

Pixi-Power SB12 User Guide

(Version 5.4)

Pixi-Power SB12 is an integrated power controller for the Pixi-Flex, Pixi-Web and Pixi-Cloth range. Due to the robust design and truss mounting capability this product is well suited for temporary and permanent installations.

All parameters including start address are set using RDM. This can be done using any of the following products: Net-Lynx O/P, Ether-Lynx or Jump-Start. Five outputs are provided, each output can drive a total of 32 pixels. For more information see App Note 36 & 39 at www.ArtisticLicence.com

Key Features include:

- ❑ 9 VDC Power supply for Pixi range
- ❑ Wall, ceiling or truss mount
- ❑ RDM (Remote Device Management Draft V1.0)
- ❑ Integrated cable support
- ❑ Truss-Mount G-Clamp available (Doughty Engineering: SP2703)
- ❑ Pixi-Power SB12 spider assembly available



Specification:

- ❑ Listing: CE FCC
- ❑ IP Rating: Indoor use
- ❑ Net Weight: 1.05Kg
- ❑ Power: 100W
- ❑ Mains Connection: IEC
- ❑ Input Voltage: 90-264VAC
- ❑ Input Frequency: 47-440Hz
- ❑ Current - Inrush: 25A-115V / 50A-230V
- ❑ Output Voltage: 9VDC
- ❑ Output Current: 10A
- ❑ Duty Cycle: 80%
- ❑ Width: 100 mm
- ❑ Height: 218 mm (inc flange)
- ❑ Height: 303 mm (inc flange & G-Clamp)
- ❑ Depth: 110 mm
- ❑ Control Connection: 5 pin Male XLR
- ❑ Loop Connection: 5 pin Female XLR
- ❑ Total Flex's: Low & Medium Res x 10 or High x 5
- ❑ Total Web's: Medium Res x 10 or High Res x 2 ½
- ❑ Total Flex's / Webs per output: Low & Medium Res x 2 or High Res x 1
- ❑ Mating Multi-way Connector: Trident Ringlock Plug TR1823PMS1NB
- ❑ Connector pins (16 - 18 awg): Trident Contacts T2P16MC1LZ
- ❑ Connector pins (20 - 22 awg): Trident Contacts T2P20MC1LZ

Pixi-Power SB12 Wiring Diagram:

Opposite is the wiring diagram for a Pixi-Power SB12 used with a Pixi-Flex Spider.

DMX512 Wiring:

XLR Pin	Function	Colour
1	Ground	Black
2	Data -	Blue
3	Data +	Red
4	No Connection	
5	No Connection	

Output Wiring:

Connector Pin	Function
A, E, J, N, T	+V (Red)
B, F, K, P, U	Data (Green)
C, G, L, R, V	Clock (Yellow)
D, H, M, S, W	GND (Black)

Input:

The DMX512 input uses a standard XLR5 pin connector.

Loop Through:

A passive Loop Through connection allows onward connection to other DMX512 devices. If this feature is not required the unit must be terminated as specified by DMX512-A.

Output:

An Pixi-Power SB12 is capable of powering/controlling 32 Pixels through each of the five outputs. This could be either;

- Two Low / Medium Res Flex's or Webs, or
- One High Res Flex or
- ½ High Res Web.

Please see the specifications for more detail.

Indicators:

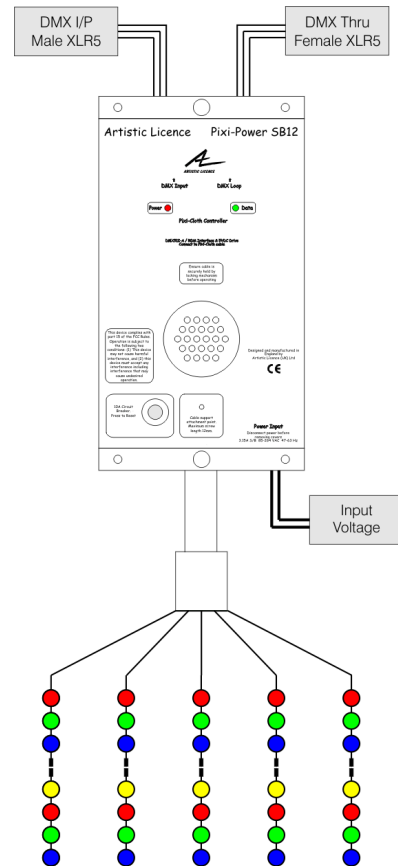
Data (Green): Indicates that DMX512 is being received.

Power (Red): Indicates good power and normal operation.

Earthing:

The following table summarises the internal earth interconnection and isolation:

Please note that we use the term Earth-Ground to avoid international confusion. In Europe Earth-Ground is called Earth, in the USA Earth-Ground is called Ground.



Maximum Cable Distances (to first Pixi-Flex)

For correct operation of Pixi-Flex/Web please follow the guidelines below:-
(based on using 250mm pitch)

Standard extension cables:

- ❑ Max distance of 25M (two Pixi-Flex's connected)
- ❑ Max distance of 50M (one Pixi-Flex connected)

Boot Loader:

Pixi-Power SB12 has the capability to be firmware upgraded. If the LEDs flash out of sync then the SB12 is in the boot loader function and will need to have a firmware upgrade.

When in boot loader all other functions are disabled. This can be done using a Net-Lynx or Down-Lynx.

Health & Safety for flying equipment

- ❑ Flying or overhead mounting of equipment **shall** be undertaken by **qualified** staff. The staff shall be capable of undertaking a risk assessment.
- ❑ Each Pixi-Power SB12 provides safety wire points that **must** be used. Artistic Licence recommends the use of load arrestors in all overhead applications.
- ❑ **Safety should be your prime concern.** If in any doubt seek professional advice.

The Pixi Range:

- ❑ Pixi-Core - The optical module used inside Pixi-Led. It is available in this format for OEMs and set designers
- ❑ Pixi-LED - A self-contained LED colour changer fixture
- ❑ Pixi-Bar - A remarkably versatile 10 pixel colour changer based on the technology of Pixi-LED
- ❑ Pixi-Power L1 - The controller and PSU for Pixi-LED
- ❑ Pixi-Flex 16/250 (Low Res) - A string on 16 individually controlled Pixels on a 250mm pitch
- ❑ Pixi-Flex 16/500 (Med Res) - A string on 16 individually controlled Pixels on a 500mm pitch
- ❑ Pixi-Flex 32/125 (High Res) - A string on 32 individually controlled Pixels on a 125mm pitch
- ❑ Pixi-Cloth - An LED starcloth with individual pixel control and full colour mixing
- ❑ Pixi-Power SB12 - Truss or wall mounted controller and PSU for Pixi-Flex & Pixi-Web
- ❑ Colour-Tramp - A lighting control system specifically designed to handle the complexity of two and three dimensional lighting arrays
- ❑ Pixi-Power F1 - Truss or wall mounted Art-Net Ethernet controller and PSU for Pixi-Flex & Pixi-Web

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