#### 1. Features

(1). Four ports control maximum 4096 pixels (for exampleWS2812). But for DMX512, each port outputs 512 channels.

(2). Support ArtNet protocol, 4 universes(each 512 channels) output when H802RA works with Madrix.

(3). Allocate address for DMX512 chips (for example UCS512, TM512)

(4). Controlled by master controller or PC.

(5). Transmission distance between two controllers is up to 100 meters.

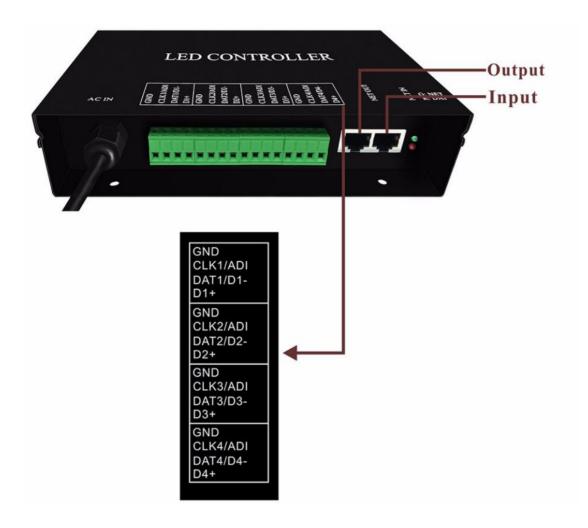
## 2. Supported Driver Chips

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: H802RA supports more than the chips listed above(for example UCS2903 has the same sequence diagram with UCS1903, H802RA supports them all).

### 3. Product Display





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

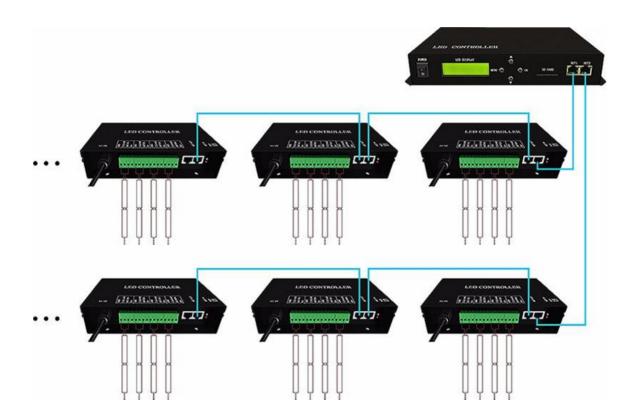
GND, CLK and DAT are for chips like APA102, LPD6803.

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 master controller, software is LED Build. Programs are stored in SD card.

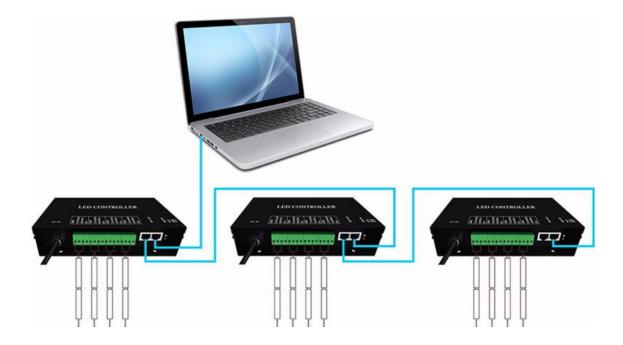


LED Build download link:

https://drive.google.com/open?id=0B1gzqyV6hfOgN2pkMV8yMFo zYzQ LED Build Tutorial Video:

https://drive.google.com/open?id=0B1gzqyV6hfOgUnFjeG9EM3V RZjA

(2). Connect to computer, software is LED Studio(our software) or other software that supports Art-Net protocol.



LED Studio download link:

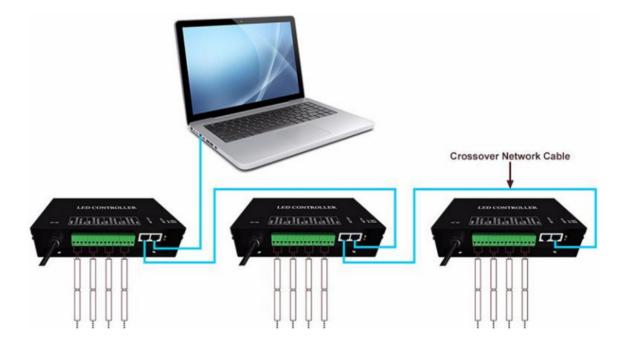
https://drive.google.com/open?id=0B1gzqyV6hfOgNEtYT2o0LWd DNG8 H802RA to PC manual:

https://drive.google.com/open?id=0B1gzqyV6hfOgeGI1M2JaYi1U RW8

5. Basic Working Procedure for MADRIX

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

(1). Connect H802RA to PC, allocate an IP address for H802RA.





#### Control Panel/Network and Internet/Network Connections



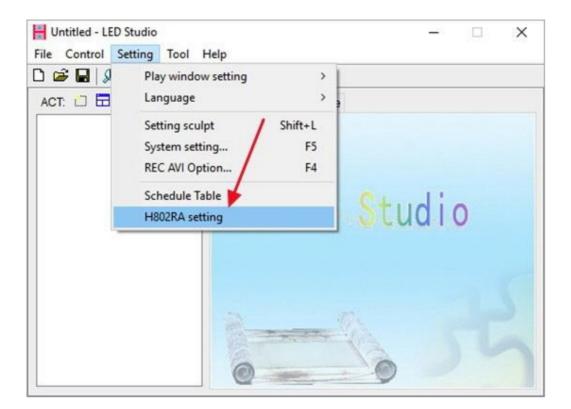
Control Panel\Network and Internet\Network Connections





General					
You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.	to ask y				
Use the following IP address:	dily /				1
IP address:	192	. 168	. 6	. 5	
Subnet mask:	255	. 255	. 255	. 0	
Default gateway:		x			
Obtain DNS server address auto	omatical	ly			
Use the following DNS server ac	ddresses				
Preferred DNS server:		2		10	
Alternate DNS server:		a -	3	•3	
Validate settings upon exit				Adv	anced

(2). Open LED Studio, click "setting" -- "H802RA setting", pops up the following dialog box.



		×
IP and ArtNet settings DMX Addressing		
MAC: 72 - 67 - 88 - 77 -	24 - 88	
IP: X . X . X 18 (The first three byte	s is adaptive)	
Clock: 250K V IC Type:	DMX512	~
Universe: 0 Art-Net Number of controllers: 3	DMX512 TM1812 APA102	
Amplifier\Repeater		

Note:

(1). "DMX512" includes UCS512, WS2821, TM512.



(2). "TM1812" includes P9883, TM1804, TM1809, UCS1903,

UCS1909, UCS1912, WS2811, WS2812, SM16703, SM16709,

SM16712, INK1003, LX1003.

IC Type:	DMX512	~	
	DMX512		
	TM1812 APA102		P9883,TM1804,TM1809,UCS1903,UCS1909,UCS1912,WS2811,WS2812,SM16703,SM16709,SM16712,INK1003,LX1003
1			

Normally, if you choose "DMX512", Clock should be 250K, if you choose "TM1812", clock should be "750K".

	Setting				
IP and A	vtNet setti	ngs DMX A	ddressing		
MAC:	72 -	67 – 88	- 77	- 24 -	88
IP: X	. x . x	18 (Th	e first three b	ytes is adapt	tive)
Clock:		$\sim$	IC Ty	pe: TM1812	~
Univer	250K				
	750K	or controllers	3	1	
			· · · · · · · · · · · · · · · · · · ·		
		~			
Am	plifier\Rep	eater			
Am	plifier\Rep	eater			
Am)	plifier\Rep	eater			
Am	plifier\Rep	eater			
- Am	plifier\Rep	eater			
Am)	plifier\Rep	eater			
Am	plifier\Rep	eater			

H802RA Setting	×
IP and ArtNet settings DMX Addressing	
MAC: 72 - 67 - 88 - 77 -	24 - 88
IP: X . X . X 18 (The first three byte	es is adaptive)
Clock: 250K V IC Type	DMX512 ~
Universe: 0 Art-Net Number of control ers: 3	DMX512 TM1812 APA102
Amplifier\Repeater	uld be 0
0	K Cancel

IP and ArtNet settings DM	X Addressing
MAC: 72 - 67 -	88 - 77 - 24 - 88
IP: X . X . X 18	(The first three bytes is adaptive)
Clock: 250K V	IC Type: DMX512 V
Universe: 0	] DMX512 TM1812 APA102
Art-Net Number of controll	ers: 1
to set he	ow many H802RA
are coni	nected to PC

# MADRIX Configurations

Assume you connect one H802RA to PC, each universe controls

170 WS2812 pixels (1 pixel includes R,G,B, 512/3=170)



🔰 Device Manager		/						×
DMX Devices DVI Devices	DMX Input Art-Net	MIDI Audio Input	Visualizer					
Device Name	Count / Net	Universe		IP Address / MAC Address		Enal S	ble ync	
₽ <del>•</del> , +	<u>n                                    </u>	Ф нттр		Hostname :		Cou	ırıt :	0
					ОК Арріу	Cancel	н	lelp

🔰 Device Manager				0	2 <u>—</u> 3		×
DMX Devices DVI Devices	DMX Input Art-Net	MIDI Audio Inp	ut Visualizer				
Device Name	Count / Net	Universe	IP Address / MAC Address	_	En En		
ArtNet Remote	1	1	192.168.6.5 / 50:E5:49:40:50:F1 (Receive Only From 192.168.6.5)			Sync	-
2							
						Δ	
						٧	
<b>-</b>			Hostname : XB-20150719QHHX		C	ount :	1-
☞ 🖪 🚥			ок	Apply	Cance	:	lelp

🔰 Device Manager				12		×
DMX Devices DVI Devices	DMX Input Art-Net	MIDI Audio In	put Visualizer			
Device Name	Count / Net	Universe	IP Address / MAC Address		Enable	
ArtNet Remote			192.168.6.5 / 50:E5:49:4D:5D:F1 (Receive Only From 192.168.6.5)		Sync	
H802RA		1, 2, 3, 4	192.168.6.18 / 48:43:58:4D:18:58 (Send Only To 192.168.6.18)		1	1
	- ¢	С НТТР	Hostname : XB-20150719QHHX		Count :	
-			ОК Аррі	/ Ca	ncel	Help

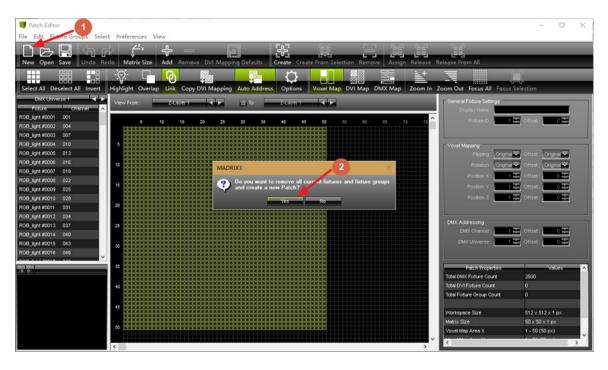
	etwork! )r else, the frame ra	te of Art-Net might drop.	vated Art-Net devices are	available in your		×
	f you are not sure, c Sync Off	io not enable any sync mo Network 192.168.6.0	ode. Subnet Mask 255.255.255.0	Speed 100 MBit/s	Enak	
Ĩ	Pre-Sync		Post-Sync	0		ancel

🔰 Sy	nc Mode			3 <u>88</u>		×
	network! Or else, the frame ra	nc, make sure that all activ te of Art-Net might drop. Io not enable any sync mo		available in your	2	2
	Sync	Network	Subnet Mask	Speed	🔲 Enab	le
	🗢 On	192.168.6.0	255.255.255.0	100 MBit/s		
		choose			9	
			Post-Sync			
	(				Ca	ancel

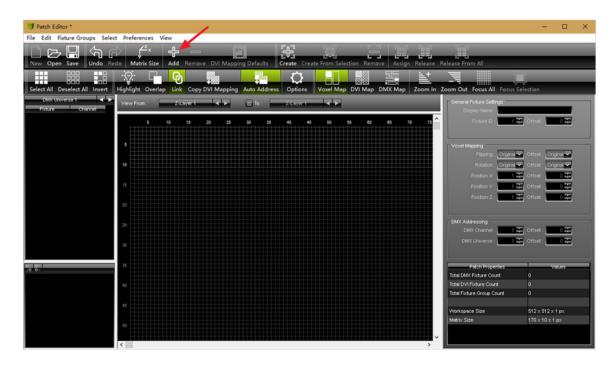
🔰 Device Mar	nager					
DMX Devices	DVI Devices DMX Input Art-Net MIDI A	udio Input   Visualiza	er			
State	Device Name	Universe	OUT / IN	ms / FPS	Frames	Device
🗧 Off	ArtNet Remote (MADRIX) Port:0		- IN	30/33.3		H802RA (192.168.6.18) Port:0
Off	H802RA (192.168.6.18) Port:0	1		30/33.3	Optimized	
Off	H802RA (192:168.6:18) Port:1	2		30/33.3	Optimized	H802RA IP: 192.168.6.18 , Uni: OUT 1
Off	H802RA (192.168.6.18) Port:2	3		30/33.3	Optimized	Truss-Link OP Artistic Licence Engineering Ltd
Off	H802RA (192.168.6.18) Port:3	4	OUT	30/33.3	Optimized	
	select then	n all			2	Enable Output Cuput Cupu
			Univ	erses in Use	out: 0/256 in: 0	Send Full Frames 🚍

State	Device Name	Universe	OUT / IN	ms / FPS	Frames	Device
ff	ArtNet Remote (MADRIX) Port:0		IN .	30/33.3		H802RA (192.168.6.18) Port:0
n	H802RA (192.168.6.18) Port:0	4	OUT	30/33.3	Optimized	
	H802RA (192.168.6.18) Port:1	2	OUT	30/33.3	Optimized	H802RA IP: 192.168.6.18 , Uni: OUT 1
	H802RA (192.168.6.18) Port 2	3	OUT	30/33.3	Optimized	Truss-Link OP Artistic Licence Engineering Ltd
	H802RA (192.168.6.18) Port: 3	-4	OUT	30/33.3	Optimized	
						Input The Universe : 177





Patch Editor		_1				- 🗆 X
File Edit Fixture Groups Select		Add Remove DVI Mapp	ing Defaults Create Cr	eate From Selection Remove Assign Relea	se Release From All	_
Select All Deselect All Invert	-Q	Link Copy DVI Mapping	Auto Address Options	Voxel Map DVI Map DMX Map Zoom	h In Zoom Out Focus All Focus S	election
DMX Universe 1	View From :	Z-Layer 1 🚽 🕨	To: ZsLayer 1	< ►	General Fixture Settings Display Name :	_
	5	10 15 20 25	30 35 40 4	<b>15 50</b> 55 60 65 70	Foture ID : 1	Offset : 0
	s		Matrix Size	×	Voxel Mapping Flipping : Original	Offset : Original W
	10		Size X : Size Y :	equal or large	Rotation : Original Position X :	
	20		Size Z : Color Depth :		Position Y : 1	
	25		ск	Cancel	DMX Addressing DMX Channel :	
	30				DMX Universe : 1	Coffset :
0.0-	35				Patch Properties Total DMX Foture Count	Values 0
	40				Total DVI Fixture Count Total Fixture Group Count	0
	45				Workspace Size Matrix Size	512 × 512 × 1 px 50 × 50 × 1 px
					~	



Add Fixtures to universe 1

Add Fixtures			×
Fixture			
Protocol :	DMX	~	
Product :	Igeneric RGB Light 1 pixel		×
Start Fixture ID :	1 🏛		
Placement	- / /		
Rotation :	Original 🖌 🖌	~	
Count X / Y / Z :	170 🗮 🛛 1 🗮	1 🚍 🦲 Merge Fixtures	
Offset X / Y / Z :	07 07	0 🎞	
Start Position X / Y / Z :	1= 1=	1 🚍	
Addressing			
Start Corner :	Top Left	<b>v</b>	
Main Orientation :	Horizontal	✓	
Snake Mode :			
	Apply Fixture Rotation		>
Z-Order :	Front To Back	~	
Snake Mode Z :	📑 Flip H 🛛 📑 Flip V		
DMX Start Channel :	<b>12</b>		
DMX Start Universe :			
2 <sup>1</sup>			Add Close

Add Fixtures to universe 2

Add Fixtures	
Fixture	
Protocol :	DMX
Product :	Igeneric RGB Light 1 pixel
Start Fixture ID :	
Placement	
Rotation :	Original 🗸
Count X / Y / Z :	170 🎞 1 🎞 1 🎞 🔚 Merge Fidures
Offset X / Y / Z :	
Start Position X / Y / Z :	1= 2= 1=
Addressing	
Start Corner :	Top Left
Main Orientation :	Horizontal
Snake Mode :	<b></b>
	Apply Fixture Rotation
Z-Order:	Front To Back
Snake Mode Z :	🚍 Flip H 🔤 Flip V
DMX Start Channel :	1 🗸
DMX Start Universe :	2
	Add

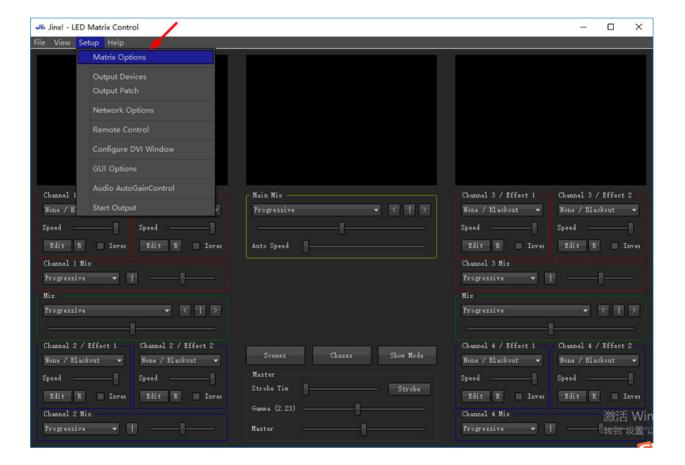
Use the same way to add fixtures for the rest of two universes

M Patch Editor *		- 🗆 ×
File Edit Fixture Groups Select Preferences View		
	and the second se	
New Open Save Undo Redo Matrix Size Add Remove DVI Mapping Defaults Create From Selection Remove Assign Release	Release From All	
Select All Deselect All Invert Highlight Overlap Link Copy DVI Mapping Auto Address Options Voxel Map DVI Map DVX Map Zoom In	Zoom Out Focus All Focus	Selection
DMX.Universe 1 View From: Z.Layer 1 View From: Z.Layer 1	General Fixture Settings	
Foture Channel A	Display Name :	
RGB_upht#0001 001 10 20 30 40 50 60 70 50 90 100 110 120 130 140 150 160 170 150 200 210 220	Foture ID :	💭 Offset : 🚺 0 🎞
RGB_jght #0002_004		
RCB_lytr#0003 007 10		
RCB_lght #0005 013 20	Voxel Mapping Flipping : Original	V Offset : Original V
00 Bart #0007 019		Offset: Original
IGB-light #0008 022 40	Position X :	
108_lght #0009 025 10	Position Y :	📮 Offset : 🗾 0 🎞
GB_lg#t#0010_028	Position Z :	Offset:
KGB_light.#0011 031 00		
GB_light #0012 034 70	r DMX Addressing	
Ce_lyt#0013 037	DMX Channel: 1	🕮 Offset : 💦 0 🎞
CB_lght#0014 040 00	the second se	Coffset : 0 🎞
CGB_gylrt #0015 043 50 CGB Jaylt #0016 046		
	Patch Properties	Values
10	Total DMX Fixture Count	680
120	Total DVI Fixture Count	0
130	Total Fixture Group Count	0
	Workspace Size	512 x 512 x 1 px
143	Matrix Size	170 x 10 x 1 px
150	Voxel Map Area X	1 - 170 (170 px)
	<	
	×.	,

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

## 6. Basic Working Procedure for Jinx!

Note: before this, you should allocate an IP address for H802RA and configure H802RA in LED Studio, which has been showed above.

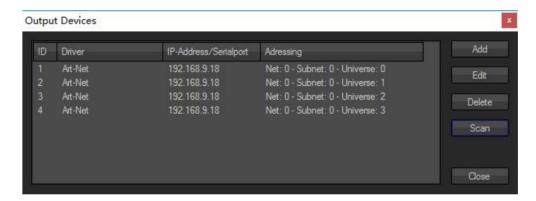


atrix Options		
Matrix Dimension	1	e .
Width (4-480px) 170 Height (	4-480px) 4	
Pixel Count (max 48000 allowed)		
Matrix Options		
PixelStep (increase on a big matrix)	1	-
Space between Pixels (Grid width)	1	-
Grid / Background Color	Black	Ť
Use Patch State for Pixel drawing		
Reset Preview Options:		
		ок

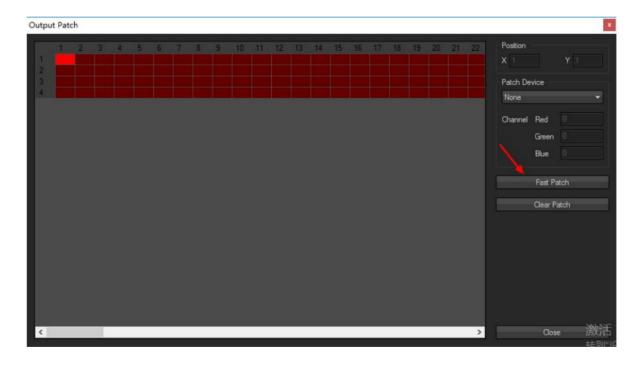
Jinx! - LED	Matrix Control		– 🗆 X
File View Se	tup Help		
Channel 1 None / E Speed — Edit R	Matrix Options Output Devices Output Patch Network Options Remote Control Configure DVI Window GUI Options Audio AutoGainControl Start Output Speed Inves Edit R Inves	Mein Mix Frogressive	Channel 3 / Effect 1 None / Blackout V Speed Speed Edit R Inver
Channel 1 Mi Progressive Mix Progressive	x	Scenes Chases Show Mode	Channel 3 Mix
Speed Edit R Channel 2 Mi Progressive	Speed Inve: Edit R Inve:	Master Strobe Tin Gamma (2.23) Master	Ache / DiacKout · Anne / DiacKout · Speed · S

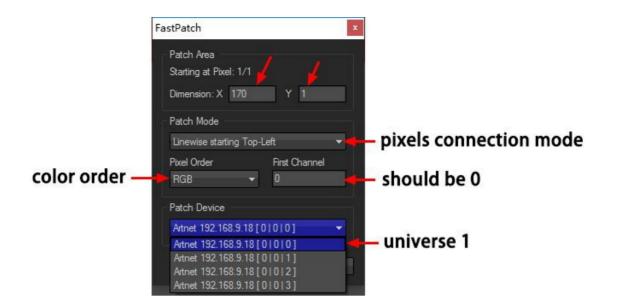
utpu)	t Devices				x
ID	Driver	IP-Address/Serialport	Adressing		Add
					Edit
					Delete
					Scan
				/	
				1	Close

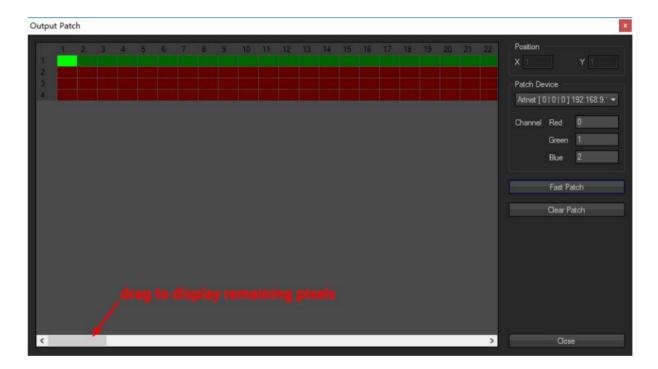
D Driver	IP-Address/Serialport	Adressing	Add
	Artnet Scan		Edit
	Scanning fo	or Art-Net Devices.	Delete
	Pleas	e Wait 3	Scan



Jinx! - LED	Matrix Control		– 🗆 X
File View Se	tup Help		
	Matrix Options		
	Output Devices		
	Output Patch		
	Network Options		
	Remote Control		
	Configure DVI Window		
	GUI Options		
- Channel 1	Audio AutoGainControl	Main Mix	- Channel 3 / Effect 1 Channel 3 / Effect 2
None / B.	Start Output	Progressive 🗸 <   >	None / Blackout 👻 None / Blackout 👻
Speed —	Speed	t	Speed Speed
Edit R	Inver Edit R Inver	Auto Speed	Edit R Inver Edit R Inver
Channel 1 Mi	ix		Channel 3 Mix
Progressive			Progressive 👻
Mix			Mix
Progressive	• <   >		Progressive 👻 <   >
Channel 2 /	Effect 1 Channel 2 / Effect 2		Channel 4 / Effect 1 Channel 4 / Effect 2
None / Blac	kout 👻 None / Blackout 👻	Scenes Chases Show Mode	None / Blackout 👻 None / Blackout 👻
Speed —	Speed	Master	Speed Speed
Edit R	Inver Edit R Inver	Strobe Tim Strobe	Edit R Inver Edit R Inver
Channel 2 Mi		Gamma (2.23)	Channel 4 Mix 激活 Window
Progressive		Master	Progressive - 卡到"设置"以激活





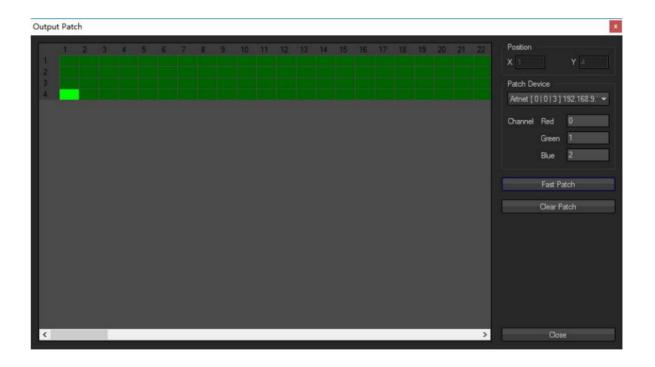


Outpu	t Patcl	h																						×
1 2 3		2	3	4	5.	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	Position X		
3 4		d		1															2				0 m 0	
۲			ļ																		>	c	lose	

FastPatch		x
Patch Area Starting at Pixel: 1/2 Dimension: X 170	¥ 2	
Patch Mode		
Linewise starting To	p-Left 👻	
Pixel Order RGB	First Channel	
Patch Device		
Artnet 192,168,9.18	[0 0 1]	— Universe 2

put	t Pato	:h	_	_	_	_				_	_	_	_	_	_	_	_	_					
	1	2	3	4	5	6	8	9	.11	12		14	15				19	20	21	22	Position		
																					<b>X</b> 1		
	1																				Patch De	vice	
																					Artnet [	01011]	192.168.9.' 🗸
																					Channel	Red	0
																						Green	1
																						Blue	2
																						Fast Pa	itch
																						Clear Pa	atch
																				>		Close	e

Use the same way to add pixels to the rest of two universes



Then

Jinx! - LED Matrix Control		– 🗆 X
File View Setup Help		
Matrix Options Output Devices Output Patch		
Network Options Remote Control Configure DVI Window GUI Options Audio AutoGainControl		
Channel 1 None / E. Start Output Speed Edit R Inves Channel 1 Mix Progressive / / / / / / / / / / / / / / / / / / /	Main Mix Frogressive	Channel 3 / Effect 1 None / Elackout Speed Edit R Inver Channel 3 / Effect 2 None / Elackout Speed Edit R Inver Channel 3 / Effect 2 None / Elackout Speed Edit R Inver Channel 3 / Effect 2 None / Elackout Speed Edit R Inver Mix Frogressive
Channel 2 / Effect 1 None / Elackout Speed Edit R Invez Channel 2 Mix Fregressive	Scenes Chases Show Mode Master Gamma (2.23) Master	Channel 4 / Effect 1 None / Elackout

Choose "Audio Auto Gain Control" if you need music effect

Jinx! - LED Matrix Control		- 🗆 X
File View Setup Help		
Matrix Options		
Output Devices		
Output Patch		
Network Options		
Remote Control		
Configure DVI Window		
GUI Options		
Channel 1 Audio AutoGainControl	Main Mix	- Channel 3 / Effect 1
None / B Start Output	Progressive 🗸 🤇 🗸 🗸	None / Blackout 👻 None / Blackout 👻
Speed Speed	E	Speed Speed
Edit R Inver Edit R Inver	Auto Speed	Edit R Inver Edit R Inver
Channel 1 Mix		Channel 3 Mix
Progressive V		Progressive 👻
Mix		Mix
Progressive - < + >		Progressive - <   >
Channel 2 / Effect 1 Channel 2 / Effect 2 None / Blackout - None / Blackout -	Scenes Chases Show Mode	Channel 4 / Effect 1 Channel 4 / Effect 2 None / Elackout - None / Elackout -
Speed Speed	Master	Speed Speed
Edit R Inver Edit R Inver	Strobe Tim Strobe	Edit R Invez Edit R Invez
Channel 2 Mix	Gamma (2.23)	Channel 4 Mix 激活 Window
Progressive -	Master	Brogressive ▼   ──转到"设置"以激活
		± 🏹

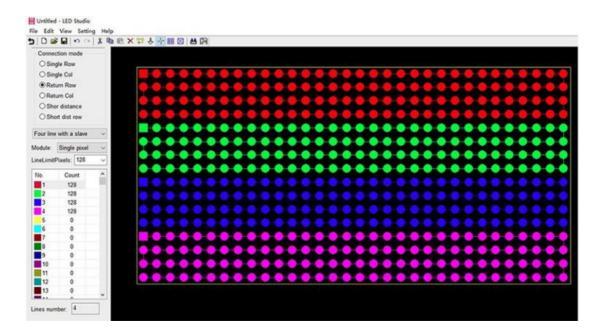
You can use Jinx! to control lights !!! The following is just for

example

Jinx! - LED Matrix Control		– 🗆 ×
File View Setup Help		
Channel 1 / Effect 1 Celor Soroll Speed Bdit R Inver Edit R Inver	Main Mix	Channel 3 / Effect 1 Channel 3 / Effect 2 None / Elackout V Speed Edit R Invez Edit R Invez
Channel 1 Mix Progressive Mix		Channel 3 Mix Frogressive I Mix
Channel 2 / Effect 1 Channel 2 / Effect 2		Channel 4 / Effect 1 Channel 4 / Effect 2
None / Elsokout - None / Elsokout - Speed Speed	Scenes Chases Show Mode Master Strobe Tin Strobe	None / Blackout - None / Blackout - Speed Speed
Channel 2 Mix Frogressive	Ganma (2.23) Master	Channel 4 Mix 激活 Window Progressive - 一转到 设置"以激活

## 7. Basic Working Procedure for Led Studio

#### **Place Pixels**



# Slave setting

	tion mode	areadoune .																	
	le Row																		
OSin					Slave setti										×	101			0.0
	um Row				Sidte set														
ORet					Bright	100 🔽	Red:	100		Green	100 🔽	-	Blue	100			A A		
			(	-0-(	121100000	e: 1.00 ~	here and	Levet 4	0.98	0.4	Number:	4 0		mma:	22				
	r distance															-		0.0	
OSho	rt dist row				LightType	RGB	✓ Add	Color	Test I	C Type:	TM1812			ColorRe	verse				
Eaur line	with a slave	1000		ю	No.	LightType	ControlType	Clock	Bright	Gray	Reverse	Ports	Red	Gre	Blue		HH		
					1	RGB	TM1812	1.00	100	4096	No	4	100	100	100				
Nodule:	Single pixel	~					THE TE										••		
ineLimit	Pixels: 128	~		ā-ā												-	ē.ē	ē.ē.	
No.	Count	^																	
1	128	100																	
2	128																		
3	128																		
4	128																		
5	0																		
6	0																		
7	0																		
8	0	- 1			<										>		HH	HH	
9	0	- 11								9	10.2020	1 102		-	_				
10	0										OK	C	ancel	A	ply				
12	0				-			-	-	-	-		-	-		ж	HH	HН	
13	0																		

# Note: many chips use one option

Bright 1 ClockRate LightType	e: 1.00 ~	Red: MHz Gray	in the second se	096	Por	t Number: 4	~	Ga	mma:	22				•			•	•	•				0-0								
2No. 1	LightType RGB	ControlType TM1812	Clock 1.00	Bright 100	Gray 4096	H32005 H0MX 512 H0MX 1741829 APA102 TLS3001 TLS3001 TLS3001 DM413 DM413 DM413 DM413 DM413 SM16711 BS0825 BS0011 BS0825 BS0015 LD15x MY9221		ted 83,T	Gre		tue 1809	luc	903		\$190			W\$2	811, //	/\$28	12,5	X	5703	3.SM	1167	09,5	M16.	712,1	UK100	3.LX	104
<				_		TM1926 MBI6024 TM1916 TM1914 TM1814 TM1814_38m/ MBI6021 UCS8904 GW6205 HBS1920 HBS1920		el	As	oply	>			•		ě ě	•	••••													

Allocate controller for the specified IP address.

		SlaveN
2.168.6.255	1-1	1 🦐
92.168.1.255		0
MoveUp Mov	eDown R	efresh
moreop		oncon

### Make Animation



# 8. Set Address for DMX512 chips

(1). Please connect your lamp to controller according to the connection method i post above(under PCB Layout).

(2). In LED Studio, click "Setting" -- "H802RA Setting".

	MV Addeeseles		
P and ArtNet settings DI	MX Addressing		
DMX Chip Type: TM512	2, UCS512	~	
Each chip channels: 3	~		
DMX start channel addres	ss: 1	1	
Enable Smart white lig	ht. allowing maxi	mum colo	r 0 v
Gravecale: 1024		1000 000 000	r 0 ~
Grayscale: 1024 ~	ht, allowing maxi refresh rate:	num colo 1024	r 0 v
		1000 000 000	r 0 ~
Grayscale: 1024 ~		1000 000 000	r 0 v
Grayscale: 1024 ~	refresh rate:		r O v
Grayscale: 1024 encryption Encryption times:	refresh rate: Unencrypt		encrypt

	ngs Di	MX Addressing		
DMX Chip Type:	TM512	2. UCS512	~	
Each chip chann	H801D	MX LIGS512		
DMX start chann	H860, SM-DN SM165	H861 IX512AP 1X	pr	0 ~
Grayscale: 102	4 ~	refresh rate:	1024	~
encryption				
	les:	Unencrypt	×.	
Encryption tim	CONTRACTOR OF STREET			
Encryption tim Enter your par	ssword:			encrypt
				111-010-010-010-01
Enter your par		1		and decode

After several seconds, lamp will turn white then green, please repower the lamp.

H802RA can address for maximum 1024 pixels.

## 9. Specifications

Input Voltage: Customized

Power Consumption: 1.3W

Drive Pixels Number: 4096

Weight: 1KG

Dimension: L163 x W155 x H54

Carton Size: L205 x W47 x H21