



# LightSymphony™

## BTC-DXD-S218A-5CH

### 5-Channel DMX Decoder



### overview

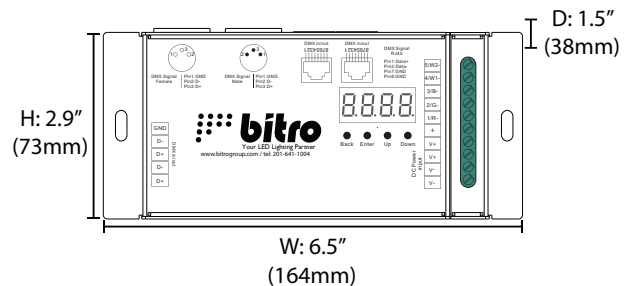
The BTC-DXD-S218A-5CH (S218A-5CH) is Bitro's advanced DMX decoder. The decoder adds multi-channel addressing and dimming ability to standard voltage-driven LEDs for use in any of Bitro's LightSymphony systems.

Built for robustness and versatility; the S218A-5CH features a multitude of connection options (RJ45, XLR, terminal block), 12-24VDC power input, and full 5A (Class 2) max load rating per channel. The S218A-5CH also includes a digital LCD display with 4-button control for easy adjustment of the various decoder configuration functions.

### features

- Constant voltage PWM output signal allows compatibility with a wide range of voltage-driven LEDs
- Standard DMX512 input protocol works with Bitro LightSymphony systems and other standard DMX-based controllers
- Multiple configuration options provide users with the ability to fully adjust decoder functions and output to match required application
- Easy-to-use Digital LCD display and 4-button control
- 5-channel output with full class 2 (5A) capacity per channel
- 3 types of input/output connectors (XLR, RJ45, terminal-block) provides for versatile connection and expansion options

### dimensions





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## BTC-DXD-S218A-5CH

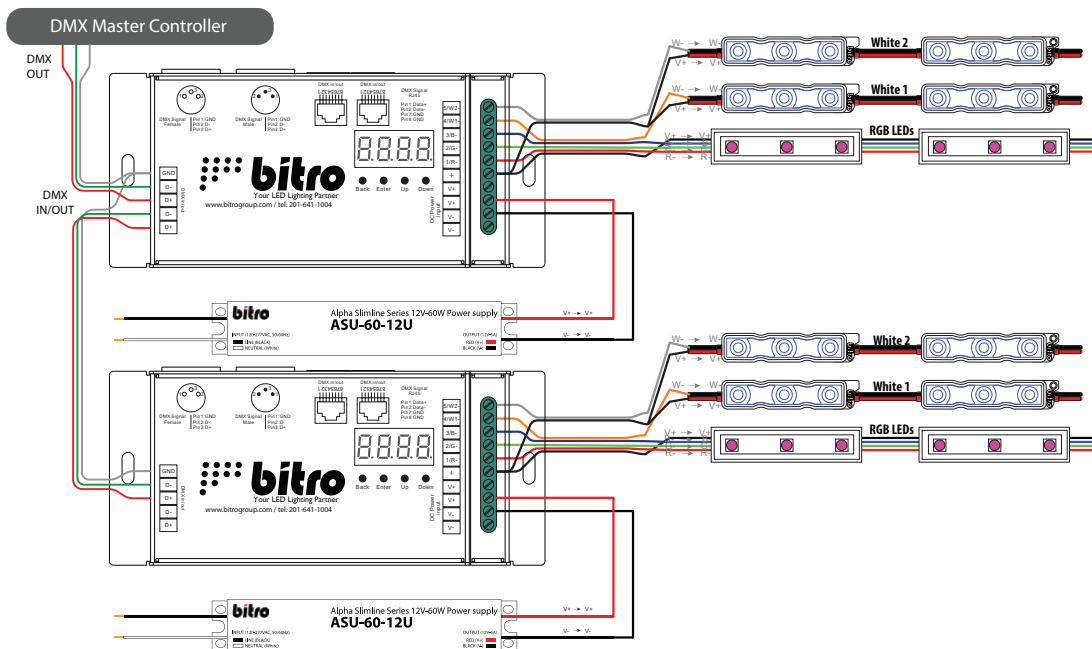
### 5-Channel DMX Decoder



### specifications

Physical	Part Number	BT-DXC-S218A-5CH
	Dimensions	6.5" x 2.9" x 1.5" (164mm x 73mm x 38mm)
	Connectors	Terminal Block XLR ports RJ45 ports
Signal Decoding Specifications	Signal Protocol	DMX512
	Channel Supported	5CH Max
	Decoder Settings	Starting DMX Address Number of Output Channels BIT Resolution PWM Frequency Gamma Curve DMX Decoding Mode
	Decoder Interface Control	4-Digit LCD Display + 4 Setting Buttons
Power and Electrical	Input Voltage	12-24VDC
	Max Output Current	5A/CH (25A Total)
	Max Output Power	60-120W/CH Max *Decoder is intended for use with Class 2 Power Supplies
	Output Type	Constant Voltage PWM
Application and Certifications	Operating Temperature	-4°F to 125°F (-20°C to 50°C), $t_c = 167^\circ\text{F}$
	Operating Environment	Dry Location
	UL	cRUus, E341583, BTC-DXD

### wiring diagram

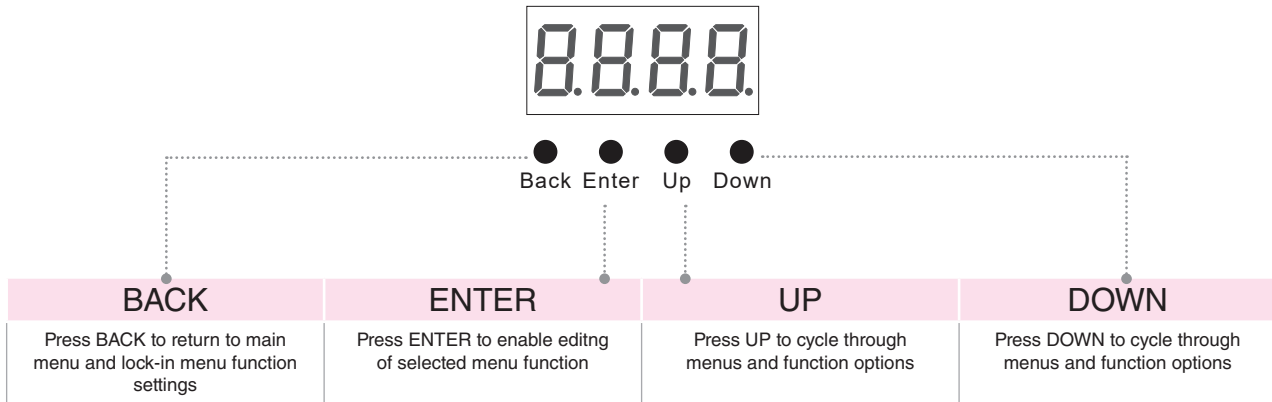


\*note: 3-conductor wire to terminal block is illustrated for the DMX signal connection in the diagram.  
 - Alternatively, you may connect controller and decoder(s) together using the XLR ports (DMX XLR Cable) or RJ45 ports (CAT5-e shielded cable).  
 - Ideal connector and wire-type to be determined by application and distance run (contact Bitro for job-specific recommendations)

\*note: all signal connections function as either DMX\_IN or DMX\_OUT. However, by convention: use XLR male port for DMX\_IN and XLR female port for DMX\_OUT



### button functions

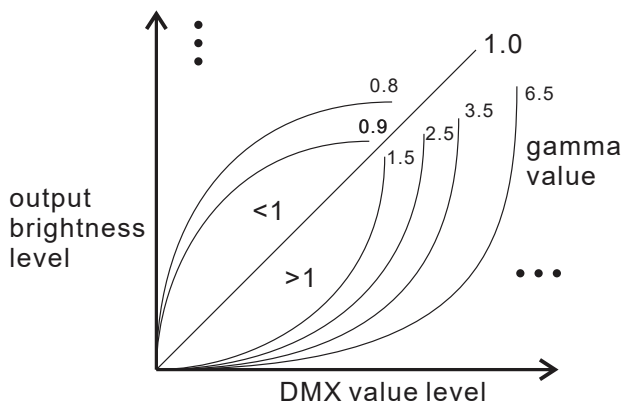


### decoder menu functions\*

MENU	FUNCTION	DEFAULT SETTING
8.XXX	DMX Address (sets first DMX channel)	xxx = 001 (DMX address 1 starting on output 1)
88XX	Decoder Channel Quantity	xx = 05 (5 channels)
88XX	8bit or 16bit Color	xx = 16 (16bit)
88XX	PWM Frequency	xx = 01 (1 kHz)
88XX	Output Dimming Curve Gamma	xx = 1.5 (1.5 gamma)
88XX	Decoding Mode	xx = 1.1

\*Advanced settings - Do not change from the default value without instructions from Bitro.  
 -Adjustment may result in unexpected results or incompatibility with other DMX/RGB hardware.

### output dimming curve gamma



### decoder channel quantity settings

OUTPUT Results per CH Quantity Settings (for default dPI.1 decoding mode)						
DMX Channel	CHxx	xx = 01	xx = 02	xx = 03	xx = 04	xx = 05 (Default)
001		dimming for all outputs	dimming for outputs 1 & 3	dimming for output 1	dimming for output 1	dimming for output 1
002			dimming for outputs 2, 4, & 5	dimming for output 2	dimming for output 2	dimming for output 2
003				dimming for outputs 3, 4, & 5	dimming for output 3	dimming for output 3
004					dimming for outputs 4 & 5	dimming for output 4
005						dimming for output 5