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Check that the unit has not been damaged during transport



Read all cautions and warnings prior to operation of this equipment

Protection against 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 to close to a heat source.
- 4. Make sure cable are properly secured.

Protection against electrical hazards



- 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.

Electrical

5. Do not extend power supply cable.

Protection against mechanical hazards



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

Mechanical

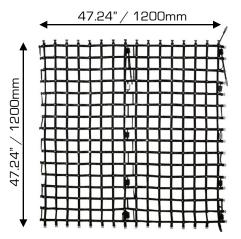
Fixture

Flight Case

EN-8075-Enigma Net 75

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



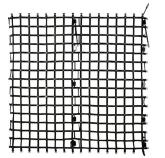
Dimensions / Weight		
In:47.24" x 47.24" x .78" / mm: 1200 x 1200 x 20		
Weight: 5.5lbs		

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

ower Consumption: 75 Watts

Product Overview



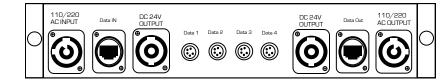
EN-75–Enigma Net 75 24V

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

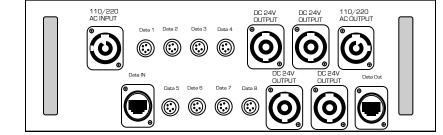




EN-PD12—Enigma Net Sub Drive System

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

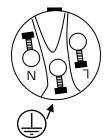


Caution!

- 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.

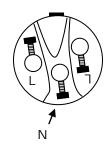
110V Connection

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



220V Connection

Cable (USA)	Cable (EU)	Pin	Connection
Black	Brown	Live	
2.2011		2.00	_
White	Light Blue	Live	1
VVIIIC		LIVE	L
Green	Yellow/Green	Neutral	N
Green		NCUUAI	I N

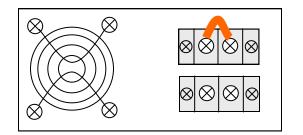


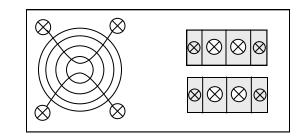
Caution!

Power must be internally switched to desired setting.

For 110V operation the bridge must be in place

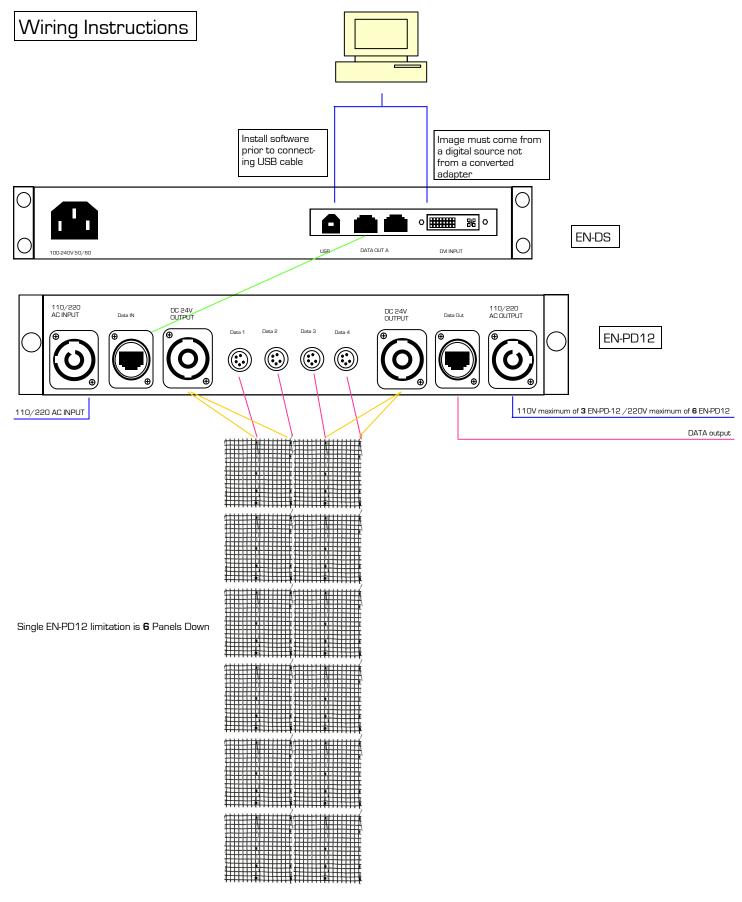
For 220V operation the bridge must be removed



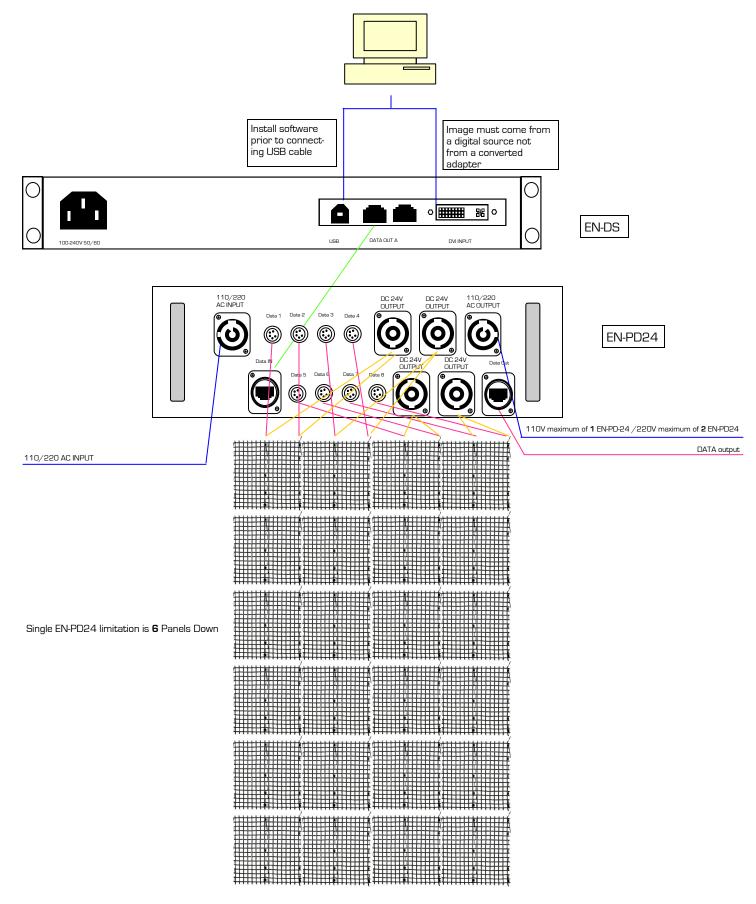


Signal Cable Connection

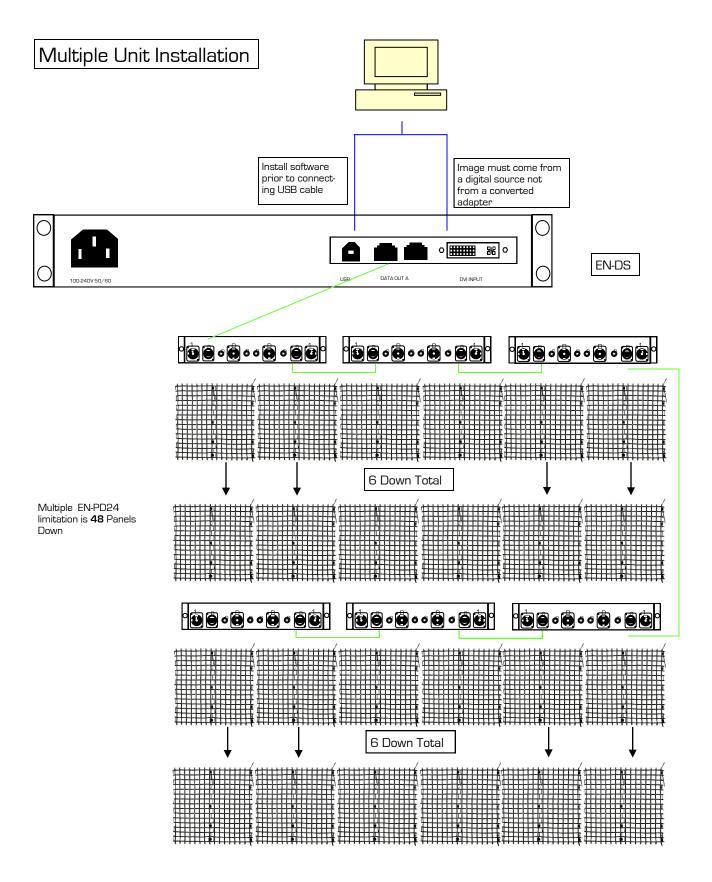
The fixture is equipped with panel mount Neutrik Ether Conn Connection (RJ-45) for signal input and output.



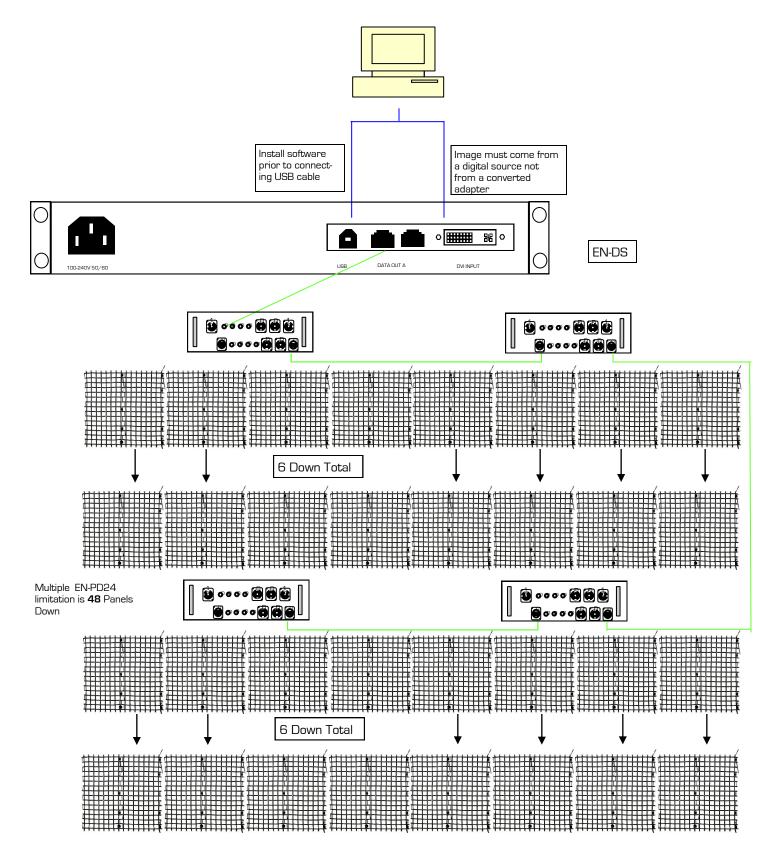
Single EN-PD12 limitation is **2** Panels Across



Single EN-PD12 limitation is **4** Panels Across



Multiple EN-PD24 limitation is 64 Panels Across



Multiple EN-PD24 limitation is 64 Panels Across

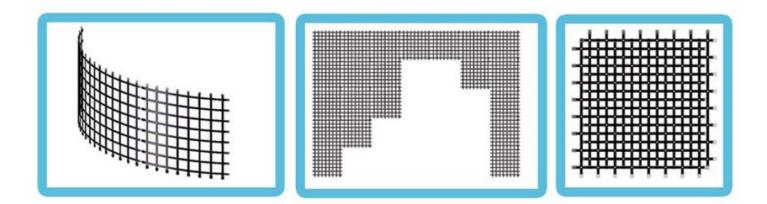
Rigging the fixture

Caution!

- 1. The installations must be carried out by an authorized dealer or trained professional.
- 2. Unit may cause severe injures 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.

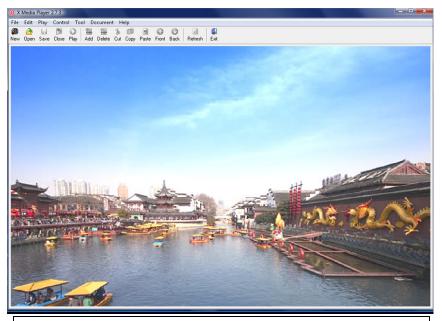
Replacing the power cable: If the power cable of this device becomes damaged, it has to be replaced by authorized dealers only In order to avoid hazards.

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



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**

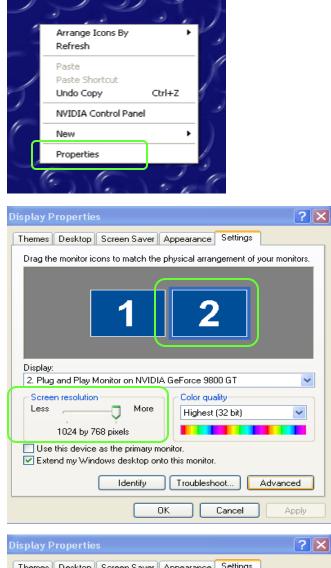
1.2 On your setting window of your Display Properties. Click

on window 2.

1.3 Your screen

resolution for moni-

tor 2 should be set to **1024 by 768**



Themes Desktop Screen Saver Appearance Settings Drag the monitor icons to match the physical arrangement of your monitors. Display: 2. Plug and Play Monitor on NVIDIA GeForce 9800 GT ~ Screen resolution Color quality Less More Highest (32 bit) ~ 1024 by 768 pixels Use this device as the primary monitor. Extend my Windows desktop onto this monitor. Troubleshoot... Identify Advanced OK Cancel Apply

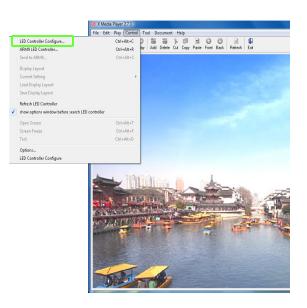
1.4 Check to Extend my Windows desktop onto this monitor

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**

D input	password	\mathbf{X}
	Cancel	

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

D LED control setting2, 7, 3, 8 Jul 22 2009 11:33:09	
_ control list	
2	insert refresh
×	modify import
LED controller1	delete export
connect port:COM7 identification:020896CE09020211 Video real pixel v to connect 🔽 try to connect	o display unactive control
screen disolav	
LED driver DM413	frame synch VHz 60Hz -
green	data clock duty cycle:47%
NS 100	pulse width:1600Ns
blue ↓ base options and guy wire of screen model	🔹 refresh rate priority 🔍 👻
brightne 256	👻 basic grey 💌
1 MBI5030/MBI5039	50 Hz 60 Hz
☐ data receive Setu ✓ OE mode 28): 64	HUB Data on break
position of picture position of picture G448 thereose G45 G47 G47 G47 G47 G47 G47 G47	Data or minor
	05 % 🔽 power on gradually-brig
	irce Data 🦳 Input data from left
lines(dividedby 64) 512 🔆 C in the right of the first ou	other para apply
rows(dividedby64,32<641) 512 C custom	
standard display mode detect window apply 1. output:1 basic unit:64x64 basic array:1x1	array them fre insert
screen rotation	modify
	> delete
0° 90° 180° 270° more than one array	detect window apply
schedule off screen IT power manager wizard se	nd all para exit

2.5 The Enigma Net 24V uses a **DM413** driver please select this driver. After selecting click **OK** **Ø** basic attribution setting X picture mode setting position of screen LED light two red C single color C two green C double color real pixel C virtual pixel 🗖 24 foot data mode decoder moode static/138/139 -🗌 data polarity Full-dec LED driver C MBI5026/TB62726 C LPD6803 C ZQL9722/ZQL9729 C MBI5027 C MBI5030/TLC5491 C TB62747 • DM413 C MBI5039/5036 OK 5 C 74HC595 C MBI5042 cancel

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**



1	1 OE Lode
-	
	use bardware setting
	No. 1 is light than No. 2
	No. 1 is dark than No. 2
j	Cancel cancel

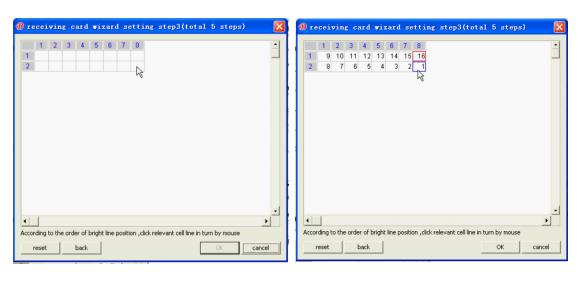
2.8 Click on the total number cols in the screen **8.** And click **OK**

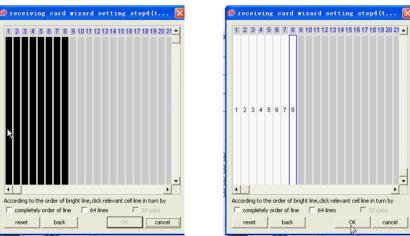
Preceiving card vizard steps2 (total 5 st... Continuous unbright number of cols in the screen on o f 1 f 3 f 7 f 15 f 31 total bright number of cols in the screen f 1 f 2 f 4 f f f f f 6 f 32

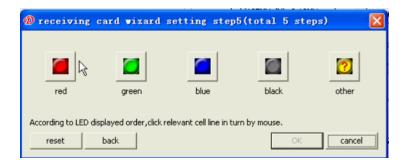
2.9 On the first Net Panel you will see the first 2 rows light up in white color. Click on the square row 2 column 8 and the number 1 will appear on the square. On your net the same unit will turn off. Continue to click the squares in series like image 2. On your net all the LEDs that were white should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

D LED control setting2, 7, 3, 8 Jul 22 2009 11:33:09	
_ control list	
e.	insert refresh
~	modify import
LED controller1	delete export
connect port:COM7 Identification:020896CE09020211 Video real pixel by to connect 🔽	no display unactive control
screen disolav	rame rate apply to signal source)
red 256 LED driver DM413 12	frame synch VHz 60Hz 💌
green 256 screen clock(125MHz/N)::3.12MHz 40	data clock duty cycle:47%
latch signal intervel >1:6400Ns 20	pulse width:320Ns
blue 256 de-shadow(close line) time 20	💼 refresh rate priority 💌
brightne 256 level of grey: 256	👻 basic grey 💌
1 054	80 Hz 180 Hz
data receive setup apply row (the mutiplie of 16)(max256): 256	
position of picture col(max128): 16	Data on Mirror
position of left(X) 0 + theposition of second output: Brightness Wastage: 76.	.59 % 🔽 power on gradually-brig
position of up(Y) 0 * (* the same as the first out	urce Data 🧮 Input data from left
lines(dividedby 64) 512 📩 C in the right of the first ou	
rows(dividedby64,32<641) 768 * C custom	other para apply
standard display mode detect window apply	
1. output:1 basic unit:64x64 basic array:1x	
screen rotation	modify
	> delete
0° 90° 180° 270° In more than one array	detect window apply
schedule off screen power manager wizard se	end all para exit

2.14 Click on data clock duty cycle

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

screen options(Frame synchronization mode, frame rate apply to signal source)		
LED driver DM413	▼ If frame synch VHz 60Hz ▼	
screen clock(125MHz/N)::3.12MHz data clock phase polarity	40 - data clock duty cycle:47%	
latch signal intervel >1:6400Ns	20 - pulse width:320Ns	
de-shadow(close line) time	20 😴 refresh rate priority 💌	
level of grey:	256 💌 basic grey 💌	
refresh rate:	180 Hz 180 Hz	
row (the mutiplie of 16)(max256):	256 🕂 🗌 HUB Data on break	
col(max128):	16	
Brightness Wastage:	76.59 % 🔽 power on gradually-brig	
L.	10bits Source Data 🧮 Input data from left	

data clock duty cycle:7%	
	_
frequency height	19
frequency height end:	22
OK cancel	

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

screen options(Frame synchronizati	ion mode, frame rate apply to signal source) —
screen clock(125MHz/N)::3.12MHz	
latch signal intervel >1:32000Ns	100 pulse width: 320Ns
de-shadow(close line) time	100 - Freineskinde priority
level of grey:	256 💌 basic grey 💌
refresh rate:	180 Hz 180 Hz 256 ↔ □ HUB Data on break
row (the mutiplie of 16)(max256): col(max128):	16 ÷
Brightness Wastage:	76.59 % 🔽 power on gradually-brig
Г	10bits Source Data 🧮 Input data from left
	other para apply

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]

218B 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**

ወ pulse width:4	000 N s
latch signal start time latch signal stop time	95
	OK cancel

EN-PD12				
screen options(Frame synchronization mode, frame rate apply to signal source)				
LED driver DM413	▼ If frame synch VHz 60Hz ▼			
screen clock(125MHz/N)::3.12MHz	40 🔹 data clock duty cycle:7%			
latch signal intervel >1:32000Ns	100 - pulse width:1600Ns			
de-shadow(close line) time	100 🛒 refresh rate priority 💌			
level of grey:	256 💌 basic grey 💌			
refresh rate:	60 Hz 60 Hz			
row (the mutiplie of 16)(max228):	96 HUB Data on break			
col(ma×128):	32 -			
Brightness Wastage:	97.07 % 🔽 power on gradually-brig			
Γ	10bits Source Data 🔲 Input data from left			
	other para apply			

EN-PD24				
LED driver screen clock(125 data clock) latch signal inter de-shadow(close level of grey: refresh rate:	vel >1:32000Ns line) time of 16)(max228): age:	▼ ▼ fra 40 ↔ 100 ↔ 256 ▼ 60 96 ↔ 64 ↔ 97.07	me synch VH2 data clock duty pulse width: refresh rate prio basic grey H2 60 H HUB Data on V Power on g	60Hz cycle:7% 320Ns rity tz on break Mirror radually-brig
	L	10bits Source	Data 🗌 Input o	apply

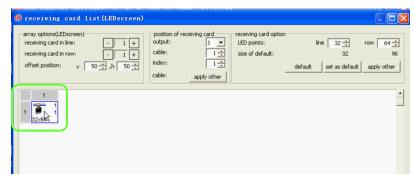
position of picture				
position of left(X)	416 + theposition of second output:			
position of up(Y)	0 🔹 📀 the same as the first out			
lines(dividedby 64)	512 🕂 🔿 in the right of the first ou			
rows(dividedby64,32<641)	512 🗧 C custom 🛛 🚊			
standard display mode	detect window apply			
screen rotation				
	20 😫			
0° 90°	180° 270°			
schedule off screen F power manager				

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

1. output:1 ba	sic unit:64x64 basic ar	ray:1×1 array them fre	insert
<			mortify delete
more than o	ne array	detect window	apply

Single EN-PD Driver

2.17 Click On the Square box representing 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**

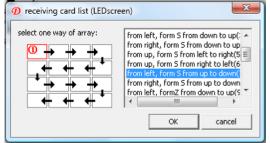
Multiple EN-PD Drivers

2.19 If you have multiple EN-PD12 or EN-PD24 you will have to indicate how many units you have on the Receiving 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**

Ø receiving card list (LEDscreen)	101 77 7009 11:33.09	
$\begin{array}{c c} \mbox{array options(LEDscreen)} \\ \mbox{receiving card in line:} & - & 1 & + \\ \mbox{receiving card in row:} & - & 1 & + \\ \mbox{offset position:} & \mbox{V} & \mbox{S0} \box{J} & \box{S0} \box{J} & \box{S0} \box{J} & \box{S0} \box{J} & \box{S0} \box{S0} $	position of receiving card output: I receiving card option LED points: Im cable: 1 size of default: Im cable: 1 default Im	a 32 row 96 32 96 set as default apply other
1 1 <u>22:96</u>		1

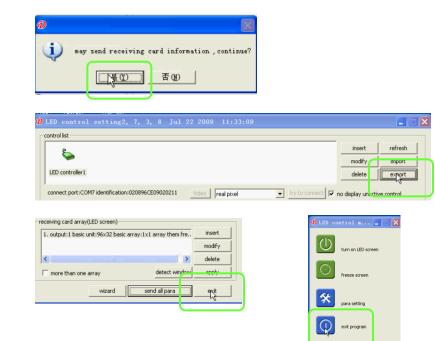
array options(LEDscreen) receiving card in line: receiving card in row: offset position: v C + h 0 +	position of receiving card receiving card option output: I cable: 1 index: 0 cable: apply other	n ine 64 internet row 96 internet 64 9 default iset as default apply other
1 2 3 4 1 1 2 3 4 64:96 64:06 64:06 64:06 2 6 6 6 6 2 6 6 6 6 5 2 6 6 6 6 5 2 6 6 6 6 5 6 6 6 6 6 5 2 6 6 6 4:36 6 6		
▲	n button move the nurser modify.	
dad by clicklere modsejdelete by right modsej entado	Pactor more the carbon moany	



2.18 Send info to receiver click **OK**

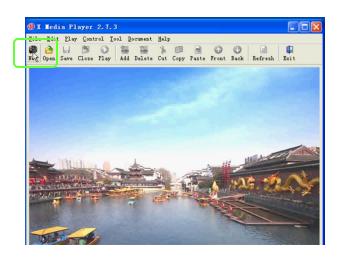
2.19 Click on the **export** this will allow you to save the file .

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



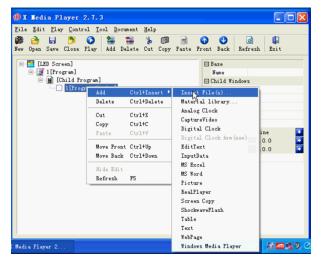
3.2 Calculate the total amount of pixel. You will need to add the total amount of LED you have going width wise and height wise. And place in corresponding area. Then click **OK**

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.



🕖 Choice Program Style			
Single child	The left bigger	The left smaller	
Range (2X2)	than the rig Range (3X3)	than the righ	
	(None)		
OK Cancel			





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