



AS_SDMX Master Controller and AS_832M Artnet Controllers User

1. Features

- (1) . AS_832M Artnet Controller total 8ports
- (2) **SPI** each prort 4universes*170pixels/U=680Pixels,8ports*680Pixels=Maximum 5440 pixels RGB (for example WS2812).
- (3) **DMX512**, each prort 1univers*170pixels/U=170Pixels,8ports*170Pixels=Maximum 1360 pixels RGB (for example UCS512).
- (4). Support ArtNet protocol, 4 universes each output when AS_832M works with Madrix/Madmapper/Resolume
- (5). Controlled by AS_SDMX SD master controller or PC Software VideoLEDShow.
- (6). Transmission distance between two controllers is up to 100 meters.

2. Supported Driver Chips

DMX512, HDMX, LPD6803, LPD8806, LPD1882, LPD1889, LPD1883, LPD1886, TM1812, TM1809, TM1804, TM1803, TM512, TM1926, TM1913, **TM1914**, TM1814, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, UCS512, UCS8904, APA102, APA104, P9813, WS2801, WS2803, **WS2811**, **WS2812**, WS2821, SM16716, SM16711, INK1003, LX1003, MY9221, MBI6021, MBI6024, LD1510, LD1512, LD1530, LD1532,etc.

Note: AS_832 supports more than the chips listed above(for example UCS2903 has the same sequence diagram with UCS1903, AS_832M supports them all).

3. Product Display

Artnet DMX/SPI Controller/Sub-Controller



DMX Controller/SD Master Controller





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GND and DAT are for chips like TM1812, WS2811, WS2812.

GND, CLK and DAT are for chips like APA102, LPD6803.

GND, D- and D+ are for DMX512 chips like TM512, UCS512.

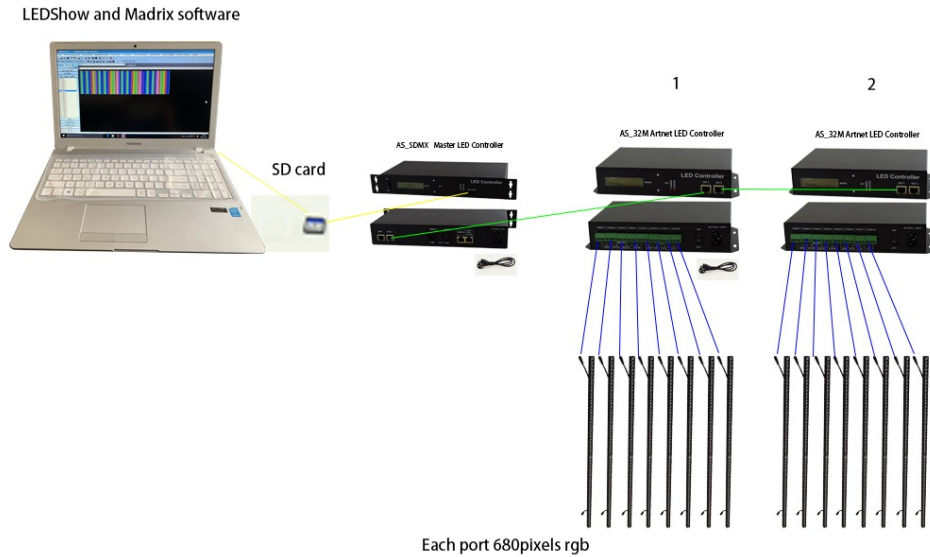
ADI(address input) is address line for DMX512 chips.

4. Working Mode

(1). Connect to AS_SDMX SD master controller to AS_832M artnet controller, software is LEDShow programs are stored in SD card(can use LEDShow Record Madrix effects save SD card)



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LEDShow is programs are stored in SD card. download link:

<http://www.aoshowled.com/filedownload/61228>

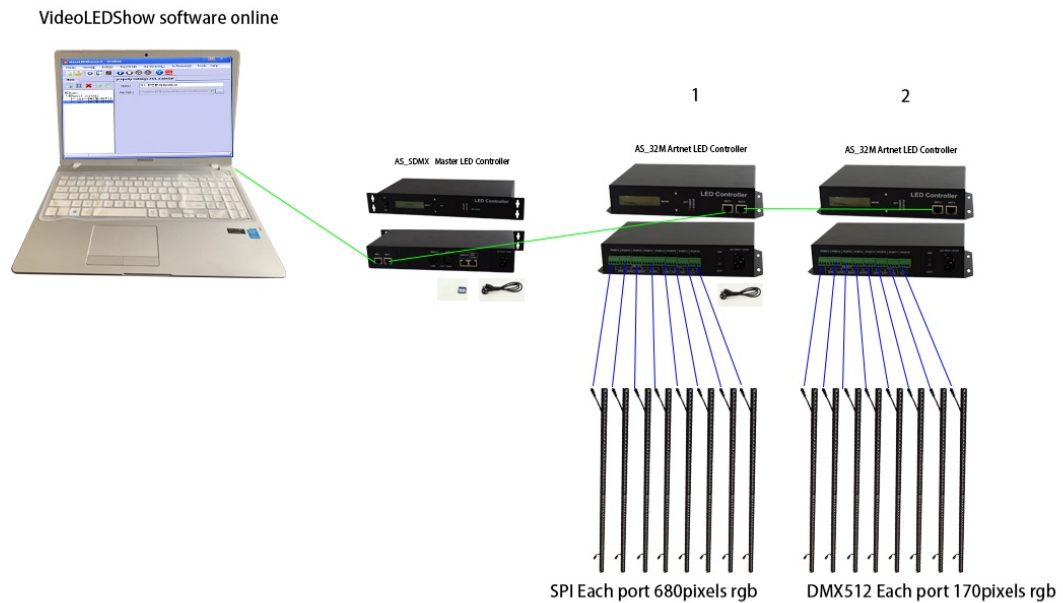
LEDShow Record Madrix effects save SD card Tutorial Video:

<https://www.youtube.com/watch?v=eB2jDv0ca7A&t=34s>



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(2) Connect to computer online controlled, software is VideoLEDShow(our software) (PC
IP address 192.168.25.5/255.255.255.0)



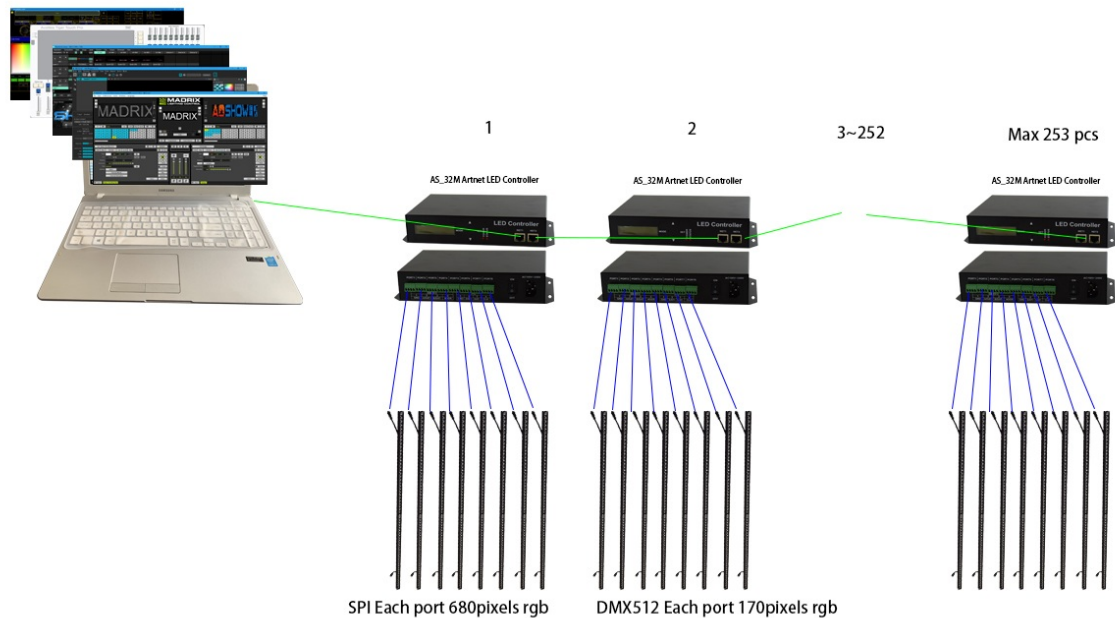
VideoLEDShow download link: <http://www.aoshowled.com/filedownload/61230>



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(3)AS_SDMX Connect Artnet to Madrix/Madmapper/Resolume/Grandma2/Avolites titan (PC IP address 2.0.0.8/255.0.0.0 or 192.168.0.8/255.255.255.0)

Artnet software Madrix/Madmapper/Resolume/Malighting/Avolites



AS_832M to PC manual:

5. AS_832M working for MADRIX

Configurations before MADRIX (if you use other software, these configurations are also essential)

(1). Connect AS_832M to PC, allocate an IP address for AS_832M



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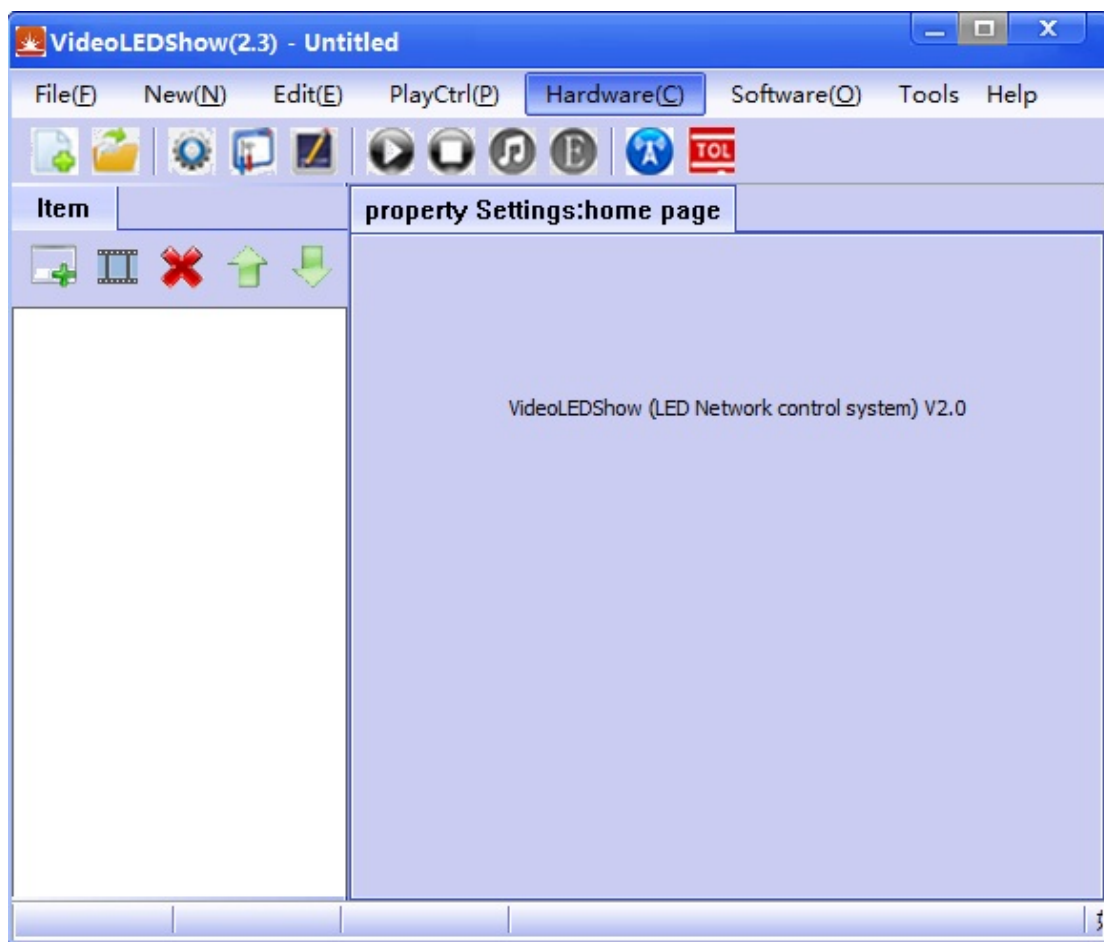


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(2). AS_832m Default protocol is SPI RGB Pixel WS2812B/UCS1903 , Default IP addressable is 2.0.0.10/255.0.0.0

(3) If you need change IC protocol is DMX512 RGB Pixels,First Setup PC IP address to 192.168.25.5/255.255.255.0

After, Open VideoLEDShow, click “hardware” -- “controller parameter setting”, pops up the following dialog box.

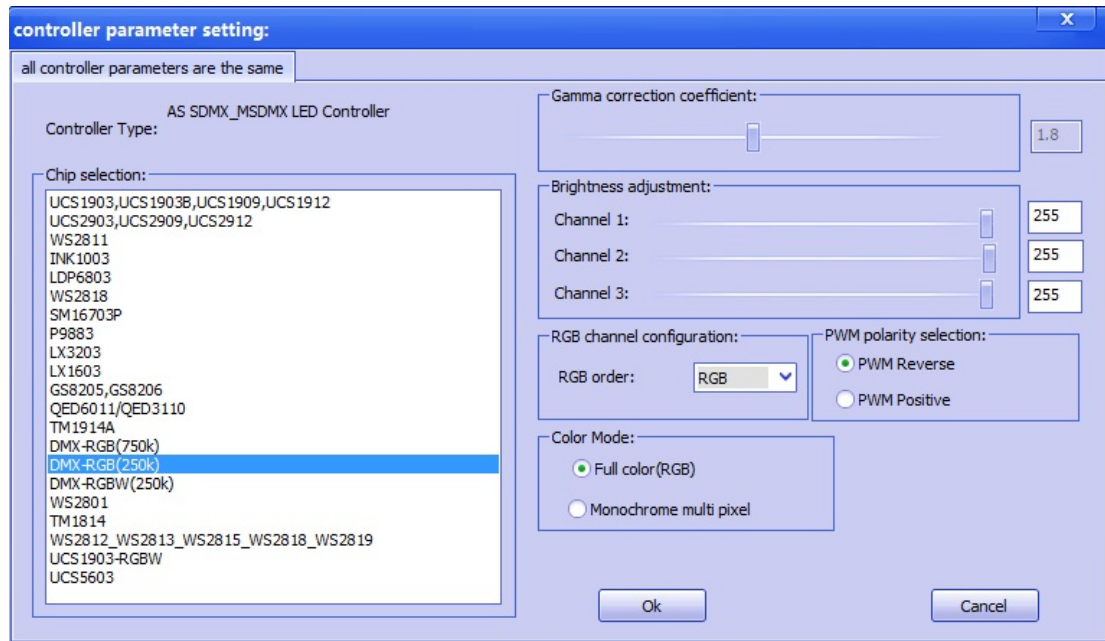


Note:

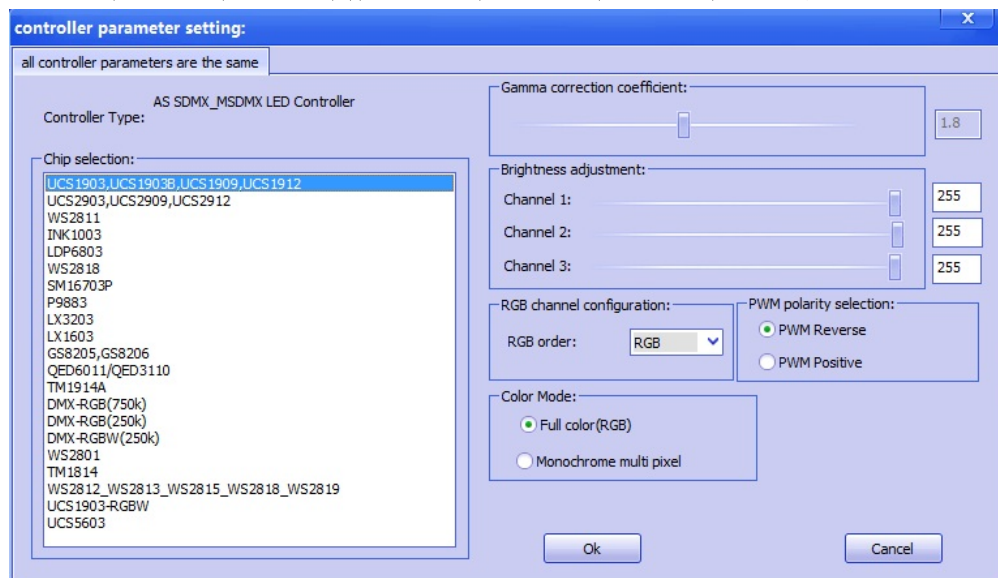


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(1). "DMX-RGB (250K)" includes RGB Pixel UCS512, WS2821, TM512.SM16512



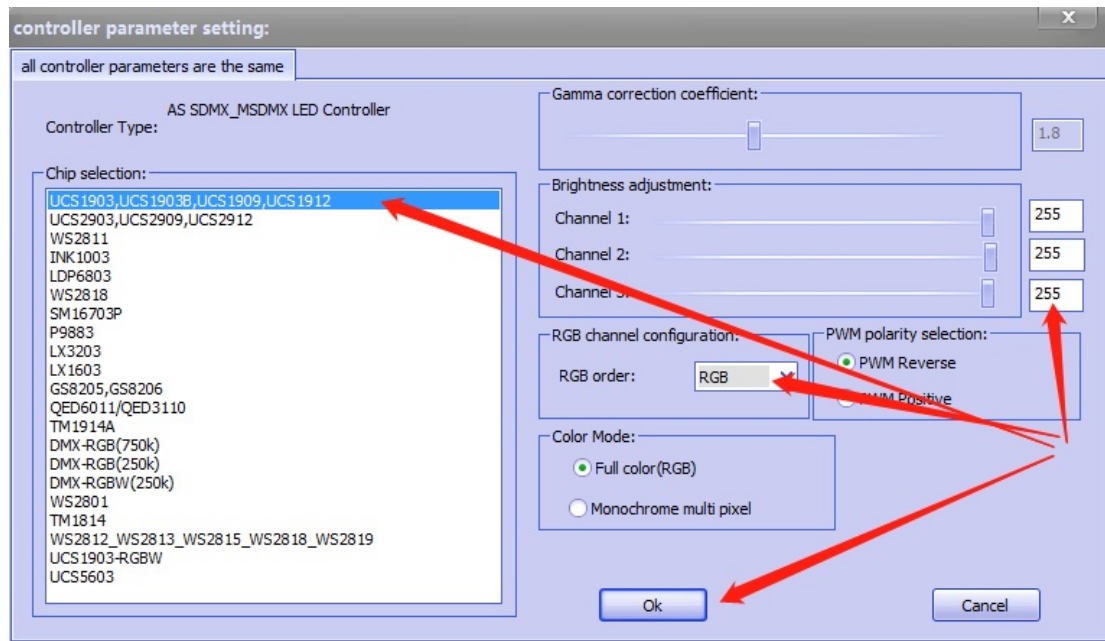
(2). "SPI" includes UCS1903, WS2811, SM16730, P9883, TM1804, TM1809, UCS1903, UCS1909, UCS1912, WS2811, WS2812, ,, SM16709, SM16712, INK1003,LX1003, Ect...





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Normally, if you choose "DMX512", Clock should be DMX-RGB (250K) , if you choose "SPI", choose IC type "UCS1903", After choose IC, enter OK save



After choose IC type, need setup come back PC IP Address to 2.0.0.8/255.0.0.0





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MADRIX Configurations

Assume you connect one AS_832M artnet controller to PC,

SPI each universe controls 170pixels WS2812 pixels (1 pixel includes R,G,B, $512/3=170$ pixels)

1port*4U*170pxels/U=680pixels RGB

8ports*4U*170pixels/U=5440pixels RGB

DMX each universe controls 170pixels DMX512 pixels (1 pixel includes R,G,B, $512/3=170$ pixels)

1port*1U*170pxels/U=170pixels RGB

8ports*1U*170pixels/U=13600pixels RGB

Open madrix 5 software

1



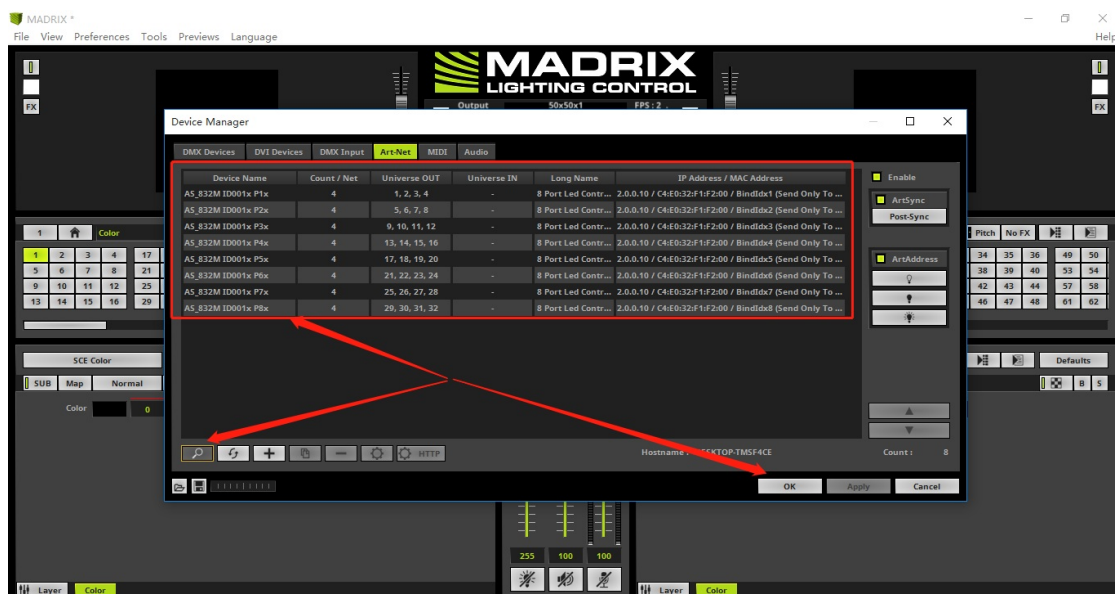
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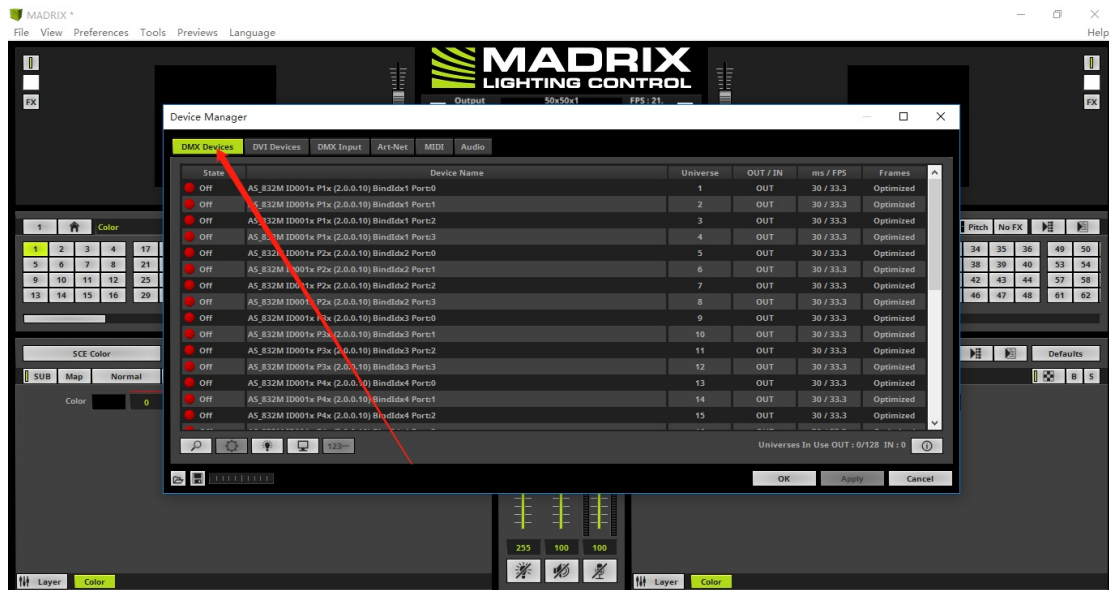
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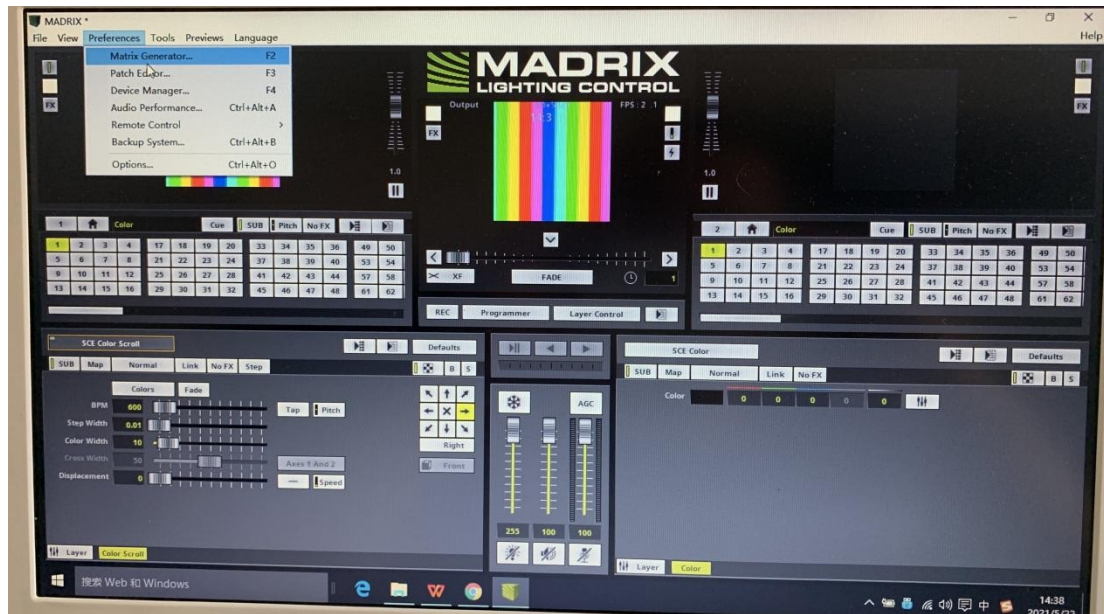
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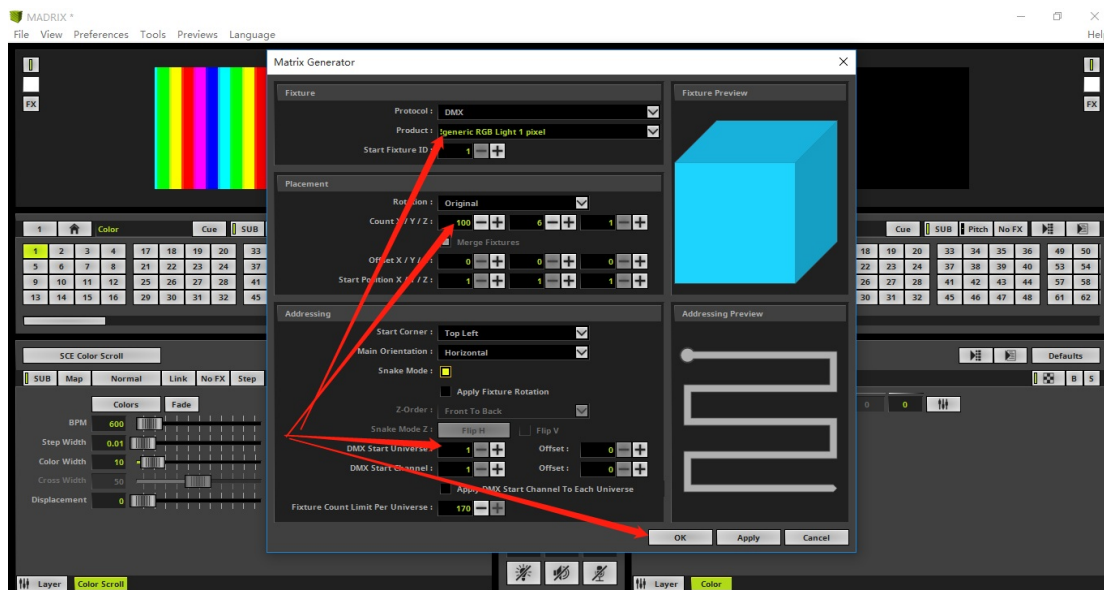
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6



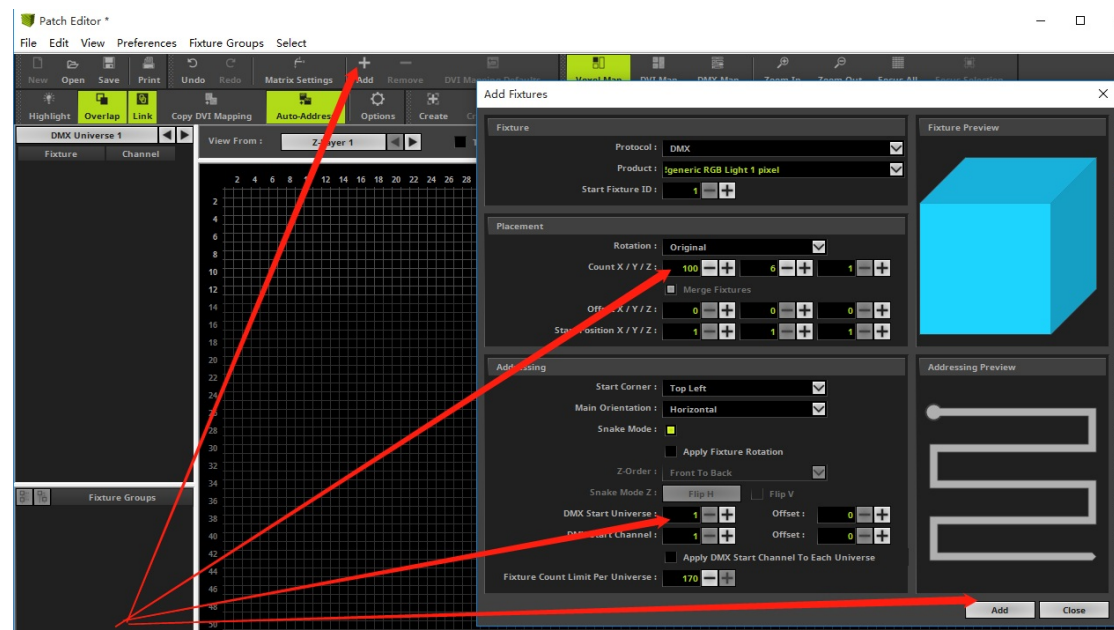
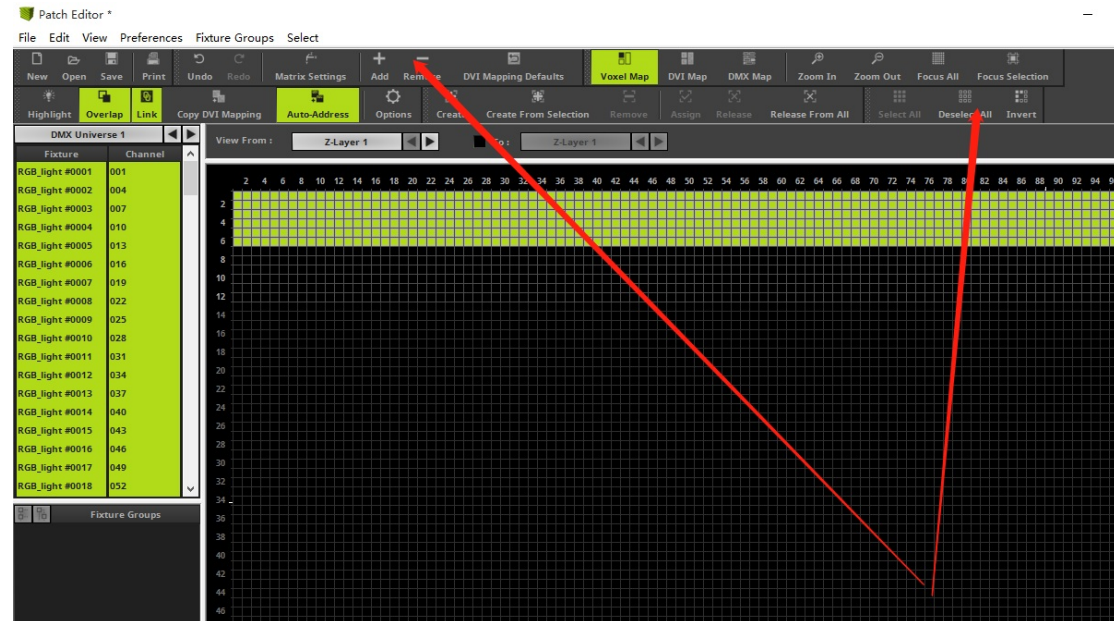
7 If setup Easy small led pixel patch 1 port 1~4univers like use 100pixels*6rolls





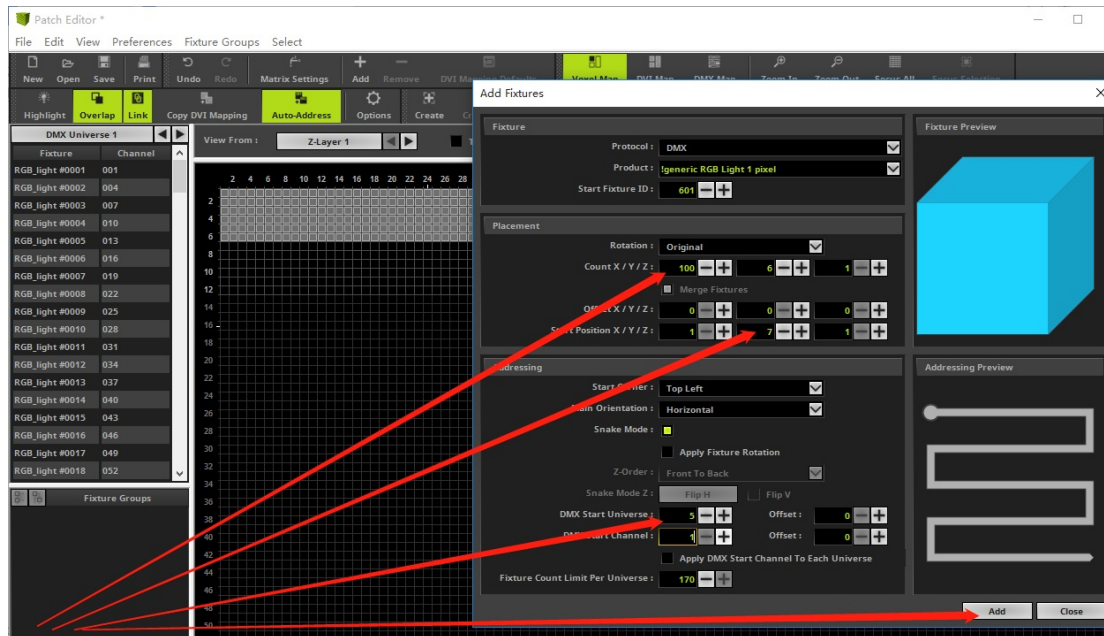
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8 If use led pixel patch more 2ports 1~8universes 100pixels*12rolls





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9 add madrix effects



Save patch, then go back to main window, you can control lights with MADRIX!!!



6. Basic Working Procedure for Madmapper

Note: before this, you should allocate an IP address for AS_832M and Choose IC types which one you need controled in VideoLEDShow(IP 192.168.25.5/255.255.255.0) , which has been showed above.after,

Setup PC IP address 2.0.0.8/255.0.0.0

Internet 协议版本 4 (TCP/IPv4) 属性

常规

如果网络支持此功能，则可以获取自动指派的 IP 设置。否则，你需要从网络系统管理员处获得适当的 IP 设置。

☐ 自动获得 IP 地址(O)

☒ 使用下面的 IP 地址(S):

IP 地址(I): 2 . 0 . 0 . 8

子网掩码(U): 255 . 0 . 0 . 0

默认网关(D): . . .

☐ 自动获得 DNS 服务器地址(B)

☒ 使用下面的 DNS 服务器地址(E):

首选 DNS 服务器(P): . . .

备用 DNS 服务器(A): . . .

☐ 退出时验证设置(L)

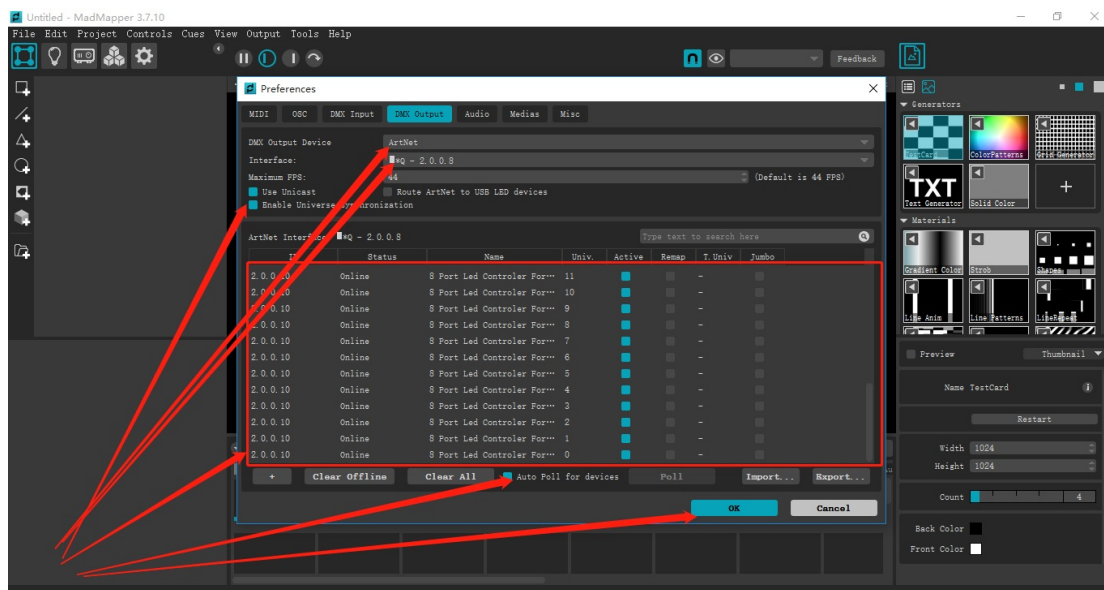
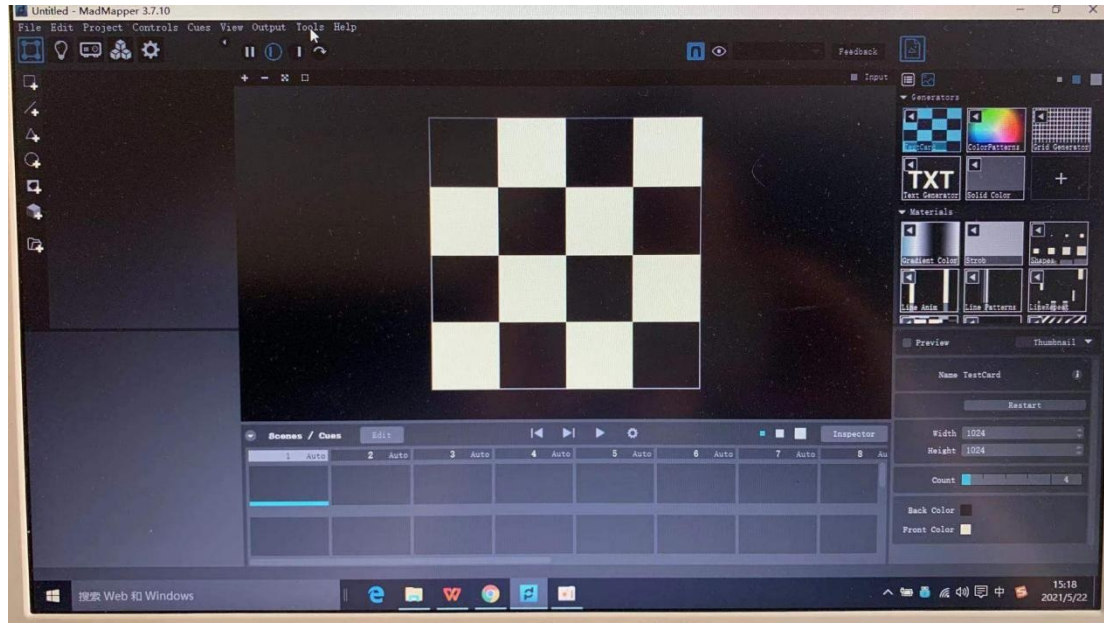
高级(V)...

确定 取消



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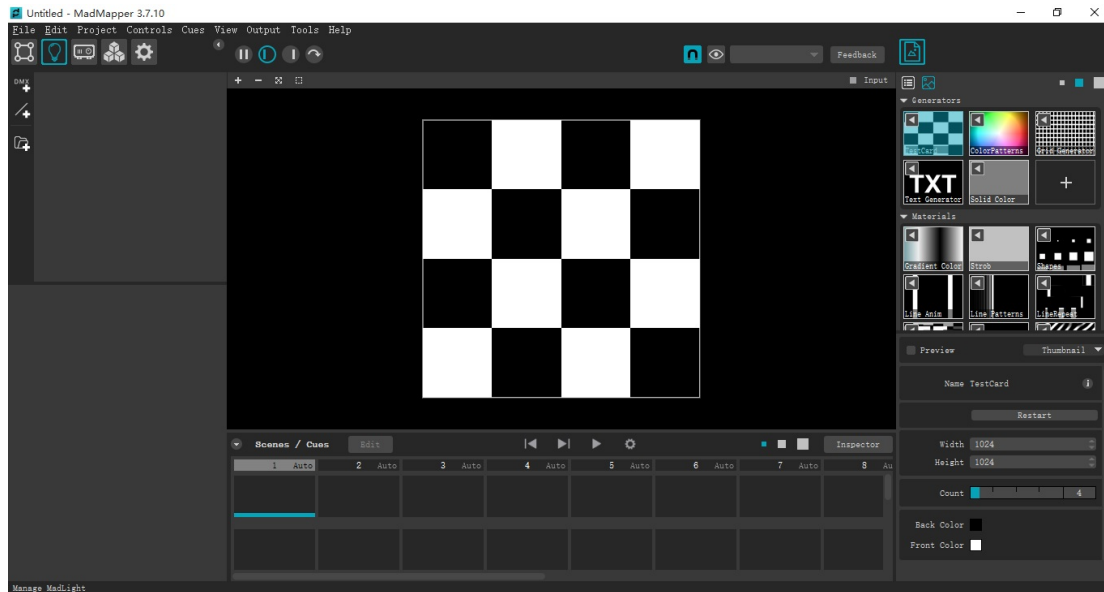
Open Madmapper software
click to enter "Tools" to "Preferences"



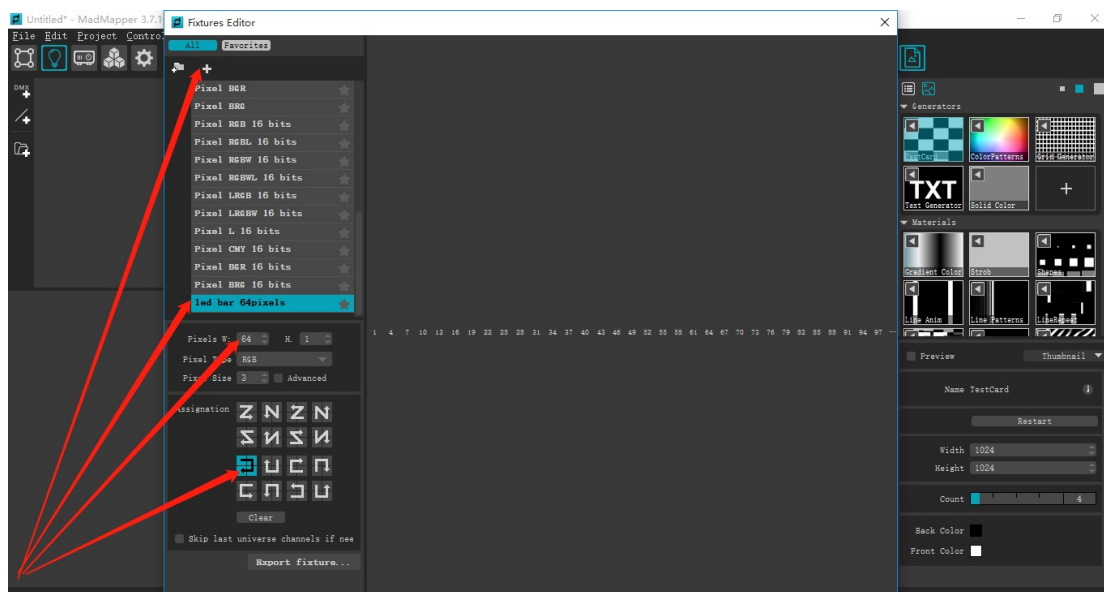
LED pixel patch



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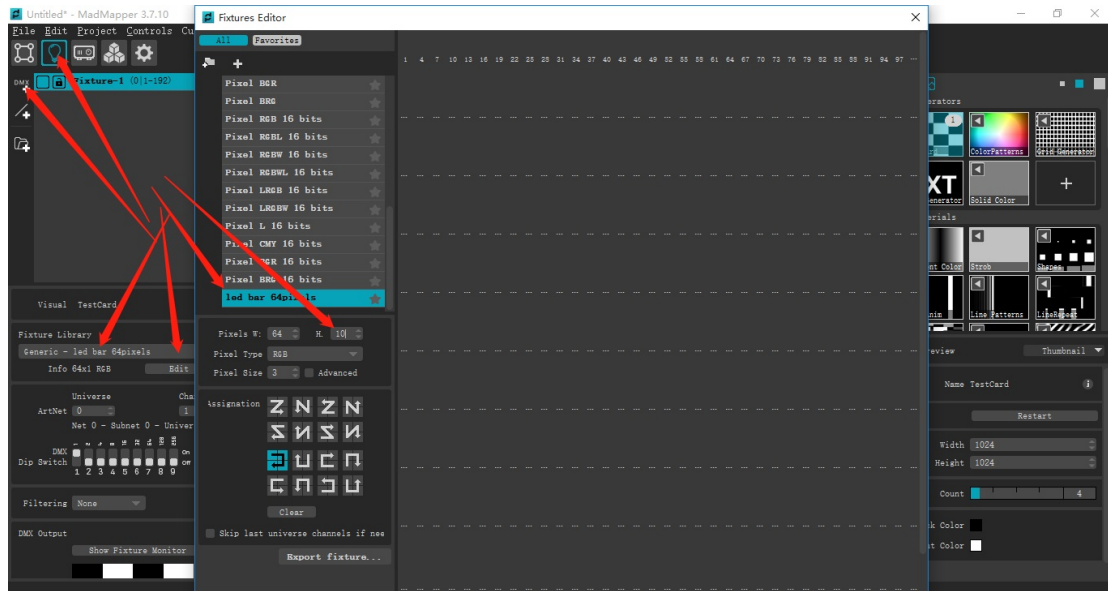
If we need setup Aoshow LED pixel bar 64pixels/pcs*10bar, need change “tools” to “fuxteres Editor”



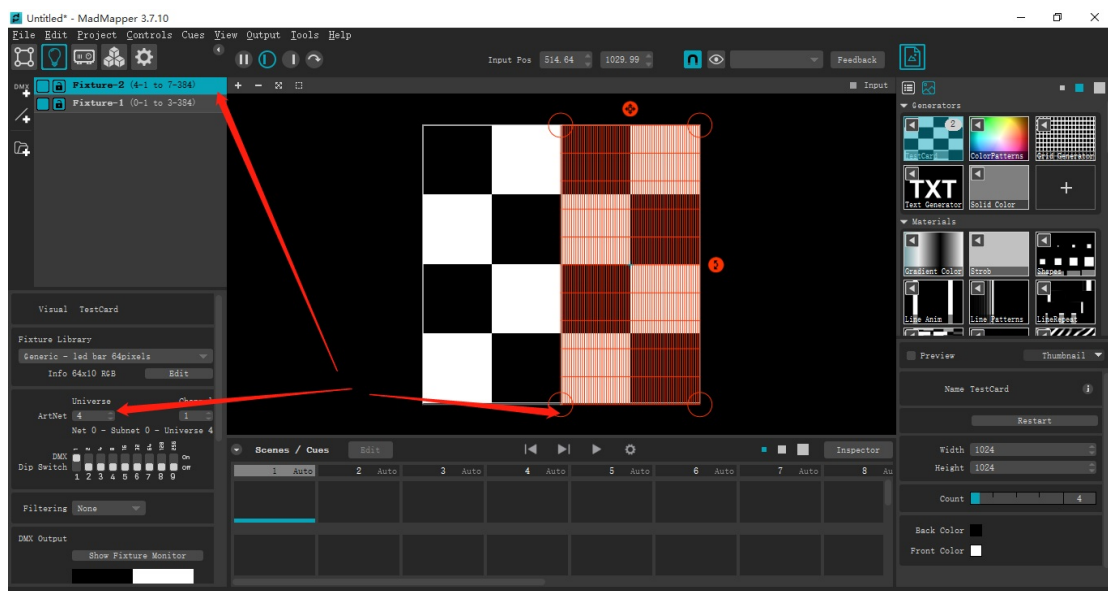


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10bars*64pixels/bar=640 pixels on patch used 0~3Universes on madmapper ,1port
1~4universes on AS_832M artnet controller



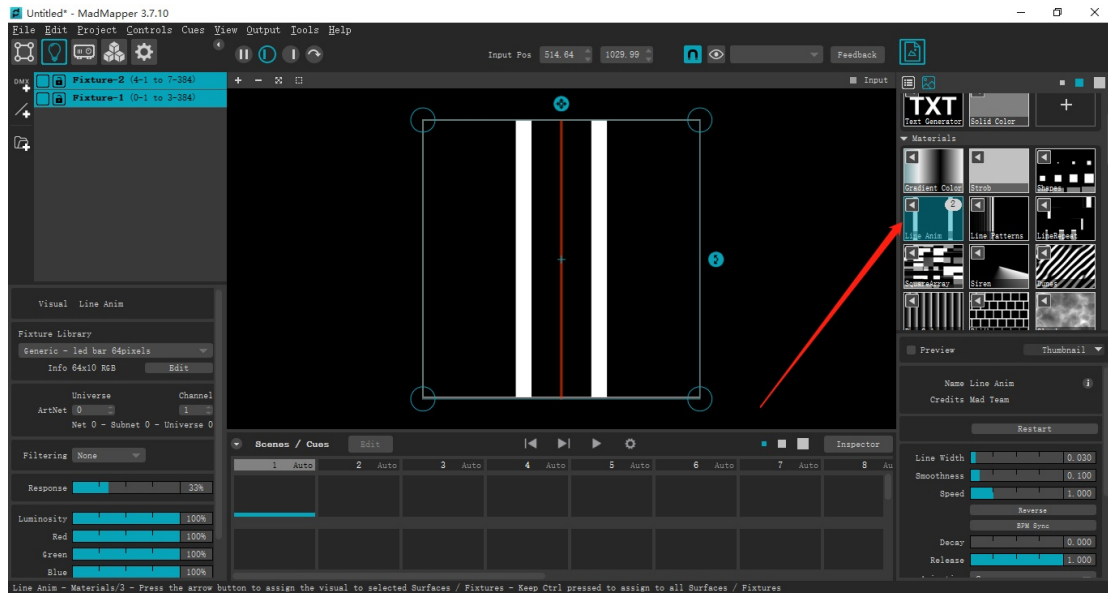
Add 10bars, total 20bars*64pixels/bar=1280 pixels on patch used 0~7Universes on
madmapper ,1port 1~8universes on AS_832M artnet controller



Add effects on madmapper running Aoshowled 20bars



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7. Basic Working Procedure for Resolume Areal

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Skype: led.lighting6

Tel: +86-755-21004200

Contact Person:



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默认网关(D): . . .

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☒ 使用下面的 DNS 服务器地址(E):

首选 DNS 服务器(P): . . .

备用 DNS 服务器(A): . . .

☐ 退出时验证设置(L)

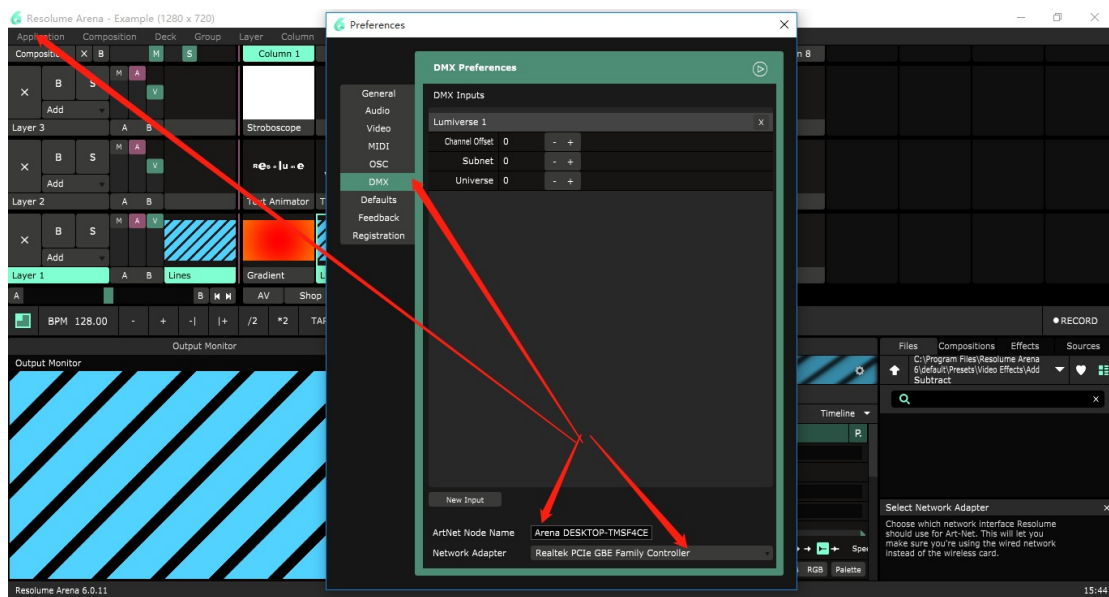
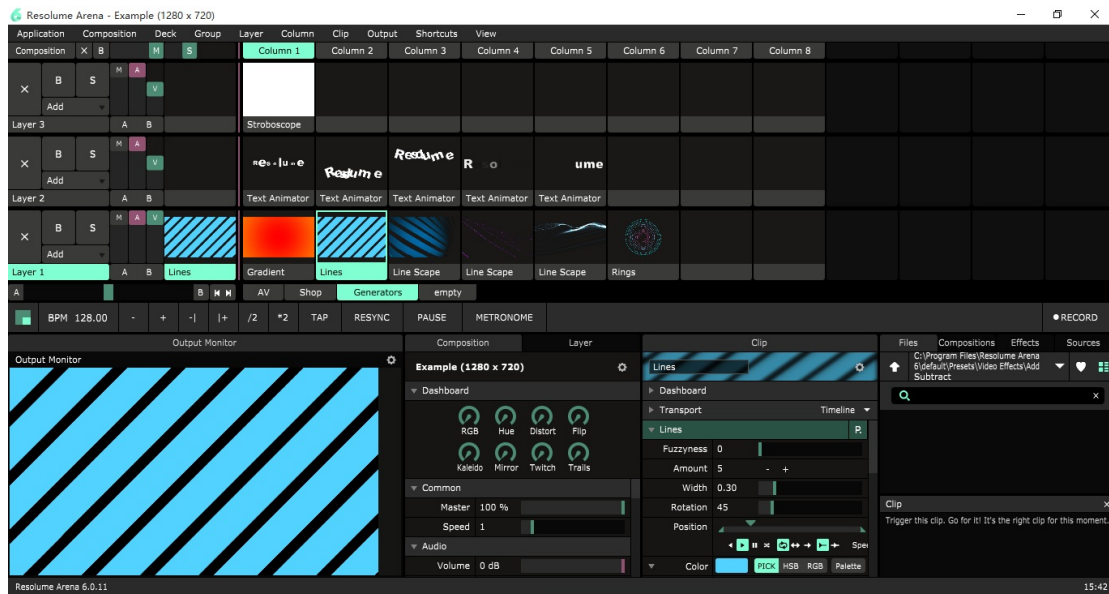
高级(V)...

确定 取消

Open Resolume software, choose Artnet node on"application" to "preferences" to "DMX"



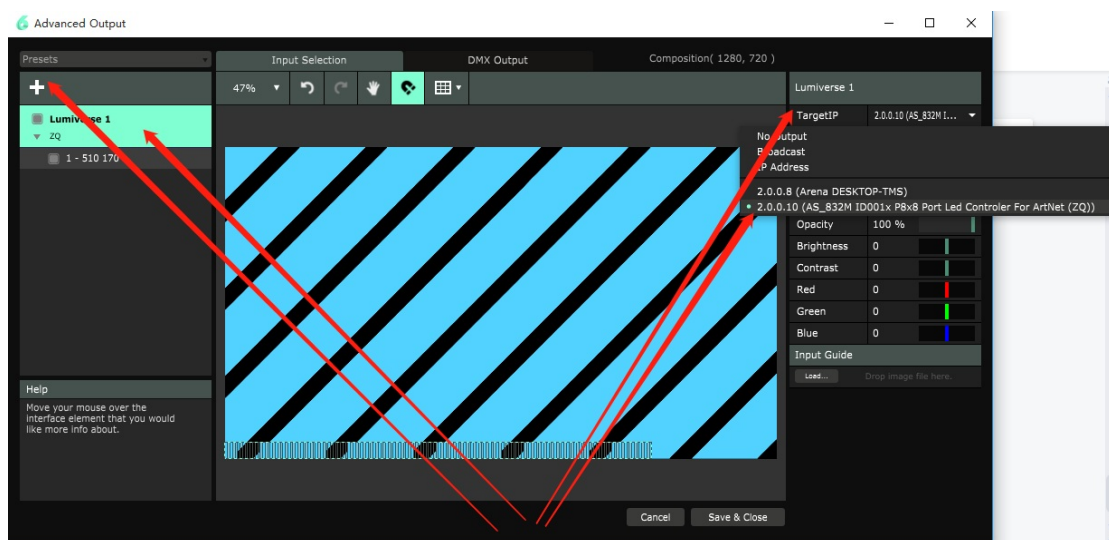
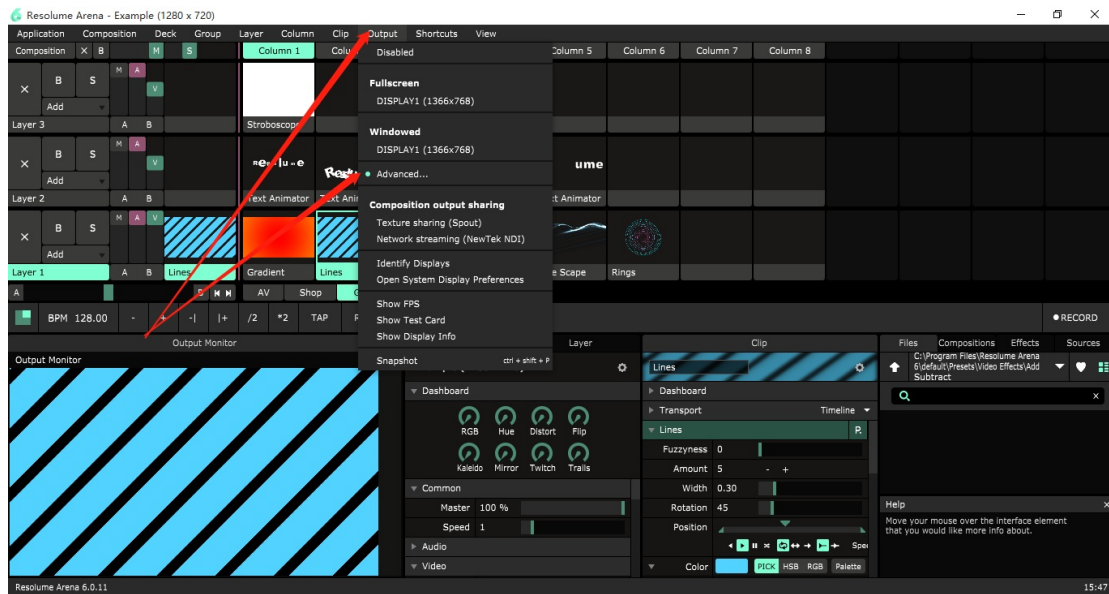
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If use AS_832M artnet controlled Aoshow LED pixel bars 64pixels/bar*1bar



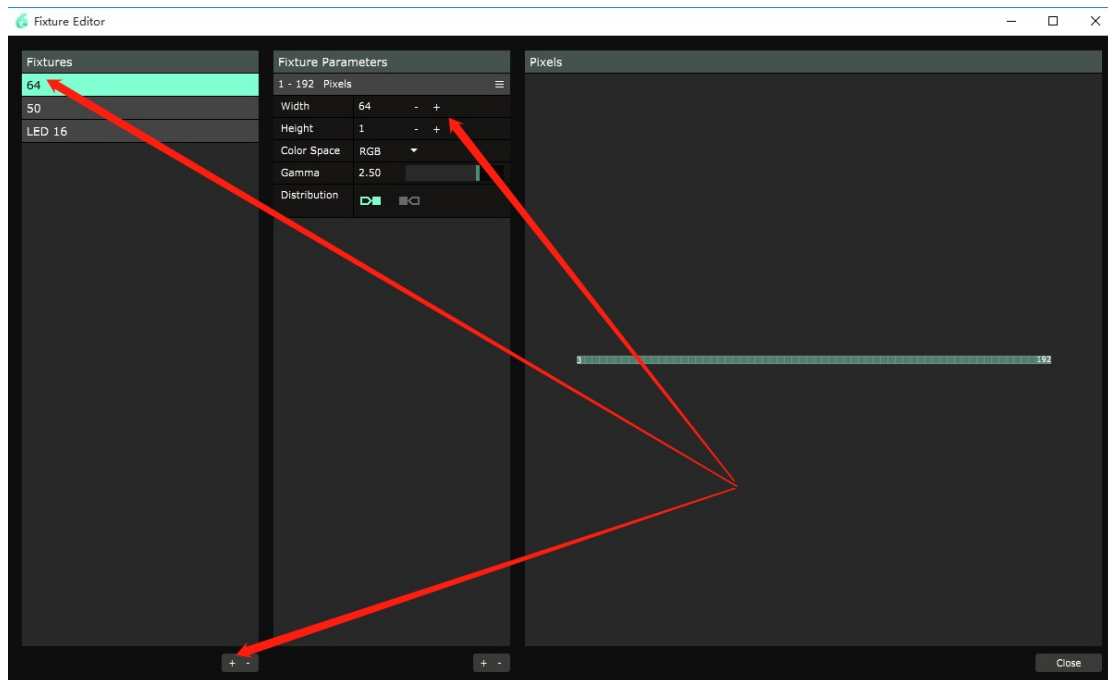
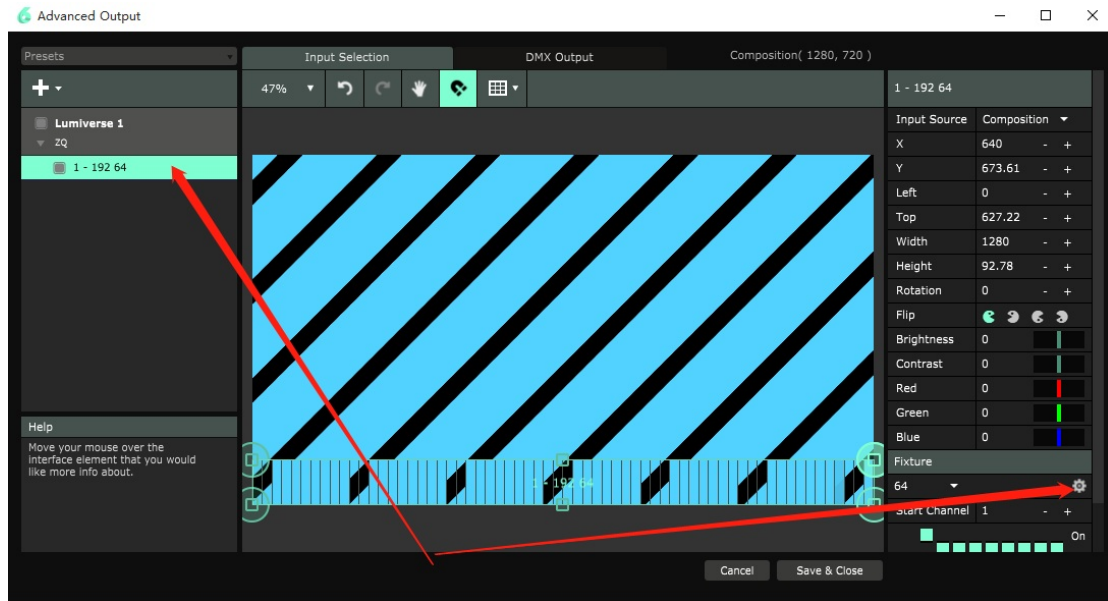
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1Bar 64pixels/bar Pixel patch



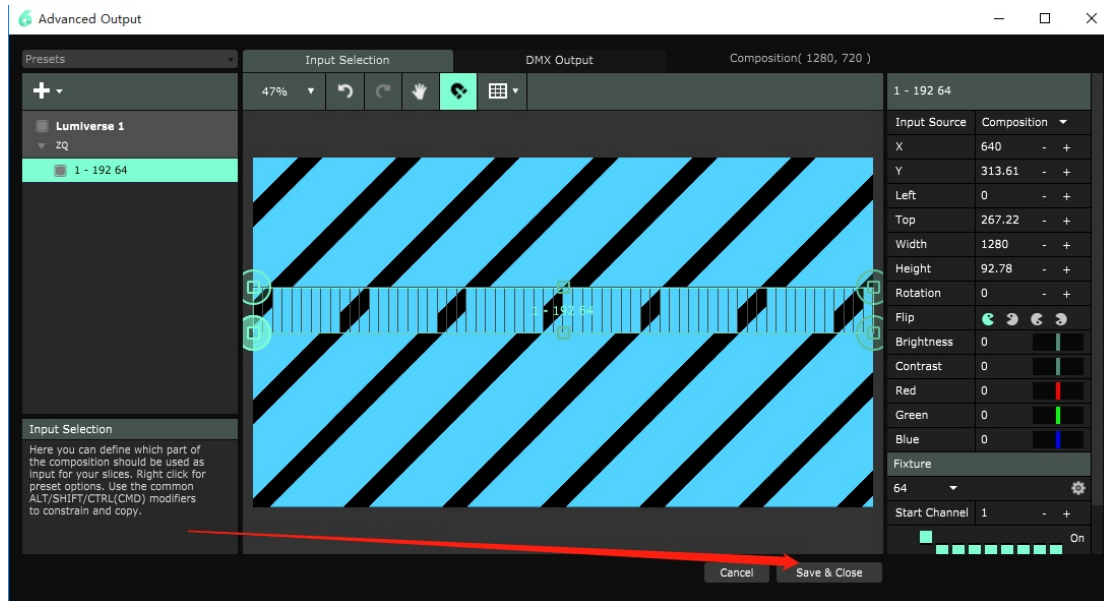
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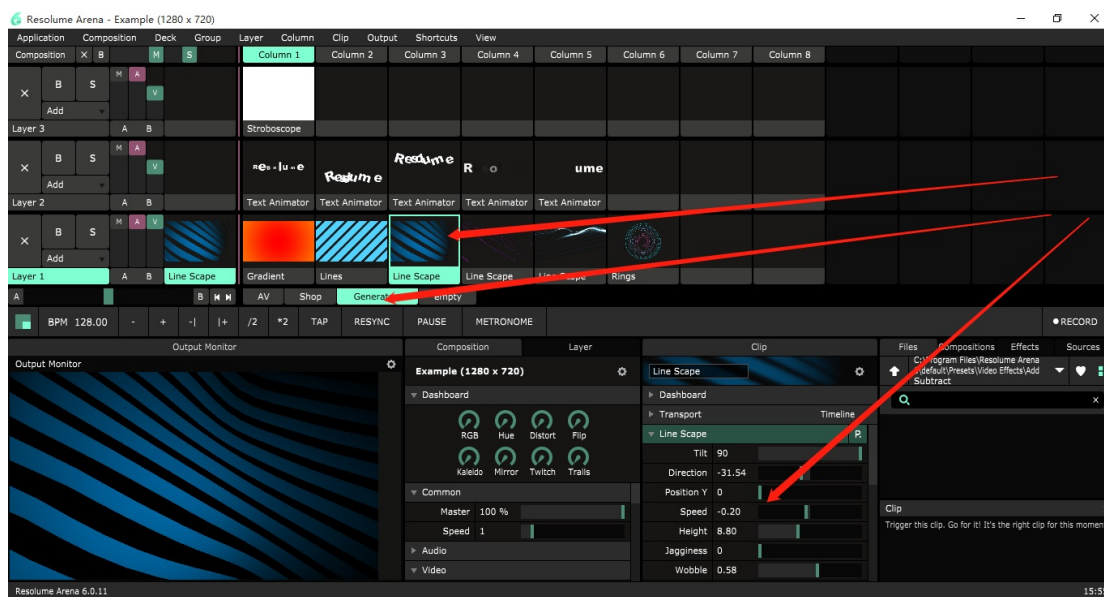
Save



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Resolve Effects



Over, thanks for watching!