DMX profiles L600D

Summary: DMX profiles for Profoto L600D with firmware version A6 or later

Contents

1. Introduction

1.1 Purpose and Scope

This document describes the DMX profiles supported by Profoto L600D.

1.2 Document History

Document Revision	Firmware Version	DMX Revision	Changes
1.3	L600D A1	1.0	• Profiles P01 to P04 • Flex profile P31 • Fan and device control channels
1.5	L600D A6	3.0	• Profile P22 for Special Effects • Flex profile updated

2. General

2.1 General strategy

The following DMX profiles are generic for most Profoto lights. The general strategy is that selectable values are in accordance with the specific products limits. The value is calculated linear from lowest selectable value to max.

$$Value = Min + (Max - Min) \cdot \frac{DMX\ value}{DMX\ value\ max}$$

For example, selecting color temperature in 8 Bit mode (8 Bit CCT) for a light that has the CCT range 2000-10'000K. Sending in the value 102 would result in:

$$Value = 2000 + (10000 - 2000) \cdot \frac{102}{255} = 5200K$$

3. DMX profiles

3.1 P01 – 8 Bit Dimmer

Channel	Function	Value	Output
1	Master intensity	000-255	0-100%

3.2 P02 – 16 Bit Dimmer

Channel		Function	Value	Output
1 HI	2 LO	Master intensity	00000-65535	0-100%

3.3 P03 – 8 Bit Dimmer with Device Control

Channel	Function	Value	Output
1	Master intensity	000-255	0-100%
2	Fan control	000-255	See device control section
3	Device configuration	000-255	

3.4 P04 – 16 Bit Dimmer with Device Control

Channel		Function	Value	Output
1 HI	2 LO	Master intensity	00000-65535	0-100%
3		Fan control	000-255	See device control section
4		Device configuration	000-255	

3.5 P22 – Effects profile

Channel	Function	Value	Output
1	Master intensity	000-255	0-100%
2	Effect selection	000-009	No effect
		010-029	Explosion
		030-049	Faulty bulb
		050-079	Reserved
		080-099	Lightning
		100-119	Paparazzi
		120-139	Reserved
		140-159	Pulsing
		160-179	Strobe
		180-189	TV
		190-255	Reserved
3	Effect mode	000-009	Loop
		010-019	Trigger
		020-255	Reserved
4	Trigger effect	000-255	See selected effect table
5	Effects parameter 1	000-255	
6	Effects parameter 2	000-255	
7	Effects parameter 3	000-255	
8	Effects parameter 4	000-255	
9	Fan control	000-255	See device control section
10	Device configuration	000-255	

3.5.1 Explosion

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger once
5	Reserved		
6	Reserved		
7	Speed	000-255	1-100
8	Reserved		

Back to effect table

3.5.2 Faulty bulb

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger blackout
5	Reserved		
6	Reserved		
7	Pace	000-255	1-10
8	Speed	000-255	1-100

Back to effect table

3.5.3 Lightning

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger lightning bolt
5	Reserved		
6	Reserved		
7	Speed	000-255	1-100
8	Reserved		

Back to effect table

3.5.4 Paparazzi

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger blackout
5	Reserved		
6	Reserved		
7	Pace	000-255	1-10
8	Speed	000-255	1-100

Back to effect table

3.5.5 Pulsing

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger restart
5	Reserved		
6	Reserved		
7	Type	000-009	Sine
		010-019	Throb
		020-029	Triangle
		030-039	Square
		040-255	Reserved
8	Speed	000-255	1-100

Back to effect table

3.5.6 Strobe

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger restart
5	Reserved		
6	Reserved		
7	Speed	000-255	1-100
8	Reserved		

Back to effect table

3.5.7 TV

Channel	Function	Value	Output
4	Effect trigger	000-249	Reset trigger
		250-255	Trigger scene change
5	Reserved		
6	Pace	000-255	1-10
7	Speed	000-255	1-100
8	Reserved		

Back to effect table

3.6 P31 – Flex profile

This is a dynamic profile, where the first DMX channel selects the active profile, which are placed in the channels after the first.

Channel	Function	Value	Output
1	Profile select	000-004	P01 - 8 Bit Dimmer
		005-009	P02 - 16 Bit Dimmer
		010-014	P03 - 8 Bit Dimmer with Device Control
		015-019	P04 - 16 Bit Dimmer with Device Control
		020-104	Reserved
		105-109	P22 - Effects
		110-255	Reserved
2-...	First channel in selected profile		See corresponding profile table

4. Device control via DMX

Some settings have a 3 second activation time to enable device control via manual DMX panels. Device control channel control should normally be kept in range 0-9. To activate a setting: Move control to the desired DMX setting value and hold for 3 seconds before moving it back to 0-9 range.

DMX Smoothing settings are activated instantly but not saved until held for 3 seconds.

4.1 Device control

Channel	Function	Value	Output	Activation
1	Fan control	000-009	Auto	Instant
		010-019	Max	Instant
		020-029	Silent	Instant
		030-255	Reserved	n/a
2	Device control	000-009	No changes	n/a
		010-019	DMX smoothing: off	Instant
		020-029	DMX smoothing: smooth	Instant
		030-039	DMX smoothing: super smooth	Instant
		040-049	Dimming curve: Linear	3 seconds
		050-059	Dimming curve: S-Curve	3 seconds
		060-069	Dimming curve: Exponential	3 seconds
		070-079	Dimming curve: Logarithmic	3 seconds
		80-249	Reserved	n/a
		250-255	Reset all settings	3 seconds