#### **Kling Net Application Guide**



This setup guide will step through using Arkaos' Kling-Net Mapper software in conjunction with an ENTTEC Pixelator Mini in order to map a number of shapes.

This guide steps through the process of configuring the following pixel products:

Pixel Product	Quantity	Product Number
12*12 WS2812b Pixel Tile	7	8PS144-125
60 px/m LED WS2812b strip	1	8PL60

-The pixel products in this guide have been connected to the Pixelator Mini through ENTTEC's P-Link System. Using this same system, Phero Battens can also be mapped.

Control Product	Quantity	Product Number	
Pixelator Mini	1	70066	
5V PLink Injector	8	73546	

\*DC Power should be provided locally at each Plink Injector.





#### Configuration of the Pixelator Mini

After Plugging in your Pixelator Mini to your network, launch Enttec NMU on your computer to find the IP address of the unit. From here you can open the web page:

ENTTEC Node Mar	nagement Utility [1.85]		
ile Artnet Help			
Device Type	IP Address	Device Name	Mac Address
Pixelator Mini	10.10.1.5	Pixelator	0050C2076060
Discovery	Configure		Clear List
		NMU Client IP: 10.10.0.	9

Navigate to the settings tab within the web interface and select 'Kling-Net' in the dropdown menu.

NTTEC			Ріхе	ELATOR-	IINI - Se	TTING S					
Hama	Network Settings	Network Settings									
Home	Node Name:		Pixelator Mini								
Quertine a	DHCP:		DHCP E	nable			This	will override the	IP setting below		
Settings	IP Address:		10.7	. 186	. 207		Used i	f DHCP is disable	d or unavailable		
Network State	NetMask:		255 . 0	. 0	. 0		Used i	f DHCP is disable	d or unavailable		
etwork Stats	DMX Protocol (Input)	:	Kling-Net	v							
ate Firmware	LED Protocol (Output	t):	Art-Net ESP sACN								
	PLink Outputs (K	ling-Net)	rung-rect								
	Options	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out 8		
	Pixel Order: correct color order	RGB ¥	RGB ¥	RGB ¥	RGB ¥	RGB V	RGB V	RGB ¥	RGB ¥		
	Pixel Height: RGB (0-340) RGBW (0-256)	0	0	0	0	0	0	0	0		
	Pixel Width: RGB (0-340) RGBW (0-256)	0	0	0	0	0	0	0	0		
	Height x Width:	0	0	0	0	0	0	0	0		
	Pixel Patch: hover to see patch options	1	1	1	1	1	1	1	1		
	Max. Pixels / Port:	0	0	0	0	0	0	0	0		
	Total Pixels:								0		
	Updates										
	Save		Save Setting	6							
	Factory Default		Reset to Def	Reset to Defaults							
	Reboot/Restart		Reboot Now	]							

The first row of the outputs will allow you to configure your pixel ordering for each port using the dropdown menu's.

		Pixe	LATOR-I	INI - SE	TTINGS				
Network Setting	s								
Node Name:		Pixelator Mini							
DHCP:		DHCP E	nable			This	s will override the I	IP setting be	
IP Address:		10 . 7	. 186	. 207		Used i	f DHCP is disabled	d or unavail	
NetMask:		255 . 0	. 0	. 0		Used i	f DHCP is disabled	d or unavail	
DMX Protocol (Inpu	t):	Kling-Net	¥						
LED Protocol (Outp	ut):	WS2812B	•						
e									
PLink Outputs (	Kling-Net)								
Options	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out 8	
Pixel Order: correct color order	GBR V	GBR V	GBR 🔻	GBR V	GBR V	GBR V	GBR V	RGB RGB	
Pixel Height: RGB (0-340) RGBW (0-256)	0	0	0	0	0	0	0	RBG GRB GBR BRG	
Pixel Width: RGB (0-340) RGBW (0-256)	0	0	0	0	0	0	0	BGR RGBW RGWB RBGW	
Height x Width:	0	0	0	0	0	0	0	RGWE RWGE	
Pixel Patch: hover to see patch options	1	1	1	1	1	1	1	GRBW GRWE GBRW	
Max. Pixels / Port:	0	0	0	0	0	0	0	GWRE	
Total Pixels:								BRWG	
Updates									
Save		Save Settings							
Factory Default		Reset to Defi	aults						
Reboot/Restart		Reboot Now	1						

-Each port on the rear of the Pixelator Mini Should be thought of as a 'virtual fixture' and will appear as such within the KlingNet Mapper software.

-If you want to disable a port so it does not show up in the KlingNet Mapper software, set it's dimensions to o Width and o Height.

-For the ports you do wish to use, enter the dimensions of each shape you wish to create. Whilst doing this you must remember that there is a maximum pixel per port limit of: 370 RGB LED's & 256 RGBW LED's.

-The quantity of pixels used per port is shown in the Height \* Width row directly below.

PLink Outputs (M	(ling-Net)							
Options	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out 8
Pixel Order: correct color order	GBR V	GBR V	GBR V	GBR V	GBR V	GBR V	GBR V	GBR V
Pixel Height: RGB (0-340) RGBW (0-256)	12	12	12	12	12	12	12	1
Pixel Width: RGB (0-340) RGBW (0-256)	12	12	12	12	12	12	12	36 🗘
Height x Width:	144	144	144	144	144	144	144	36

After the number of pixels used per port are assigned, using the PixelPatch row select the way in which your pixels have been connected to eachother. Hovering your cursor over the 'Pixel Patch title will show what layout corresponds to each number.

	PLink Outputs (H	(ling-Net)							
	Options	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out
	Pixel Order: correct color order	GBR V	GBR V	GBR 🔻	GBR V	GBR V	GBR 🔻	GBR V	GBR
	Pixel Height: RGB (0-340) RGBW (0-256)	12	12	12	12	12	12	12	1
	Pixel Width: RGB (0-340) RGBW (0-256)	12	12	12	12	12	12	12	36
	Height x Width:	144	144	144	144	144	144	144	
_	Pixel Patch: hover to see patch	1	1	1	1	1	1	1	1
ato	ch controls how the pi	xels are arrang	ed. . ?∧l	144	144	144	144	144	
	\$ ⁴\$	3-₩₩ 4	-∳ ∳						
-	<u>ک</u> ، ا	7-	₃-↓ <b>↑</b> ╏						
	←←								
		11 - Tririt 1	2-1₩	1					
3		15_^^	16 1 1	uits					

Once this has been completed click 'Save Settings', and wait for the page to refresh.

PLink Outputs								
Options	Out 1	Out 2	Out 3	Out 4	Out 5	Out 6	Out 7	Out 8
Universe/Output: (0 - 2)	2 •	2 •	2 🔻	2 •	2 •	2 •	2 •	2 🔻
First Universe: ESP Universe: (0 - 255)	12	0	4	6	8	10	12	14
Second Universe: ESP Universe: (0 - 255)	1	3	5	7	9	11	13	15
Pixel Order: correct color order	GBR V	GBR V	GBR V	GBR V	GBR T	GBR <b>v</b>	GBR V	GBR V
Pixel Group:	1	1	1	1	1	1	1	1
DMX Start Add: (0 - 511)	0	0	0	0	0	0	0	0
Max. Pixels / Port:	340	340	340	340	340	340	340	340
Total Pixels:								2720

Your configuration should now appear in KlingNet Mapper.

Updates	
Save	Save Settings
Factory Default	Reset to Defaults
Reboot/Restart	Reboot Now

#### Configuration of Arkaos' KlingNet Mapper

Open 'Arkaos KlingNet Mapper' (Ctrl+K from within the main MediaMaster Window) and ensure the Test Pattern is Enabled on your output.

S ArKaos Kling-Net Mapper								
File	Edit	Canv	as Pro	oject	Help	p		
	Output	8	R					
			None					
			Test Pa	attern				
		6	Screen	Grabl	ber			
ID		$\odot$	Medial	Maste	r	•		

After all KlingNet devices have been discovered on the network, you will be presented with a list of fixtures. Each of the Ports on the rear of the Pixelator Mini will show up as individual fixtures (each with the same dimensions and pixel ordering as defined in the Pixelator Mini Web Interface). Drag each of these shapes onto the test card and arrange them to suit using the mappers inbuilt tools. Press 'Send to Mapper' when you're confident everything lines up with your real world design.



Rotate all 'virtual fixtures' to the correct orientation and scaling. By selecting each of them and moving to the correct size for the canvas port and moving it to suit the correct positioning.



Once satisfied, if necessary use (Ctrl+shift+r) in order to re-size your canvas to be as close to your mapped objects as possible. Following this, press the 'Send Mapping to Mediamaster' button.



Finally, within the Klingnet Mapper Software, set the output to 'MediaMaster' instead of the KlingNet 'Test Pattern'.



If MediaMaster is configured correctly to output to KlingNet Mapper your LED panels, dots and Pixel Tape plugged into each Plink Port should function like independant5 KlingNet Fixtures.

