ROCKCELL PIXELBOX-LAN user guide

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Brochure

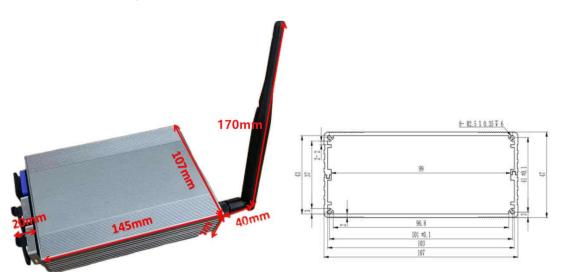
ROCKCELL PIXELBOX-LAN is a highly integrated wireless DMX transmitter. With 2.4G ISM band proprietary wireless protocol, ROCKCELL PIXELBOX is widely proven for the stable wireless signal quality and its hardware robustness. Up to 48000 pixels can be achieved when multi PIXELBOXs are integrated for grand musical festival, concerts, parties, shows, etc....

With external 40dBm 2.4G RF power amplifier, ROCKCELL PIXELBOX guarantees over 400m LOS transmission range with omnidirectional antenna. Longer transmission range makes more activity scenario possible.

By CAT6 Ethernet port connection, with ROCKCELL PIXELBOX configuration tool, the system setup and network debugging is easy and efficient.

Appearance & Dimension

PIXELBOX-LAN-2port



PIXELBOX-LAN-3port



Function descriptions

LAN port

Cannon Jack CAT6 connector.

ARTNET decoder

ARM M4

• Radio frequency select

Build-in DIP switch

• Wireless transmission

Proprietary 2.4G broadcast

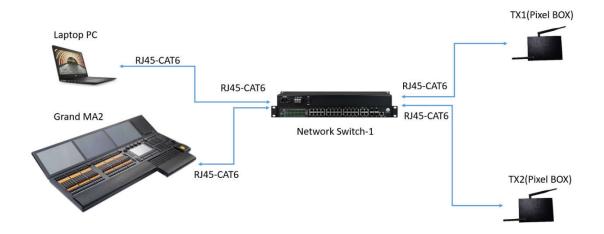
Antenna

Omnidirectional 6dB

AC jack

Linco YF-24

Device Setup



Appendix

1. Product Specification

Product Specification					
Model	PixelBOX-LAN-3port				
Product type	Wireless Transmitter				
Manufacturer	ROCKCELL Technology (Shenzhen) CO., LTD				
RF Band	2400~2483.5 MHz				
Output Power					
Occupied Bandwidth	≤1MHz				
Modulation	GFSK				
Antenna	Dipole antenna 6dBi				
Power supply	AC 110~240V/ 0.5A				
Dimension (mm)	3port: 150X145X54mm 2port: 145X107X47mm				
Color	Black or Iron Gray				
Operation system	Embedded MCU				
Operation temperature	0 ~ 65 degree				

2. Antenna Specification

A. Electrical Characteristics					
Working Frequency	2400-2500MHz				
S.W.R	<2.0				
Typical Antenna Gain	6dBi				
Polarization	Vertical				
Impedance	50 Ohm				
B. Material					
Material of Coaxxial Cable	RG178				
Marerial of Plastic	TPEE				
Connector Type	SMA				
C. Environmental					
Operation Temperature	- 45 °C ~ + 85 °C				
Storage Temperature	nperature -45 °C ~ + 85 °C				

3. Frequency Table

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2404 MHz	18	2427 MHz	36	2445 MHz	54	2463 MHz
1	2410 MHz	19	2428 MHz	37	2446 MHz	55	2464 MHz
2	2411 MHz	20	2429 MHz	38	2447 MHz	56	2465 MHz
3	2412 MHz	21	2430 MHz	39	2448 MHz	57	2466 MHz
4	2413 MHz	22	2431 MHz	40	2449 MHz	58	2467 MHz
5	2414 MHz	23	2432 MHz	41	2450 MHz	59	2468 MHz
6	2415 MHz	24	2433 MHz	42	2451 MHz	60	2469 MHz
7	2416 MHz	25	2434 MHz	43	2452 MHz	61	2470 MHz
8	2417 MHz	26	2435 MHz	44	2453 MHz	62	2471 MHz
9	2418 MHz	27	2436 MHz	45	2454 MHz	63	2472 MHz
10	2419 MHz	28	2437 MHz	46	2455 MHz	64	2473 MHz
11	2420 MHz	29	2438 MHz	47	2456 MHz	65	2474 MHz
12	2421 MHz	30	2439 MHz	48	2457 MHz	66	2475 MHz
13	2422 MHz	31	2440 MHz	49	2458 MHz	67	2476 MHz
14	2423 MHz	32	2441 MHz	50	2459 MHz	68	2477 MHz
15	2424 MHz	33	2442 MHz	51	2460 MHz	69	2478 MHz
16	2425 MHz	34	2443 MHz	52	2461 MHz	,	,
17	2426 MHz	35	2444 MHz	53	2462 MHz	/	/

WARNING!

- AC110V~240V rated 0.5A power supply is required. Out-of-range voltage input may damage the device.
- Antenna is week and easy to break. Please treat the device with gentle.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body