abum Persea Abum Rease Abum Persea Abum Abum Persea Abum Abum Persea Abum	Group Preset Prizmatix_EED_PWR 120 < Group: + - Edit Preset + -	Edit		Camera settings Exposure [ms] Binning Shuter Auto shutter V Clock Manager so funding will continu om Profile Autofocu Manager (Clock and a statistication) (Clock	el s Group: + - Ec	Preset 20 * • • • • • Edu
	Sync channels Slow hist Autostretch ignore % 2 - Log hist		Scale Bar		Sync channels Slow hist Autostretch ignore %	2⊕ □Log hist
Single channel co	ontroller				ntroller. For D forPWR Vi	

Repeat the above procedure to add Prizmatix_LED_State group

Sroup Editor	le Group Editor
Here you can specify the properties included in a configuration group. Show OK Show read-only properties Image: shutters Cancel Show read-only properties Image: shutters Image: shutters Image: Group name: Prizmatix_LED_State Image: shutters	Here you can specify the properties included in a configuration group. Show OK Show read-only properties Image: shutters Cancel Show read-only properties Image: shutters Image: shutters Group name: Prizmatix_LED_State_UV Image: shutters
Property Name Use in Group? Current Property Value LED_CTRL-Power 0 0 COre-AutoFocus 0 0 Core-AutoShutter 1 0 Core-Camera 0 0 Core-ChannelGroup 0 0	Property Name Use in Group? Current Property Value LED_UHP_M_CTRL-Power-UV 100 4 ▶ LED_UHP_M_CTRL-State-UV ✓ 0 0 LED_UHP_M_CTRL-State-Vis 0 0 0 Core-AutoFocus 1 0 0 Core-AutoFocus 1 0 0 Core-Camera 0 0 0
Single channel controller	Dual channel controller. For Dual channel repeat this step forState_Vis

After these two steps you will have both types of controls ..._PWR and ..._State appear at Configuration Settings table.

👔 Micro-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_Prizmatix_LED	🖌 Micro-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_Prizmatix_LED 👝 💷 🗾
File Tools Plugins Help	File Tools Plugins Help
Group Preset Binning Prizmatik LED_PV/R Autor Acad Shubar Prizmatik LED_PV/R Jac Prizmatik LED_State p Preset p Edit Preset Image info (trom camera) 0 X 0.0, Intensity range 0 bits, 0mm pix Contrast Metadata Contrast Metadata Scale Bar Top-Left Vinite Sync channels	Contrast Metadata Comments Surde Bar Top-Left White Surde Bar Top-Left White Surde Bar Top-Left White Surde Bar Top-Left White Surde Slow bits
Single channel controller	Dual channel controller.

As you may have noticed the ..._State control already has two states: "0" and "1". We still need to configure the ..._PWR control to several useful presets.

To create a new presets for the group (such as ..._PWR slider), select the group (by clicking on the name of the group, "Prizmatix_LED_PWR" in this example), and click the Preset '+' button. The Preset Editor will appear.

Preset editor for the "Prize	matix_LED_PWR" configuration group	Preset editor for the "Prizmatix_LED_PWR_UV" configu	iration group
Here you can specify the property in a configuration preset.		Here you can specify the property values in a configuration preset.	ОК
Preset name: PWR_500	Cano	Preset name: PWR_500	Cancel
Property Name	Preset Value	Property Name Preset Value	
LED_CTRL-Power	500 4	LED_UHP_M_CTRL-Power-UV 500 4	
	†		1
Single channel co	ontroller	Dual channel controller. For Dual	channel
		repeat this step for PWR_Vis	

The Preset Editor will only list the properties you selected for your new group. Set the position of the slider that you selected to the desired position, and name the Preset (for example "PWR_500"). Click 'OK', and you will have the first Configuration Preset in this group. To add Presets to the group, select the group and click the Preset '+' button. The Preset Editor will appear again for each new preset. The 'Configuration' column in the user interface will now be a dropdown menu, selecting an item from this menu will change the state of the ..._PWR.

Micro-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_Prizmatix_LED File Tools Plugins Help	Micro-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_Prizmatix_LED File Tools Plugins Help
Camera settings Configuration settings Save Exposure (ms) Croup Preset Croup Preset Primatics_LED_State Pr	Brace Camera settings Configuration settings Bave Une Bayesus (m) Group Presst Image International Structure Primatic L10 PMR VV PWR 300 Presst Image Reference Structure Primatic L10 PMR VV PWR 200 Primatic L10 State Primatic L10 State PWR 200 Primatic L10 State PWR 200 Primatic L10 State PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 Primatic L10 State PWR 200 PWR 200 PWR 200 PWR 200 PWR 200 PWR 200 PWR 200 PWR 200 PWR 200
Single channel controller	Dual channel controller.

Once you are satisfied with your current presets they can be saved into the current configuration file (or a new one) by using "Save" button next to 'Configuration settings'. You can also save the presets to a previous configuration file. Next time you start up with that configuration file, your presets will be automatically loaded.

The 'Edit' and '-' (Delete) buttons allow you to change and remove Configuration Groups and Presets. If you add a property to a Group, then all existing Presets in that Group will now include the current value of the new Property.

In some cases it may be more convenient to incorporate the Power and State to the same Group so a short-cut to specific state will be created. The following example is for dual channel controller

Create a new Group at the Group editor dialog box; choose all 4 controls: Power-UV, Power-Vis, State-UV and State-Vis.

🛓 Group Editor					X	
Here you can specify the properties	included	Show			ОК	
in a configuration group.		cameras shutters stages wheels, turrets, etc			Cancel	
Group name: Prizmatix_LED	1		ier devi			
Property Name	Use in G	roup? Cu	rrent	Property V	alue	
LED_UHP_M_CTRL-Power-UV		100	4	6		
LED_UHP_M_CTRL-Power-Vis	1	100	4	6		
LED_UHP_M_CTRL-State-UV		0				
LED_UHP_M_CTRL-State-Vis		0				
Core-AutoFocus						
Core-AutoShutter		1				
Core-Camera		1.				
Core-ChannelGroup		1				
Core-Focus						

After pressing OK at the Group editor, the Preset editor dialog box will appear. Create a Preset name and select the required settings, for example:

Series Preset editor for the "Prizmatix_l	LED" conf	iguration group	X
Here you can specifiy the property values in a configuration preset.			OK Cancel
Preset name: Vis_100%	_		Cancer
Property Name	Pres	et Value	
LED_UHP_M_CTRL-Power-UV	0	∢ [•
LED_UHP_M_CTRL-Power-Vis	1.000	•	
LED_UHP_M_CTRL-State-UV	0		
LED_UHP_M_CTRL-State-Vis	1		

Preset editor for the "Prizmatix_LE	D" conf	igura	tion grou	up X
Here you can specifiy the property values in a configuration preset.				ОК
Preset name: OFF				Cancel
Property Name	Pres	et Val	ue	
LED_UHP_M_CTRL-Power-UV	100	•	E	•
LED_UHP_M_CTRL-Power-Vis	100	•	E	4
LED_UHP_M_CTRL-State-UV	0			
LED_UHP_M_CTRL-State-Vis	0	K		

The final Configuration settings will look like:

🛃 Micro-Manager 1.4.22 - C:\Program Files (x86)\Micro-Manager-1.4\My_Prizmatix_LED 💶 💷							
File Tools Plugins Help							
Snap	Camera settings	Configuration settings	Save				
Live	Exposure [ms]	Group	Preset				
Album	Binning	Prizmatix_LED	OFF 👻				
Multi-D Acq.	Shutter 🗸 🗸		OFF				
C Refresh	Auto shutter V Close		UV_100% Vis_100%				
Please cite Micro-M	anager so funding will continue!		VIS_100%				
ROI Zoo	Profile Autofocus						
	, 🔍 🖄 🛗 🧪	Group: + - Edit	Preset + - Edit				
Image info (from camera): 0 X 0 X 0, Intensity range: 0 bits, 0nm/pix							
Contrast Metadata Comments							
Scale Bar	Top-Left ▼ White ▼	Sync channels Slow hist					