Installation and Setup

- Install necessary software for hardware
 - Supporting Tango controller
 - Supporting XIMEA camera
 - Supporting Autorational Controller
 Supporting Multilight controller
 Install HASP driver
- Setup DM Gold program

Before first installation of DM Gold program on new computer it is necessary to::

- 1. Create program configuration file folder manually with the path: "%PROGRAMDATA%\Octonus Software\OctoNus Digital Microscope".
- 2. Copy configuration files from archive for this digital microscope from "Dropbox (OctoNus)\Download\DM\DM-Gold-1.0.1.6.zip" (https://www.dropbox.com/s/ziit7aebq664inu/DM-Gold-1.0.1.6.zip?dl=0) to the folder with configuration files (see step 1 above).

Install necessary software for hardware

Supporting Tango controller

- 1. Download SwitchBoard software either from official marzhauser site
- Run installed SwitchBoard program.
 In the appeared window determine a COM port of connection with Tango controller. You can see COM port in the field "Serial Port". Press "Connect" button. In case of error, try other COM ports until you find port that you can connect:

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Serial Port Connect Baudrate Baudrate Disconnect		STO Help (F	F1)
Program Start Options Automatically connect at program start Show protocol window Scan for ETS when connecting Read setup from controller Send setup to controller			
MARZHAUSER ETZLAR			
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4. Upload settings on controller:

- a. Open left tree item "Setup > Synchronize Settings".
- b. Select "Load Ini File"
- c. In the appeared dialog select file "%PROGRAMDATA%\Octonus Software\OctoNus Digital Microscope\TangoSettings.ini" and press "Open".
- d. Press on "Write to controller"

Image: Sector List FANGD Controller Position List I/O Trigger Read Controller Snapshot Image: Store in Controller Image: Sector Store in Controller Image: Store in Controller Image: Store in Controller Image: Store in Controler Image: Store in Controler	- Commande	- - Synchronize Controller and Program Settings	
	 □ Commands □ Manual Move □ Command Terminal □ Meander □ Position List □ I/0 □ Trigger □ Snapshot □ Setup □ Axes □ □ [2] Y-axis □ [2] Y-axis	TANGD Controller Read Controller Write to Controller Parameter Checking Store in Controller 4 INI File - Load and Save Settings Load INI File 2 Save INI File Reset to Defaults	Help (F Close

5. Open to edit file "%PROGRAMDATA%\Octonus Software\OctoNus Digital Microscope\MicroscopeDrivers.ini". Change COM port in this file to the port determined at step 3. Save file.



Supporting XIMEA camera

- Install "Ximea Windows Software Package Stable" either from official site from the section "Installation guidelines > download".
 Run "XIMEA CamTool" to check the camera.

3. If it is properly connected and detected, you'll see that next selected buttons are active:



Press on the left of selected buttons to check a stream from the camera.

- 4. If these buttons are inactive, try to connect the camera to another USB3 port of the computer.
- 5. Close XIMEA Cam tool program

Supporting Multilight controller

It is necessary to setup static IP address at Ethernet connection to Multilight controller:

- 1. Open "Windows Settings" (in Windows 10).

- Open Windows Settings (in Windows 10).
 Press on the "Network & Internet" item.
 On the left panel press on the "Ethernet" tab.
 On the right panel press on "Change adapter options"
 Find connection to the Multilight controller in the connection list:

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Organize	•	1 1 1 1	•		•
	Ethernet Network cable unplugged Realtek PCIe GbE Family Controller				
	Ethernet 2 Unidentified network Intel(R) Ethernet Server Adapter I2				
N	Ethernet 3 Network Intel(R) Ethernet Server Adapter I2				
3 items					8:: 📼

One way to do this is to double click on each connection and determine by network traffic connection to Internet. Another available connection is the connection to Multilight controller (Ethernet 2 on the picture above). Double click on the connection to Multilight controller and press on the "Properties" button.
 Select the item "Internet Protocol Version 4 (TCP/IPv4) by mouse and press on the "Properties" button.

8. <u>Choose "Use the following IP address" option and write IP address 192.168.0.1 and subnet mask: 255.255.255.0</u>:

Internet Protocol Version 4 (TCP/IPv4)	Properties X
General	
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	matically if your network supports ask your network administrator
Obtain an IP address automatical	lly
• Use the following IP address:	
IP address:	192.168.0.1
Subnet mask:	255.255.255.0
Default gateway:	
Obtain DNS server address autor	natically
• Use the following DNS server add	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	Advanced
	OK Cancel

9. Press on the "OK" button".

Install HASP driver

The DM Gold program is protected by a HASP key, so you have to install HASP drivers from official site.

On this page we need to download Sentinel HASP/LDK - Windows GUI Run-time Installer.

After installation, please, plug-in the HASP key to any USB-port. You need to plug-in the following key (the ID could be another) and wait until Windows OS will detect it:



Setup DM Gold program

1. Download the installer from "Dropbox (OctoNus)\Download\DM\dm-gold-setup-ver-1.0.1.6-prot.exe" (https://www.dropbox.com/s/lxn1doa16hn8s6t/dm-gold-setup-ver-1.0.1.6-prot.exe?dl=0) 2. Run installed program and connect to the hardware

3. If the following window appeared, press the "Allow access" button:



In the DM-Gold version 1.0.4.9 you need to use the latest ARM firmware. Please, press the "Yes" button, in case the following message box appears:

	ARM firmware update required.
_	Current revision string: 149.149 (2019-10-09) : a1761c367c1f [MLSC_MBOX20 Board v1.x]
	Required ARM revision: [MLSC_MBOX20 Board v1.x] ver. 3.0.4.159
	Update ARM firmware?
	<u>Yes</u> <u>N</u> o