

Pknight

Art-Net <-> DMX512 Network Converter



ART
NET
ETHERNET

CR011R



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1. Introduction

Thank you for purchasing our bi-direction artnet controller CR011R which can convert the Artnet network data package into DMX512 data or DMX512 data into Artnet , The device is a powerful mini box with artnet 4, easy to set up via the Oled display and four buttons,no need any application or browser.

There is also a funny feature - NYB(name your buddy),we can customize the text of startup display via application (DMX-Workshop), very easy to set up.

2. Customer Support:

Pknight Products,LLC provides a toll free customer support,to provide set up help and to answer any question should you encounter problems during your set up or initial operation.You may also visit us on the web at

www.pknightrpro.com

for any comments or suggestions.

E-mail: info@pknightrpro.com

We will contact you within 24 hours

3. Technical Specs

Power input:	5Vdc / 500ma
Input signal:	Artnet / DMX512
Output signal:	DMX / 512Artnet
DMX channels:	1 universe / 512 channels
DMX connection:	3-pin XLR female
Network connection:	RJ45
network card speed:	100Mbps
Isolation ethernet port:	Total Isolation
Isolation power input:	Total Isolation
Working temperature:	-30 °C ~65 °C
Dimension:	L90×W47×H40mm L3.5×W1.8×H1.6inch
Package size:	L110×W70×H55mm L4.3×W2.7×H2.1inch
Weight (G.W):	291g 10.3oz

4. Name Your buddy

Download the app: **DMX-Workshop**

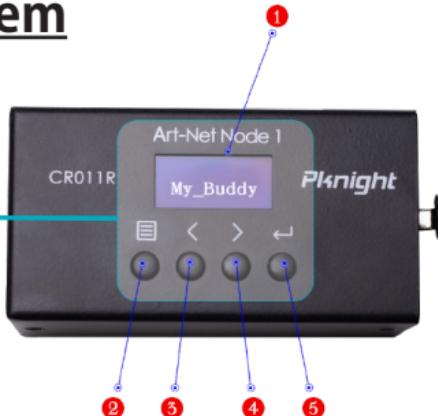
from www.artisticlicence.com/product/dmx-workshop/

Video tutorial



5. Oled Control System

Oled Control System



① Oled Screen

② Meun Button

--Click to switch the menu option

③ Backward or Minus Button

--To go backward or minus in the selected function or parameter

④ Forwardward or Plus Button

--To go forward or plus in the selected function or parameter

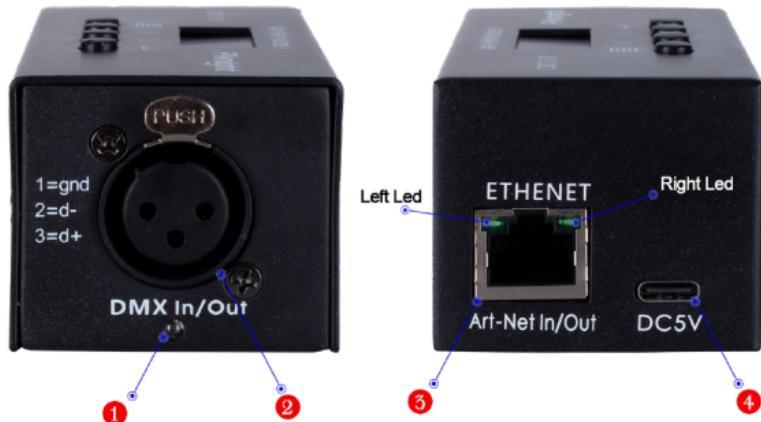
⑤ Enter Button

--Click to choose function or parameter

--Press and hold for 3 seconds to submit

Note

6. Front and Rear Panel



① Blue LED Indicator

- Stays off always: Standby mode, waiting to operate in dmx-(in/out) mode
- Stays on always (no blinking): signifies dmx-out mode, now the unit will convert Artnet to DMX output
- Blinks continuously: signifies dmx-in mode, now the unit will convert DMX input to Artnet

② Female XLR Port (3 Pin)

③ RJ45 Port (ArtNet In/Out)

- Green LED on the left : link LED
- Green LED on the right : Activity LED
- Blink Fast~There is activity on this port
- Off~NO Data

④ Power Port (Typ-c)

- Power Supply: 5 V DC
- Can be powered by 5v adapter, pc usb and power bank via USB to Typ-c cable(cable included)

7. Settings

7.1 Menu setting parameter

NO.	display		function
	option	details	
1	< Local IP >	T1*	Set the ip address of the device
2	<Subnet Mask>	T1*	Set the subnet mask of the device
3	<Port universe>	T2*	Set the universe of the device
4	< Port SubNet>	T2*	Set the subnet of the device
5	< Port Net>	T2*	Set the net of the device
6	< Transmit mode>		Artnet -> dmx or Artnet <- dmx
7	<Ethernet MAC>		Set the MAC address of the device
8	< Version>		V2.5 (display the current latest version)
9	<Default Set>		set to "yes" to restore factory settings

T1* refer to Table 1,T2* refer to Table 2

7.2 Table 1

<i>Recommended Network Parameters</i>		
<i>IP addr</i>	<i>subnet mask</i>	<i>Broadcast address</i>
2.x.x.x	255.0.0.0	2.255.255.255
10.x.x.x	255.0.0.0	10.255.255.255
192.168.x.x	255.255.255.0	192.168.x.255

note:

- "x" refer to range 0~255.
- the last digit can not be 255 or 0
- The ip address cannot be the same as the broadcast address
- The ip address set by the device cannot be the same as other devices under the LAN (local area network)

7.3 Table 2

<i>Port Address Parameters</i>	
<i>Port addr</i>	<i>value</i>
Net	0~127
SubNet	0~15
Port Universe	0~15

Artnet 4 Available

Art-Net 4 was released in September 2016. It is the most powerful and flexible version to date and, in recognition of this fact, gained a PLASA Award for Innovation.

- Transports up to 32,768 DMX universes over a single network
- Uses standard ethernet technology equipment
- One IP address per gateway (up to 1000 DMX ports)
- All DMX ports can be assigned a fully independent universe
- Free network tools(DMX-Workshop)
- Protocol is free-of-charge
- Perfect for large scale LED installations

7.4 Error Message and solutions

Display	Reason	Solution
!!Local ip: hosted can't is 0!!	Set the host address to 0	change the 0 to other number
!Local ip: hosted can't all is 1!	Set the IP address to the same as the broadcast address	change ip address, Different from the broadcast address

8. Troubleshooting

- Set IP address

Each node - CR011R must have a unique IP address (not occupied by other network devices) and the specific subnet mask, otherwise the network will not work properly

- set subnet mask

The subnet mask is 255.x.y.z, no need to modify x, y, z individually, we provide the subnet mask table in the system, there are 23 subnet masks that may be used

- Set the subnet number

There are 16 subnets in Artnet which is ranged from 0 to 15. Select the subnet number you want to set.

- Set the net number

There are 128 nets in Artnet which is ranged from 0 to 127. Select the net number you want to set.

- Transmit mode setting

< Transmit mode>

- if convert Artnet to DMX then set the mode to "Artnet -> dmx"
- if convert DMX to Artnet then set the mode to "Artnet <- dmx"

- Set the MAC address of CR011R

Each node must have a unique MAC address such as d-4d-48-c9-06-64. When we change the IP address, the MAC address will also change at the same time, so it can effectively prevent MAC address conflict. If there is still a network card conflict, the user can modify the second and third bytes of the MAC address.

- Is it compatible with third-party Type-C power cables ?

Yes, both USB-A to Type-C and Type-C to Type-C cables can power it.

- Hold the "enter" button to submit

Please keep in mind about "enter" button that [Click to choose function or parameter, Press and hold for 3 seconds to submit](#)