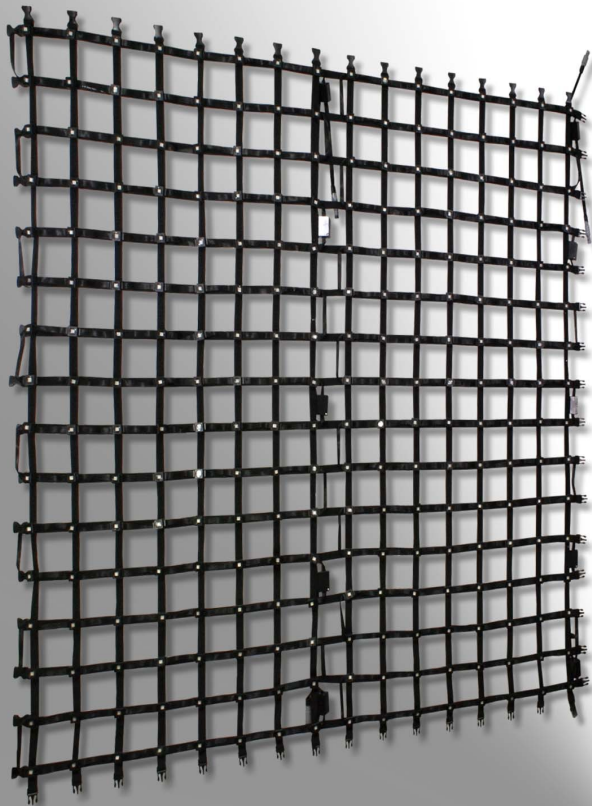


# *enigma*

*Net* *75mm 24V*

## User Manual



### Contents

Safety Information	2
Technical Information	3
Product Overview	4
Power Cable Connection	5
Wiring Instructions	6
Multiple Unit Installation	8
Rigging the Fixture	10
Maintenance	11
Software	12



Check that the unit has not been damaged during transport



Read all cautions and warnings  
prior to operation of this  
equipment

#### Protection against fire



Fire

1. Maintain a minimum of 2 foot distance from any type of flame.
2. Replace fuse only with the specified type and rating.
3. Do not install the unit too close to a heat source.
4. Make sure cables are properly secured.

#### Protection against electrical hazards



Electrical

1. Disconnect power before servicing.
2. For Connection to power supply proceed to page 5
3. This unit must be earthed (electronically)
4. Do not expose to rain or moisture.
5. Do not extend power supply cable.

#### Protection against mechanical hazards



Mechanical

1. Use safety chain when hanging unit.
2. Make sure all clips are securely clipped together.

# Technical Features

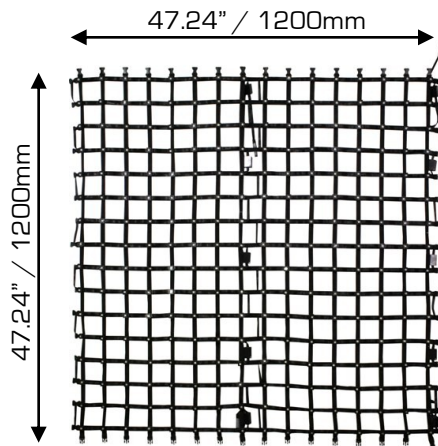
## Fixture

EN-8075-Enigma Net 75

## Flight Case

### Mechanical Specifications

- Pixel Pitch: 75mm
- Section Resolution: 16x16, 256 pixel per section
- Brightness: 3500nits
- Viewing Angel: 145° Vertical 145° Horizontal
- Transparency: 65%
- Control Connection: ODU 5 pin signal connection  
ODU 2 pin power connection  
Sub Drive-Neutrik Ether Conn  
Power Supply-Neutrik Power Conn & NL4

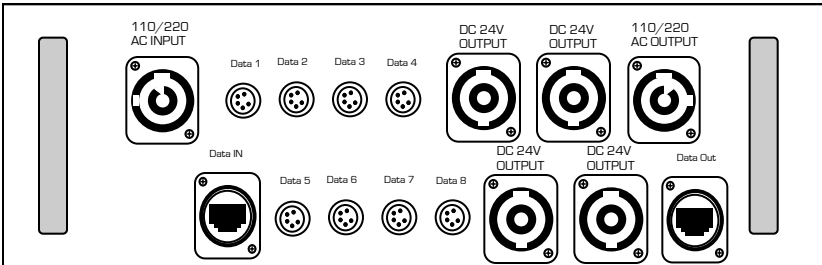
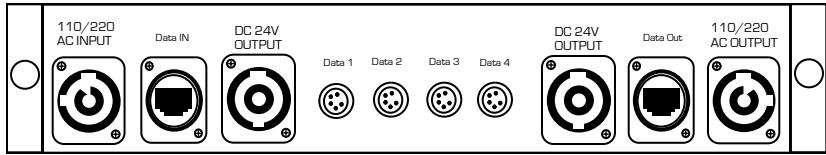
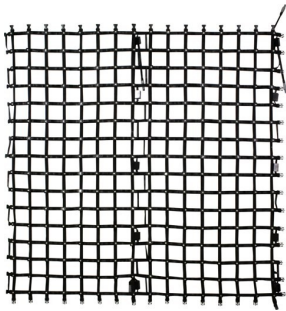


Dimensions / Weight
In:47.24" x 47.24" x .78" / mm: 1200 x 1200 x 20
Weight: 5.5lbs

### Electrical Specifications

- LED Type: Samsung SMD tri color
- Led Quantity: 256
- LED Lifetime: 100,000 Hours estimated
- Power input: Manually Switchable 110V or 220V
- Power output: DC 24V
- Power Consumption: 75 Watts

# Product Overview



## EN-75—Enigma Net 75 24V

The Enigma Net 75 is made up of 256 LED pixels. The connection starts at the lower bottom right and snakes it way across to the lower left side. Each string of the net has a male and female mounting connection allowing you to connect one net to the next. From this same string you can also connect Fly adapters that will allow you to connect to a truss or pipe for mounting.

## EN-DS—Enigma Net Drive System

The Enigma Net Drive System is a interface device that will convert the signal that is coming out of your PC's DVI output. Into a signal that can be sent to the Enigma Net Sub Drive Box

## EN-PD12—Enigma Net Sub Drive System

The Enigma Net Sub Drive System will connect to the Enigma Drive System via Ether Conn Cable and send signal to the next Sub drive box. Each Sub Drive Box can control

- 6-EN-50 Enigma Net 50
- 12-EN-75 Enigma Net 75
- 48-EN-150 Enigma Net 150

## EN-PD24—Enigma Net Sub Drive System

The Enigma Net Sub Drive System will connect to the Enigma Drive System via Ether Conn Cable and send signal to the next Sub drive box. Each Sub Drive Box can control


- 12-EN-50 Enigma Net 50
- 24-EN-75 Enigma Net 75
- 96-EN-150 Enigma Net 150

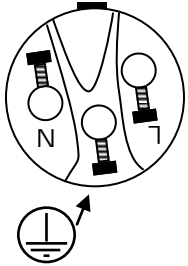
# Power Cable Connection

**Caution!**

1. Do not connect Enigma Net Power supplies to a Dimmer System
2. This unit must be earthed. (electronically grounded)
3. Replace fuse only with the specified type and rating.

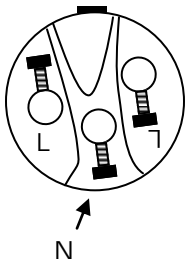
## 110V Connection

Cable (USA)	Cable (EU)	Pin	Connection
Black	Brown	Live	L
White	Light Blue	Neutral	N
Green	Yellow/Green	Ground	



## 220V Connection

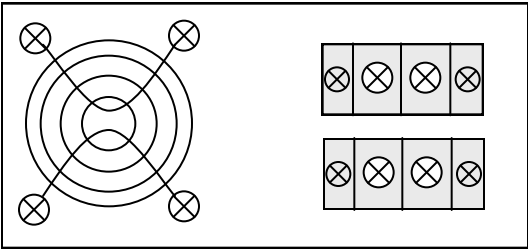
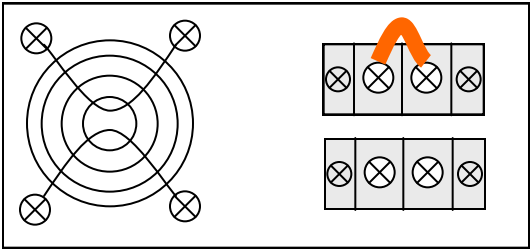
Cable (USA)	Cable (EU)	Pin	Connection
Black	Brown	Live	L
White	Light Blue	Live	L
Green	Yellow/Green	Neutral	N



**Caution!**  
Power must be internally switched to desired setting.

For 110V operation the bridge must be in place

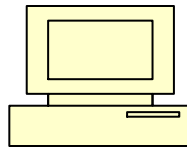
For 220V operation the bridge must be removed



# Signal Cable Connection

The fixture is equipped with panel mount Neutrik Ether Conn Connection (RJ-45) for signal input and output.

# Wiring Instructions

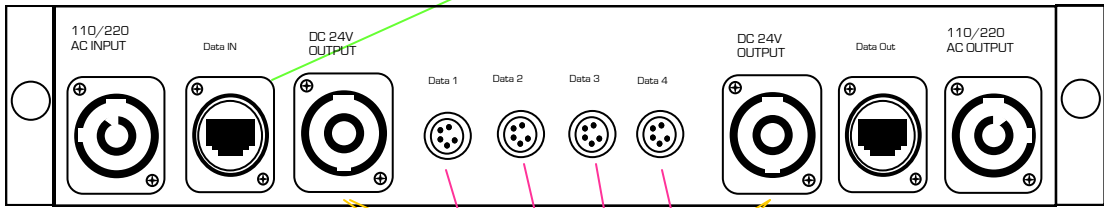


Install software prior to connecting USB cable

Image must come from a digital source not from a converted adapter



EN-DS

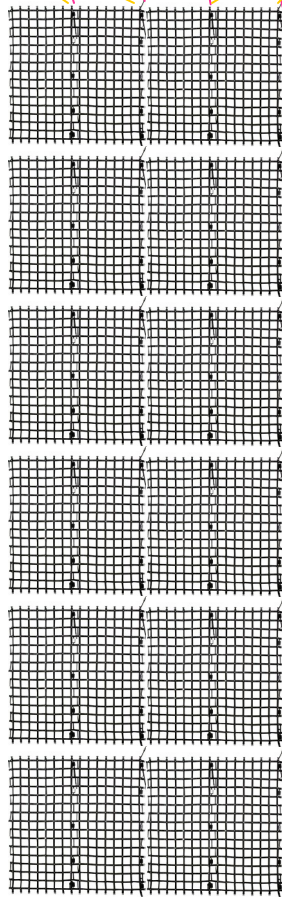


EN-PD12

110/220 AC INPUT

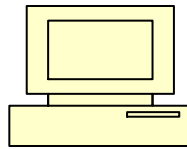
110V maximum of 3 EN-PD-12 / 220V maximum of 6 EN-PD12

DATA output



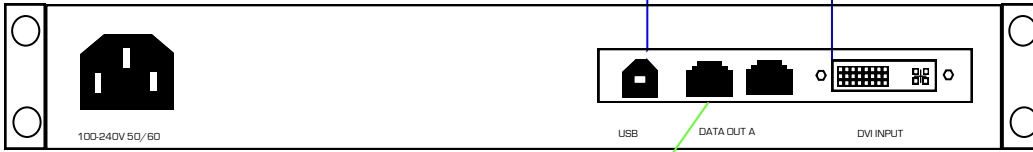
Single EN-PD12 limitation is 6 Panels Down

Single EN-PD12 limitation is 2 Panels Across

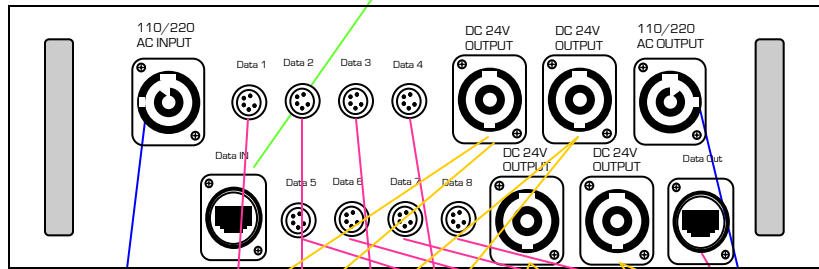


Install software prior to connecting USB cable

Image must come from a digital source not from a converted adapter



EN-DS

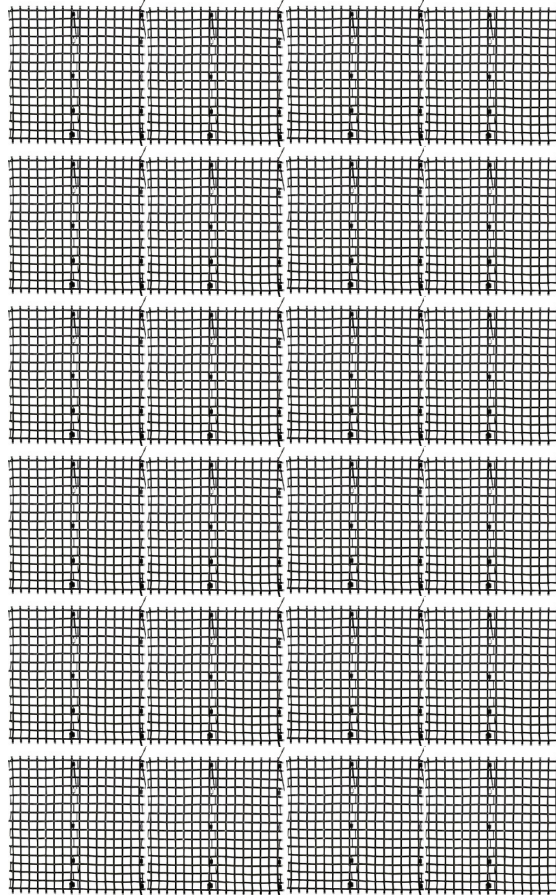


EN-PD24

110V maximum of 1 EN-PD24 / 220V maximum of 2 EN-PD24

110/220 AC INPUT

DATA output

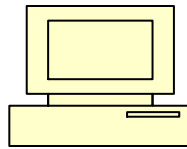


Single EN-PD24 limitation is 6 Panels Down

Single EN-PD12 limitation is 4 Panels Across



# Multiple Unit Installation

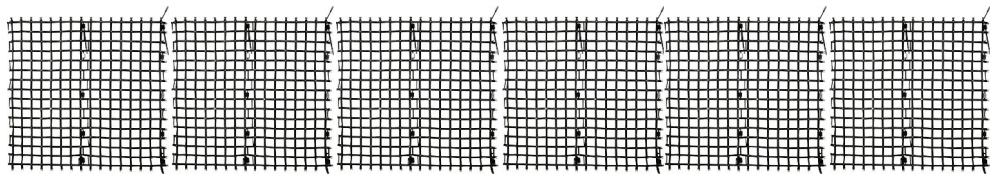
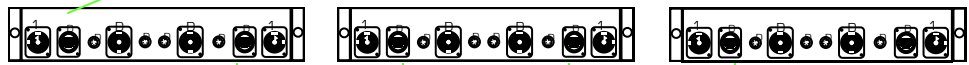


Install software prior to connecting USB cable

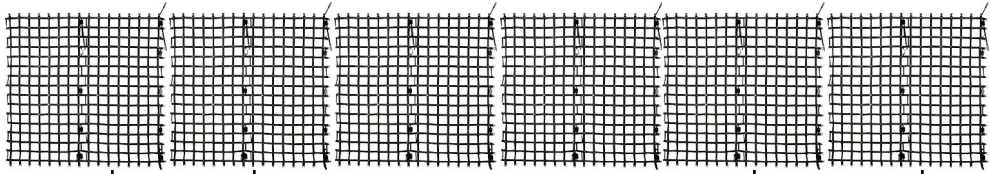
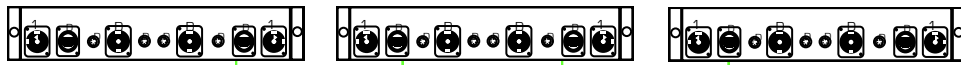
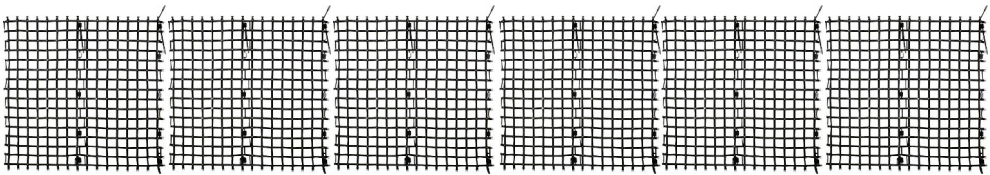
Image must come from a digital source not from a converted adapter



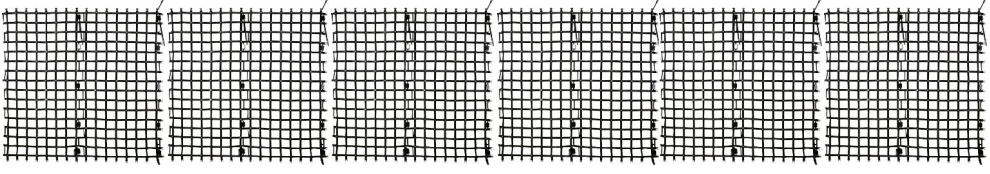
EN-DS



6 Down Total

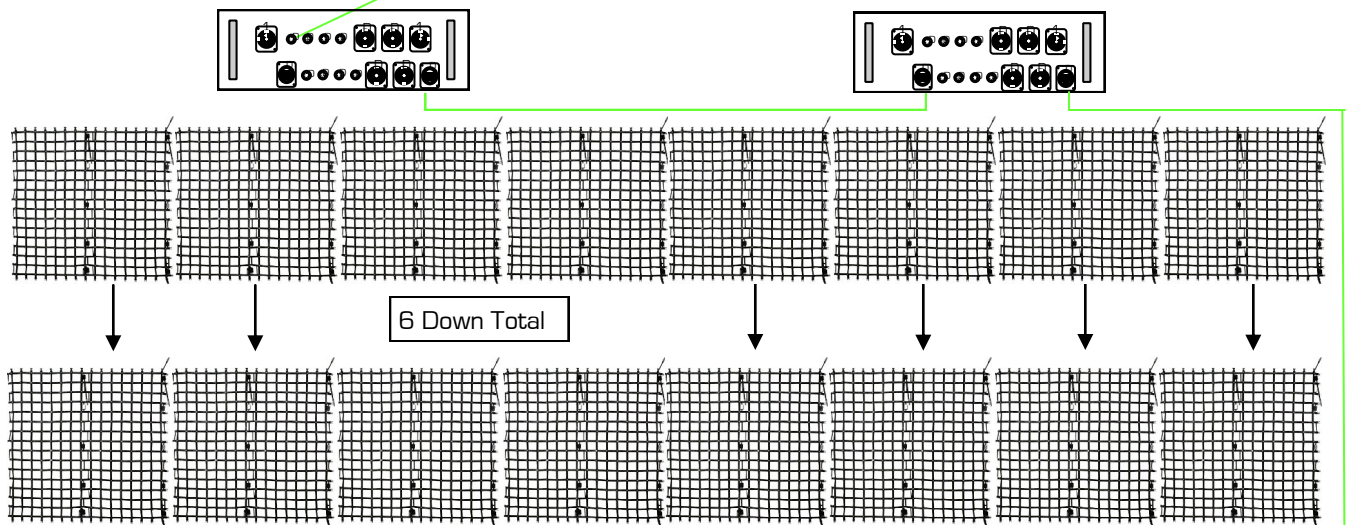
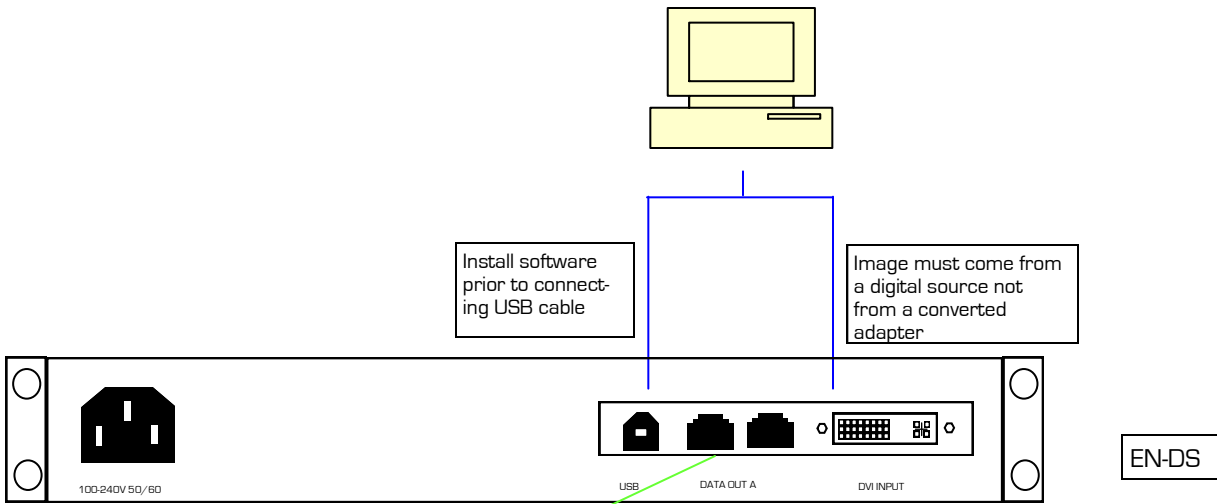


6 Down Total

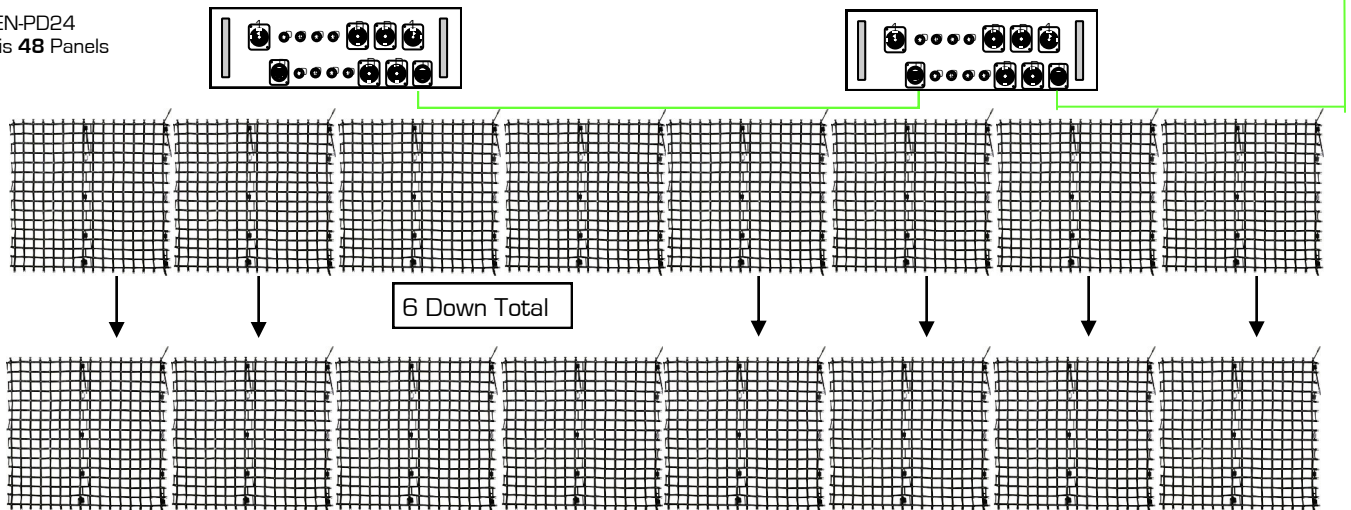


Multiple EN-PD24 limitation is **48** Panels Down

Multiple EN-PD24 limitation is **64** Panels Across



Multiple EN-PD24 limitation is **48** Panels Down



Multiple EN-PD24 limitation is **64** Panels Across

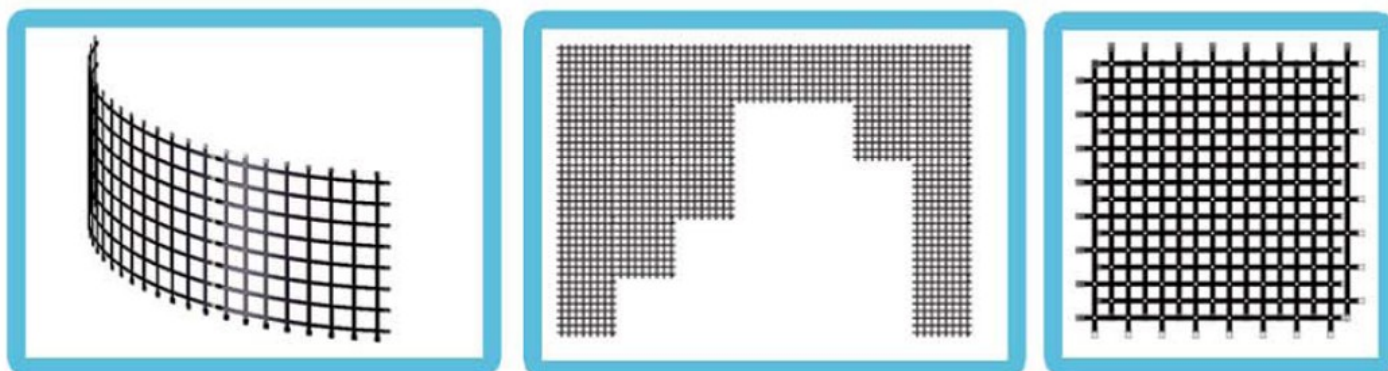
## Rigging the fixture

### Caution!

1. The installations must be carried out by an authorized dealer or trained professional.
2. Unit may cause severe injuries if you have doubts concerning the safety do not install.
3. Unit is to be 24 inches away from flammable materials (decoration material)
4. Use high quality installation equipment to hang unit.

1. When rigging a unit it is very important that you follow common safety procedures. Rigging requires extensive experience including but not limited to calculating working loads, material being used and periodic safety inspections. If you lack these qualifications, do not attempt the installation yourself, instead use a professional structural rigger.

2. When rigging the unit always be secured with a secondary safety attachment. The installation location of the projector has got to be built in the way that it can hold 10 times the weight for 1 hour with out any harming. Installation should be checked at least one time a year by a skilled person.



# Maintenance

**Installation Maintenance:** The operator has to make sure that the unit is operating safely and has the installations and electronics checked by an expert every 2 years.

The following points have to be considered during the inspection:

- 1) All screws used for installing the device or part of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing, fixation and installation spots (ceiling, suspension, trussing).
- 3) The electronic power supply cables must not show any damages, material fatigue (e.g. porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.
- 4) Make sure the fans are not blocked from air flow.
- 5) Make sure signal cables and Enigma Net Driver and EN-PD12 are not placed near any magnetic interference.

## Disconnect from mains before starting maintenance operation!

*Caution Danger to life!*



Electrical

We recommend a frequent cleaning of the device. Please use a moist, lint free cloth. Never use alcohol or solvents!

- 1) The objective lens will require periodic cleaning on usage and environment. Environment with foggers will require more periodic cleaning as fog fluid tends to build up residues, reducing the light output.
- 2) The cooling-fans should be cleaned monthly. DO NOT blow high pressure air into fans as incorrect rotation can damage the fans operation.

**Note:** There is no serviceable parts inside the device except for the lamp and the fuse. Maintenance and service operations are to be carried out by authorized dealers.

**Replacing the power cable:** If the power cable of this device becomes damaged, it has to be replaced by authorized dealers only in order to avoid hazards.

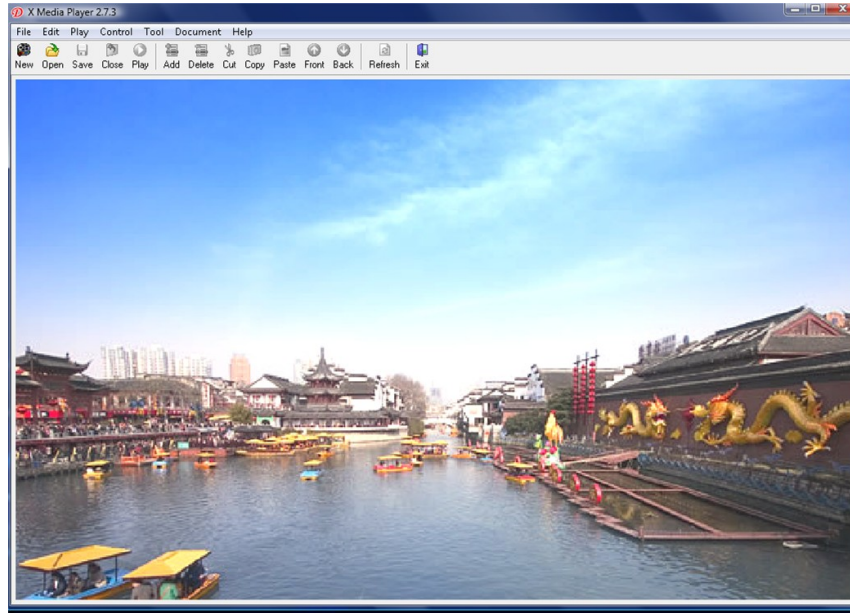
Should you have further questions , please contact your dealer.

## Parts List

EN-DS	Enigma Net Driver
EN-PD12	Nets Power Supply & Driver 12
EN-PS	Power Supply
EN-DR	Driver Card
EN-SE	Sending Card
EN-DRPS	Links Driver Power Supply
EN-C-DA-3	3 Foot Data Cable ODU Connection
EN-C-DA-13	13 Foot Data Cable ODU Connection
EN-C-PW-5	5 Foot Power Cable Neutrik to ODU
EN-CPW-13	13 Foot Power Cable Neutrik to ODU

EN-MOD	Nets Replacement LED module
EN-FC	Flying Clip Adapter

# Software



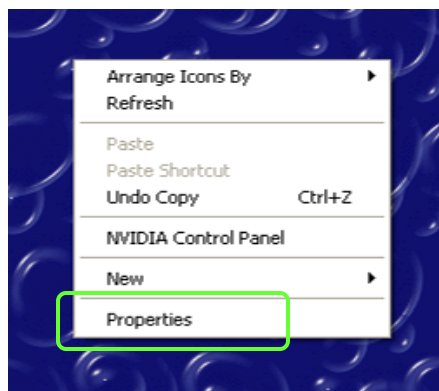
Mega-Lite's Enigma Net Software is a easy to use, and easy learning software. The software will allow you to make effect looks and to play back almost any type of format.

## System Requirements

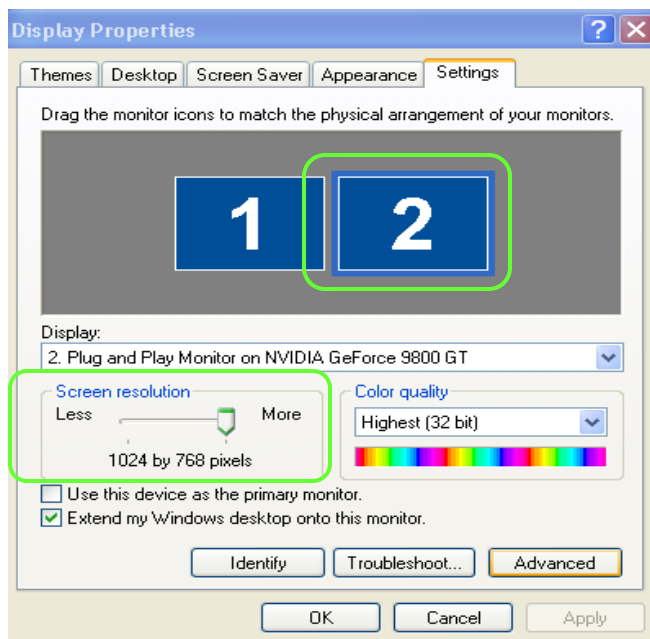
Operating System: Windows XP, Windows Vista  
Video Card: Video Card with DVI output  
Memory: 512M  
CPU: Pentium 300Mhz  
Windows Media Player

# Video Monitor Settings

1.1 Right click on your desktop screen scroll to **Properties**

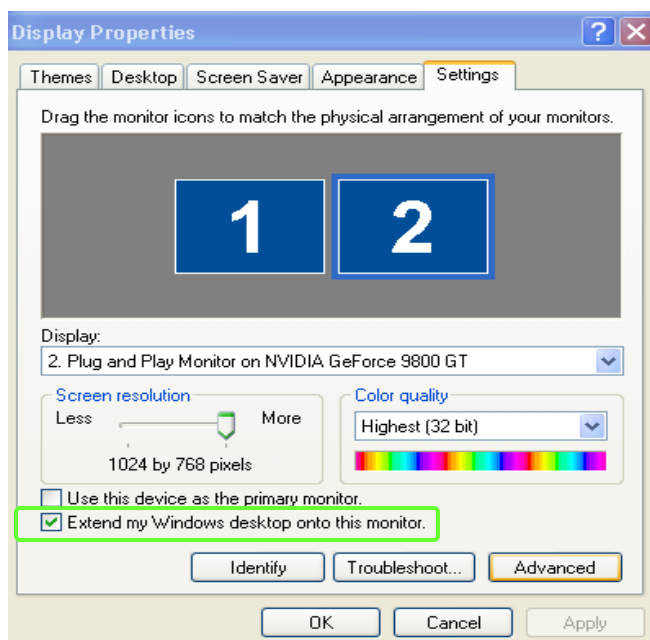


1.2 On your setting window of your Display Properties. Click on window 2.



1.3 Your screen resolution for monitor 2 should be set to **1024 by 768**

1.4 Check to **Extend my Windows desktop onto this monitor**

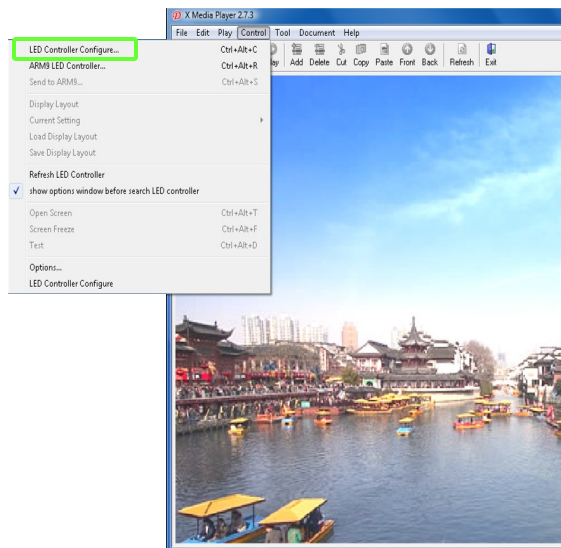


# Software Set Up

## Configure Net

2.1 This is the way to have the software recognize the amount of Enigma Nets you are configuring.

Click the **Control** scroll down to **LED Controller Configure**



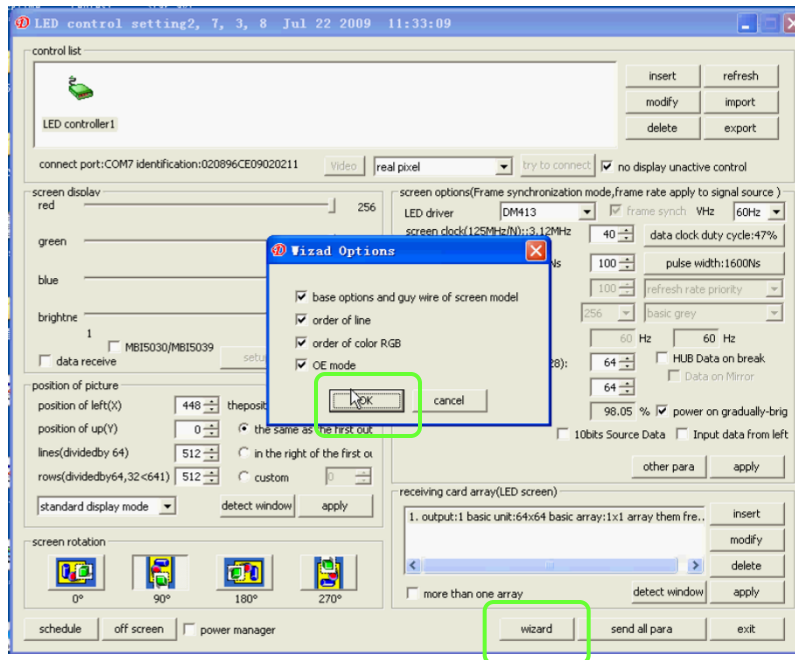
2.2 Click **Para setting** to set up your parameter settings



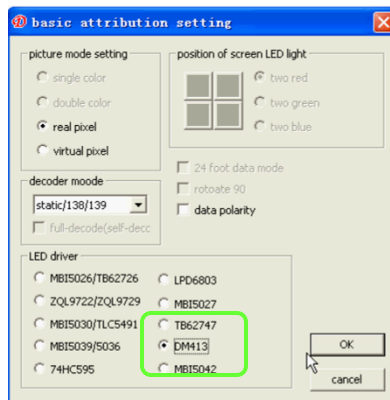
2.3 You will be asked to enter a password  
Please type in **dbstarled** and click **ok**



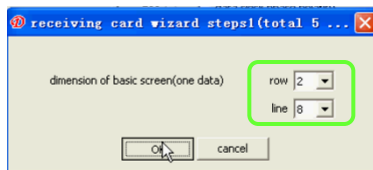
2.4 Click on the **Wizard** button and a Wizard options window will appear click **OK**



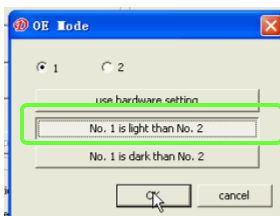
2.5 The Enigma Net 24V uses a **DM413** driver please select this driver. After selecting click **OK**



2.6 The dimensions of basic screen should be changed to **Row 2** and **Line 8** then click **OK**

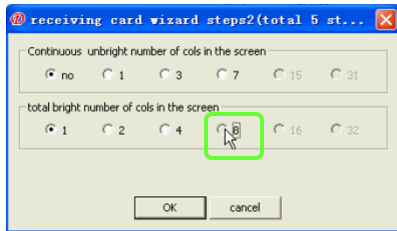


2.7 Click on **No 1 is light than No2** then click **OK**

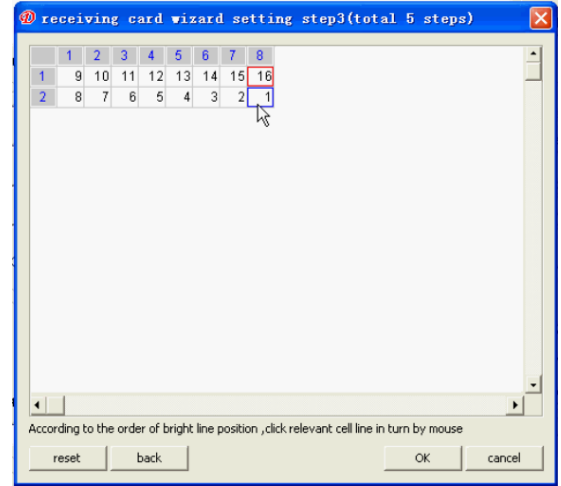
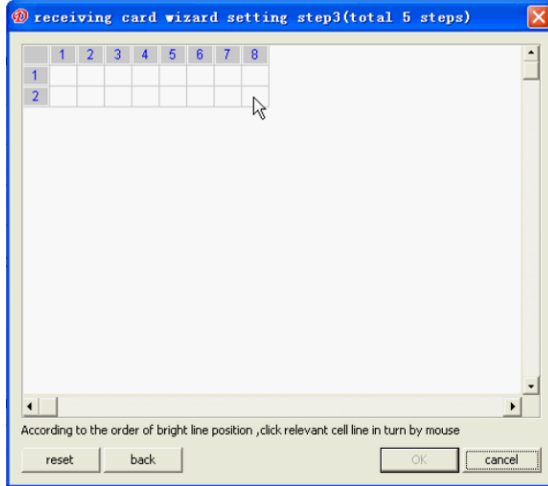




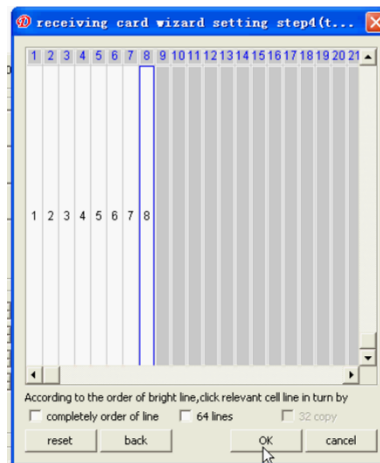
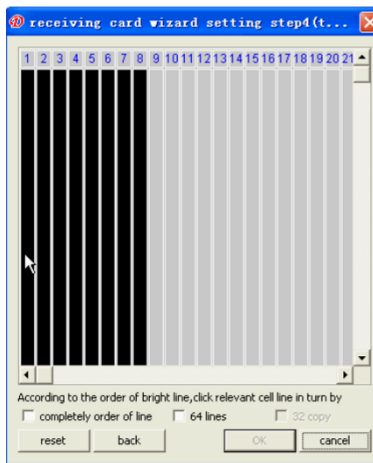
2.8 Click on the total number cols in the screen **8**. And click **OK**



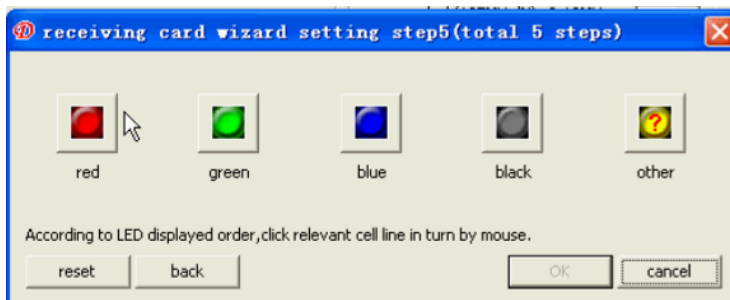
2.9 On the first Net Panel you will see the first 2 rows light up in white color. Click on the square row 2 column 8 and the number 1 will appear on the square. On your net the same unit will turn off. Continue to click the squares in series like image 2. On your net all the LEDs that were white should now be off. Click **OK**



2.10 On the first Net Panel you will see the first 2 columns light up in white color. Click on the column 1 the number 1 will appear on the column. On your net the same unit will turn off. Continue to click the squares in series like image 2. On your net all the LEDs that were white should now be off. Click **OK**



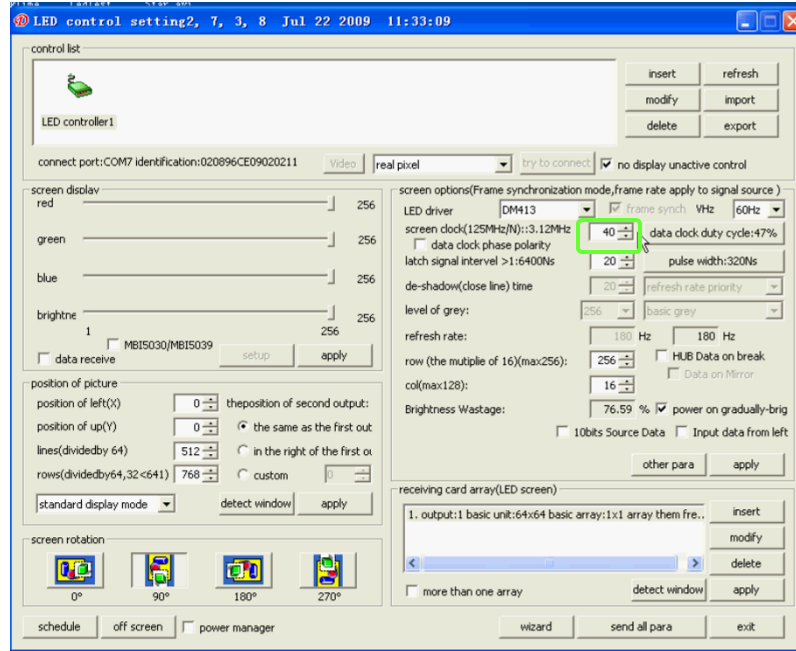
2.11 On the first net panel on your first 2 rows you will see the panel change color. Click on the color the net is. After selecting all 3 color click **OK**



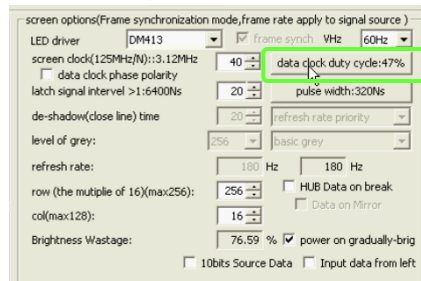
2.12 Verify that the LED color that is on is RED by clicking **OK**



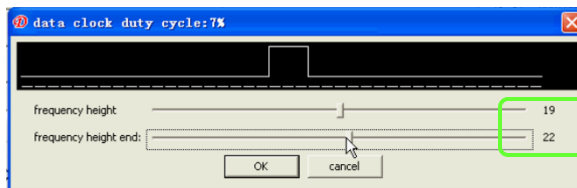
2.13 Change the screen clock to **40**



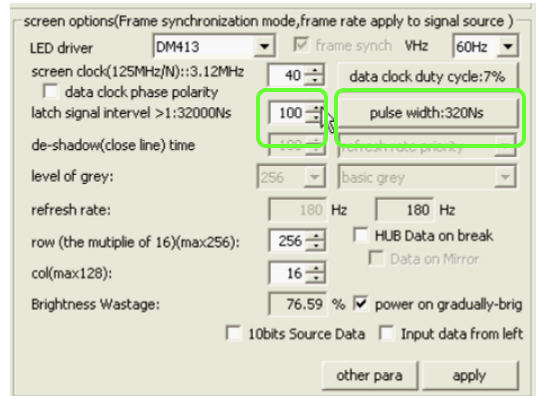
2.14 Click on **data clock duty cycle**



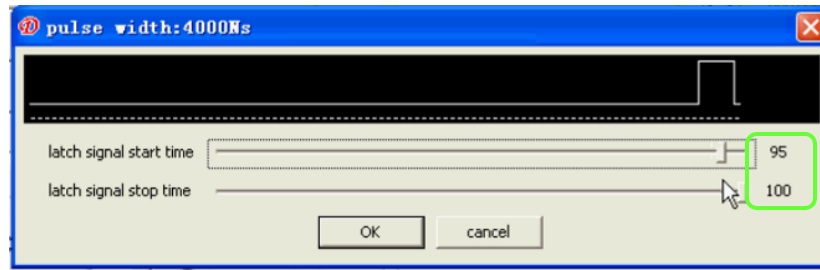
2.15 set the data clock to **19** and **22** then click **OK**



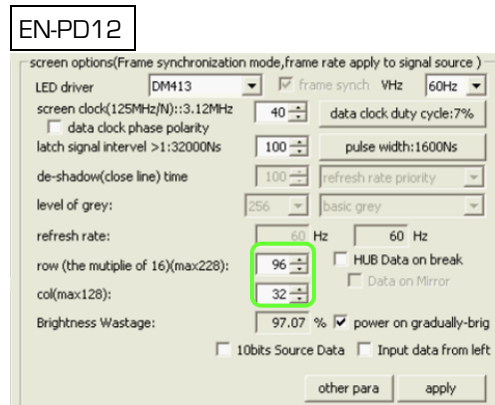
2.16 Change the latch signal interval to **100** then press **pulse width: 320Ns**



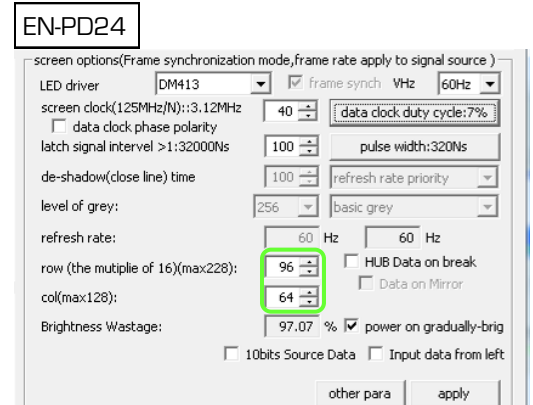
2.17 Set the pulse width to **95** over **100** then press **OK**



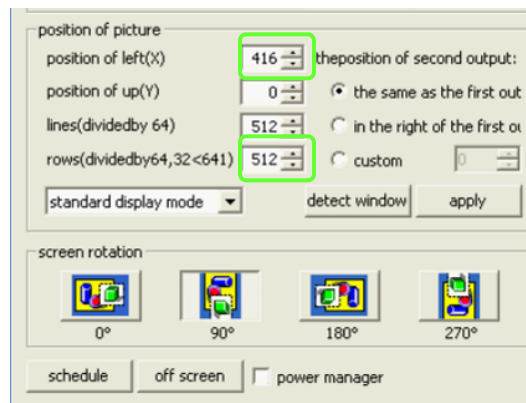
2.18 If using **EN-PD12** Set the Row and Col for the driver. You need to change the row to **96** (max) and col to **32** (max)



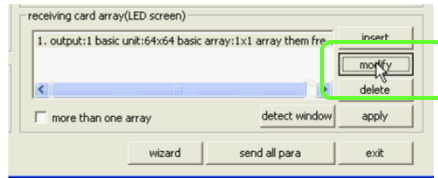
2.18B If using **EN-PD24** Set the Row and Col for the driver. You need to change the row to **96** (max) and col to **64** (max)



2.19 Set the position of picture to rows **512** and position of left to **416**

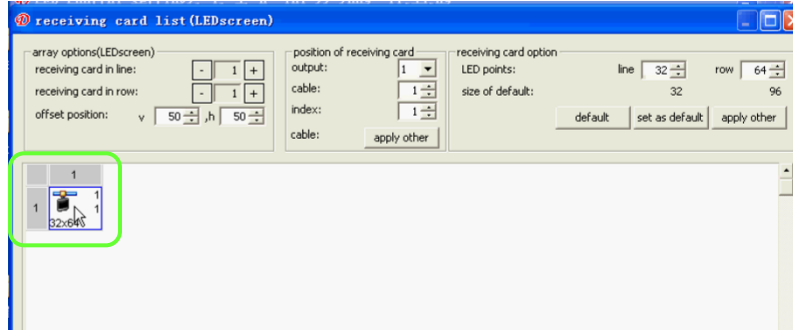


2.16 On the receiving card array part of the software click on **Modify**

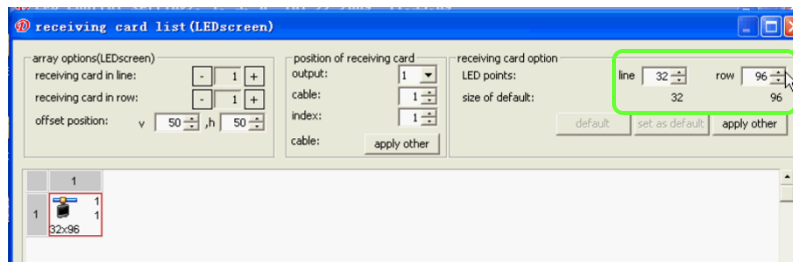


Single EN-PD Driver

2.17 Click On the Square box represent- ing the EN-PD12

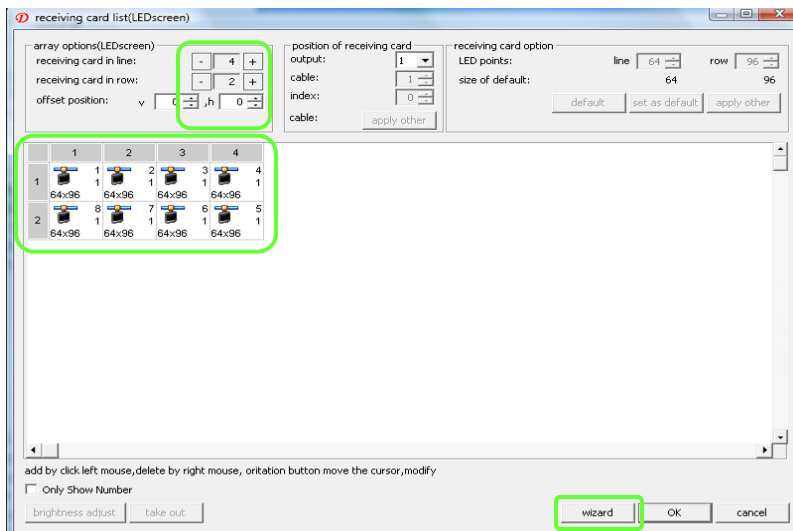


2.18 You will need to change the amounts in Line to **32** and Row to **96**. This represents the total amount of LED pixels the **EN-PD12** can control. If you are using **EN-PD24** your setting will be line **64** row **96**

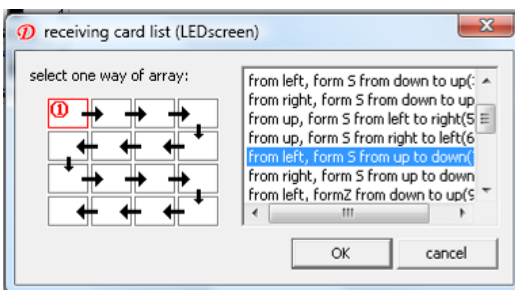


Multiple EN-PD Drivers

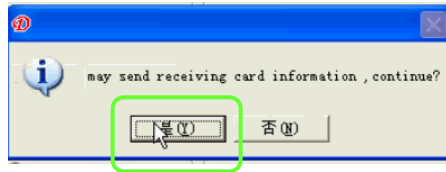
2.19 If you have multi- ple EN-PD12 or EN- PD24 you will have to indicate how many units you have on the Receiv- ing card line and rows section. And more squares will appear. You must click on the squares in the order there signal cable is connected. And click **Wizard**



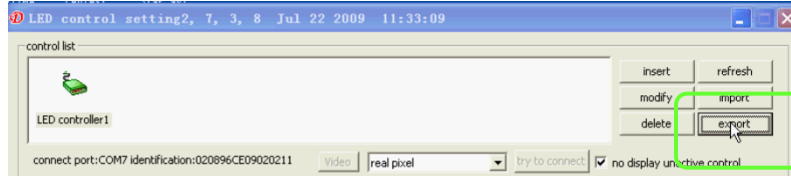
2.20 Click on the option in witch describes the way the signal cable of the EN-PD drivers were connected. And click **OK**



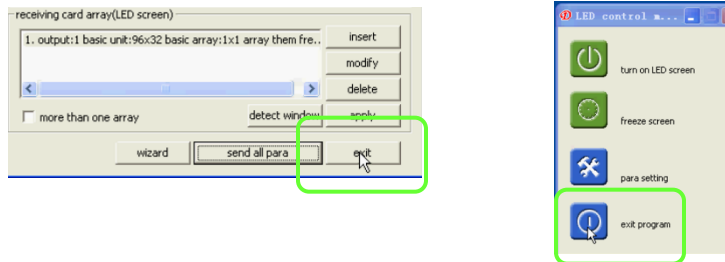
2.18 Send info to receiver click **OK**



2.19 Click on the **export** this will allow you to save the file .

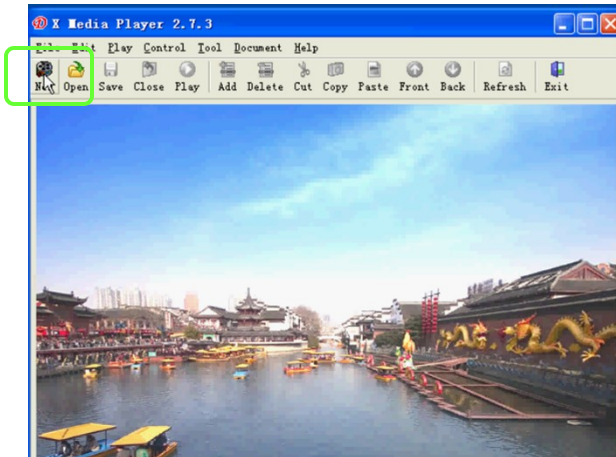


2.20 You may now **exit** this part of the software.

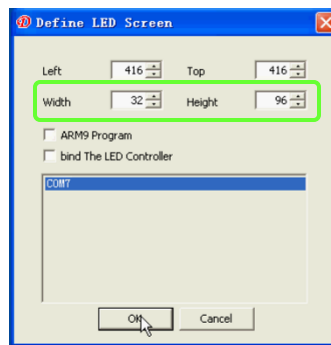


# Video Screen Position

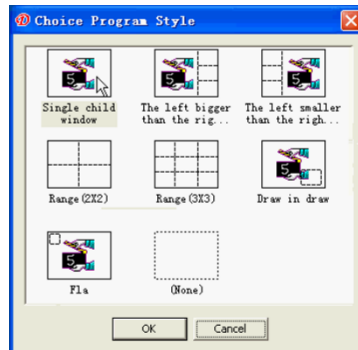
3.1 Click on **New** on the start page of the software



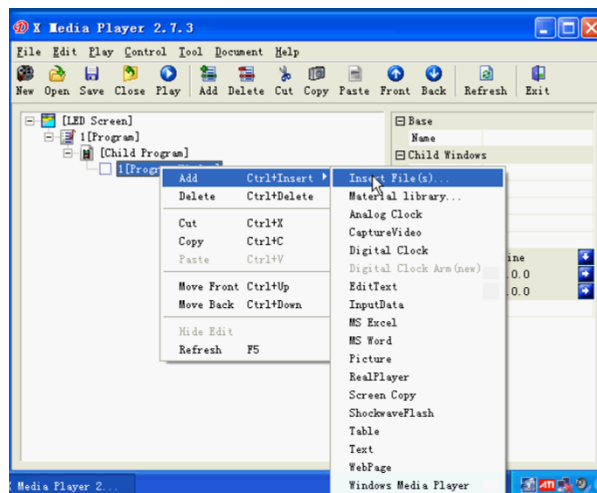
3.2 Calculate the total amount of pixel. You will need to add the total amount of LED you have going width wise and height wise. And place in corresponding area. Then click **OK**



3.3 Click on the **single child window** and click **OK**



3.4 Right click on the **program** window and then r **add** and finally you can choose what type of media you would like to show on the screen.





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