StudioPro DMX Digital Decoders

Part number: DMX-5-8A, DMX-12-30K-5A, DMX-24-30K-4A, DMX-25-30K-4A

StudioPro DMX Digital Decoders are a series of highly configurable decoders featuring a convenient digital display. The display allows the setup of DMX addresses without the use of DIP switches. They accept 12-24V DC input voltage range and can support a wide variety of LED installations. The digital display allows for easy configuration of the DMX address, number of output channels, PWM frequency, bit-rate and dimming curve. DMX connection options include 5-pin XLR, RJ45 and DMX terminal blocks (5 Channel only) for input and output. They all feature a standalone mode to allow basic control without any additional software.

Features

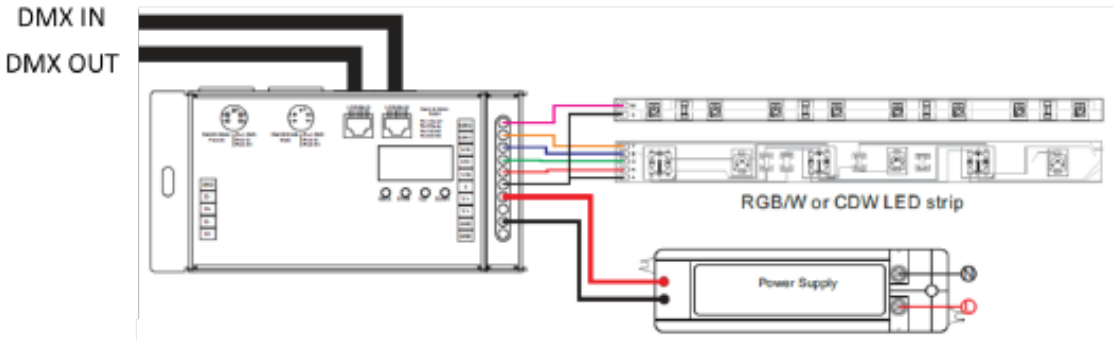
- Digital readout legibly displays the DMX address, which is useful in dimly lit rooms.
- Easily change DMX address without DIP switch math.
- PWM frequency is adjustable from 500Hz to 30kHz for flicker-free performance in any application.
- Switchable output smoothing, 8-bit or 16-bit.
- Adjustable number of output channels. See page 5.
- Configurable DMX modes, including 8/16-bit inputs and master controls. See pages 4-5.
- Adjustable dimming curve for a best fit for your application.
- Uses 5-pin XLR, RJ45 and terminal block connectors (5 Channel Only) for DMX communication.
- Mounting tabs are integrated into the rugged chassis.
- Standalone mode – no software required. See page 7.
- UL Recognized.

Applications

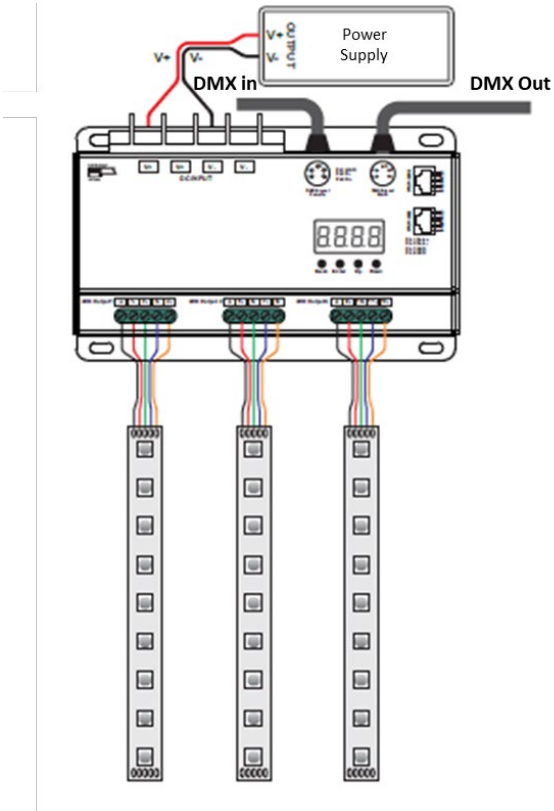
- High capacity DMX lighting applications.
- On-camera applications requiring high PWM frequency.

Wiring

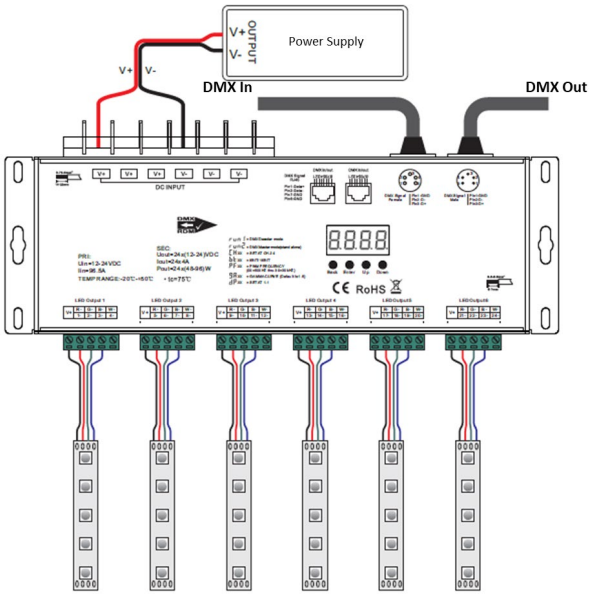
1. Confirm that the power supply voltage matches the LED voltage and that the power supply is unplugged.
2. Connect the power supply and LEDs to the decoder.
    a. 5 Channel Decoder: Connect the LEDs and power supply using the screw terminals. Power supply positive and ground should be connected to "V+" and "GND" terminals respectively. LED positive should be connected to the "+" terminal. The V+ terminals may also be used for LED positive if extra space is needed. Connect LED negatives to output channels 1-5 as appropriate for the installation.



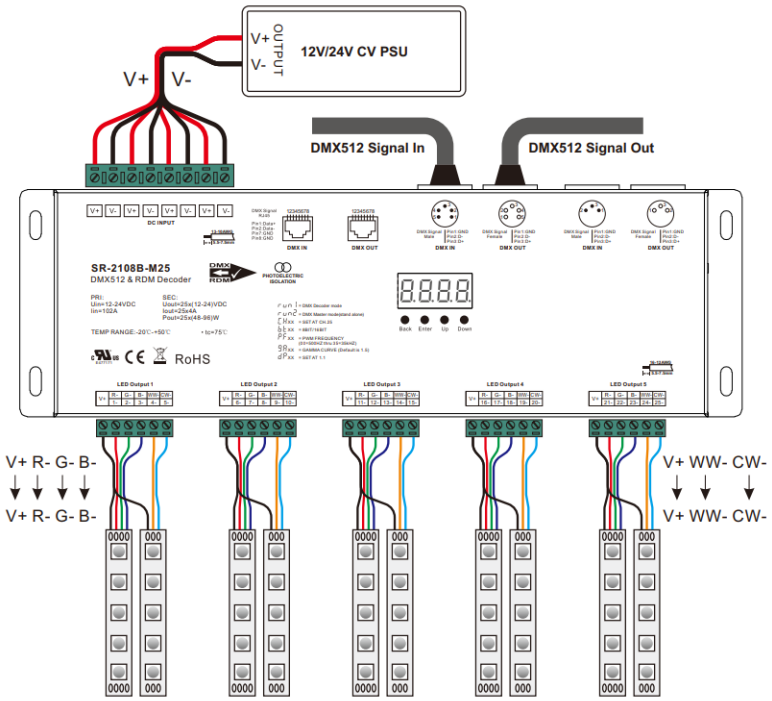
    b. 12 Channel Decoder: Connect the LEDs and power supply using the screw terminals. Power supply positive and ground should be connected to "V+" and "V-" terminals respectively. LED positive should be connected to the "+" terminals. Connect LED negatives to output channels 1-12 as appropriate for the installation.



c. 24 Channel Decoder: Connect the LEDs and power supply using the screw terminals. Power supply positive and ground should be connected to "V+" and "V-" terminals respectively. LED positive should be connected to the "+" terminals. Connect LED negatives to output channels 1-24 as appropriate for the installation.



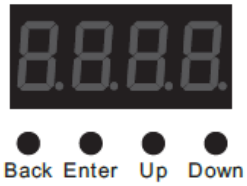
d. 25 Channel Decoder: Connect the LEDs and power supply using the screw terminals. Power supply positive and ground should be connected to "V+" and "V-" terminals respectively. LED positive should be connected to the "+" terminals. Connect LED negatives to output channels 1-25 as appropriate for the installation.



3. Power up the power supply. The screen will display A.XXX where "XXX" is the DMX starting address.
4. Connect the DMX input and output (if applicable) to any of the input/output ports. Note: do not send DMX signals to the decoder while it is powered down.

Operation

Navigation Buttons:



- Up and Down are used to cycle through settings and adjust parameters.
- Enter is used to select a setting to adjust.
- Back saves the current setting and stops adjustment of that parameter

Standalone/Decoder Mode: run1

This display indicates the current standalone mode. Set it to run1 for decoder mode and run2 for standalone mode. Press Enter and then Up or Down to change between standalone and DMX decoder mode. Press Back once the desired mode has been reached. A reboot is required to change between modes.

The standalone mode can be used either to control a single decoder or paired with other decoders to act as a master controller. To use the decoder as a master controller, set it to standalone mode and connect the DMX output to the input of the paired decoder. Setting the paired decoder to decoder mode will allow you to control both decoders simultaneously using the standalone decoder.

DMX Address: A.XXX

This display indicates the current DMX starting address. Press Enter and then Up or Down to change the DMX starting address. Up and Down can be held down to quickly scroll through addresses. Press Back once the desired DMX address has been reached.

Output Channels: 8A.XX

The “Output Channels” parameter allows the utilize all five output channels using fewer DMX channels. Based on the number of independent channels needed, the outputs will be mapped as follows. Note: this mapping is for DMX starting address 001 and default “Decoding Mode” value. See the section on Decoding Mode below for more information.

Output Channel	CHXX Setting				
	CH05	CH04	CH03	CH02	CH01
Channel 1	001	001	001	001	001
Channel 2	002	002	002	002	001
Channel 3	003	003	003	001	001
Channel 4	004	004	003	002	001
Channel 5	005	004	003	002	001

Output PWM Resolution: bt.XX

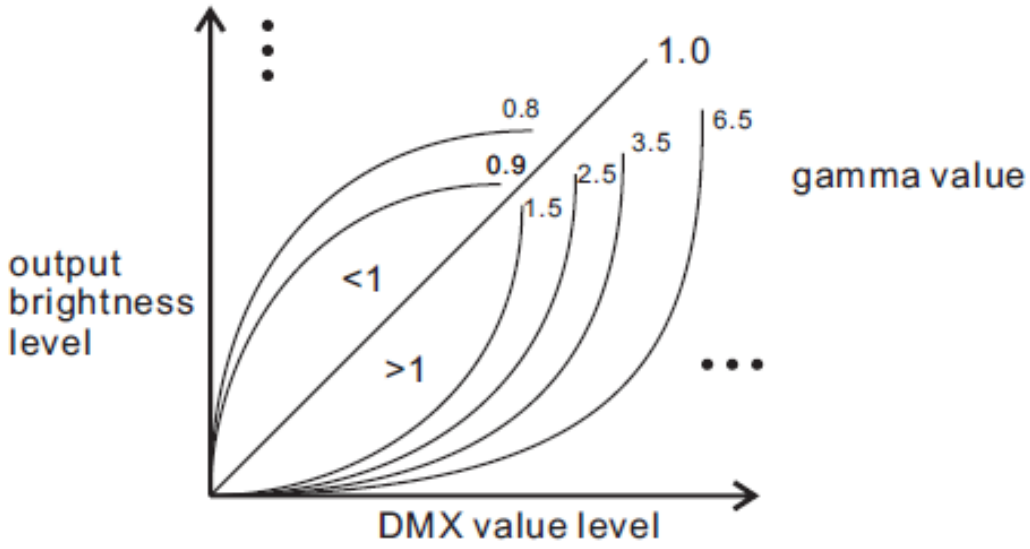
The Bit Depth setting controls the DMX output smoothing resolution, either 8-bit or 16-bit. The decoder provides output smoothing in 16-bit mode (default and recommended). This setting is different from 16-bit DMX input. 16-bit DMX input is set through the Decoding Mode.

PWM Frequency: FF.XX

The output PWM frequency is set through this parameter, with “XX” being the frequency in kHz. The default value is “01”, corresponding to 1kHz. Options range from “00” = 500Hz to “30” = 30kHz.
The output PWM frequency can be adjusted to avoid flicker in different settings. It can be left at 1kHz for most applications. For on-camera use, settings around 5kHz are typically sufficient to eliminate flicker. Very high frequency settings (over 10kHz) should be used only if necessary. Very high frequency signals can be distorted by long cable runs and/or environments will a lot of electrical signals.

Output Dimming Curve: 8.8.XX

The “gamma” value of the dimming curve is set with this parameter. This changes the rate at which the brightness changes at different DMX values. It can be used to make dimming less sensitive at the high or low end for greater precision in that brightness range. Default value is 1.5 and can be adjusted from 0.1-9.9. Values less than 1 give greater dimming precision at high brightness and values greater than 1 increase precision at low brightness. Human vision is more sensitive at low light levels, so values greater than 1 are most common.



DMX Decoding Mode: 8.8.XX

The DMX Decoding Mode determines how the DMX input is processed and mapped to the outputs. This setting is directly affected by the Output Channels parameter, please make sure that setting is configured before adjusting the DMX Decoding Mode. The setting “dP2.1” enables 16-bit input mode for all channel configurations. This mode uses two DMX input channels for each output, the first channel is the standard DMX adjustment and the second is for fine dimming control.

See Appendices A and B for decoding mode tables detailing how each setting affects decoder performance.

Standalone Mode Control (5 Channel):

The decoder must first be set to run2 mode to allow for standalone control. See page 4 for details on how to change modes.

The standalone mode of the 5 channel decoder features both individual channel control and 31 dynamic modes. To control individual channels, navigate to the channel number and press Enter. Each channel can be set a value between 0-100% with "FL" indicating 100% output. Press Back once the desired brightness level has been reached.

There are 31 preprogrammed dynamic modes. The dynamic modes use the first three channels and assign values based on the assumption that channel 1 is controlling red, channel 2 is controlling green and channel 3 is controlling blue.

P.xxx Press Enter and then Up and Down to select between preset modes. A full list of dynamic modes can be found in Appendix C.

8-.xx Press Enter and then Up and Down to select a brightness level between 1 and 8.

SP-x Press Enter and then Up and Down to select a speed level between 1 and 9.

Standalone Mode Control (12, 24, and 25 Channel):

The standalone mode of the 12, 24, and 25 channel decoders features both individual channel control and 4 color changing modes. To control individual channels, navigate to the channel number and press Enter. Each channel can be set a value between 0-100% with "FL" indicating 100% output. Press Back once the desired brightness level has been reached.

There are four preprogrammed channel cycling modes. Each mode turns the outputs on and off in sequential order starting at channel 1.

AAAA Press Enter and then Up and Down to Select between the four channel cycling modes.

Program Setting	Modes
CA01	Fade in and Fade Out
CA02	Gradual Cycle
CA03	Fade In
CA04	Fade Out

SPAA Press Enter and then Up and Down to select a speed level between 1 and 9.

Appendix A: 5 Channel Decoding Mode Tables

CH01

DMX Channel	Decoding Mode	
	dP1.1	dP2.1
001	Dimming all channels	Dimming all channels
002		micro-dimming all channels

CH02

DMX Channel	Decoding Mode		
	dP1.1	dP2.1	dP3.2
001	Dimming output 1 & 3	Dimming output 1 & 3	Dimming output 1 & 3
002	Dimming output 2 & 4	Micro-dimming output 1 & 3	Dimming output 2 & 4
003		Dimming output 2 & 4	Master dimming
004		Micro-dimming output 2 & 4	

CH03

DMX Channel	Decoding Mode			
	dP1.1	dP2.1	dP4.3	dP5.3
001	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1
002	Dimming output 2	Micro-dimming output 1	Dimming output 2	Dimming output 2
003	Dimming output 3, 4 & 5	Dimming output 2	Dimming output 3, 4 & 5	Dimming output 3, 4 & 5
004		Micro-dimming output 2	Master dimming	Master dimming
005		Dimming output 3, 4 & 5		Strobe
006		Micro-dimming output 3, 4 & 5		

CH04

DMX Channel	Decoding Mode			
	dP1.1	dP2.1	dP5.4	dP6.4
001	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1
002	Dimming output 2	Micro-dimming output 1	Dimming output 2	Dimming output 2
003	Dimming output 3	Dimming output 2	Dimming output 3	Dimming output 3
004	Dimming output 4 & 5	Micro-dimming output 2	Dimming output 4 & 5	Dimming output 4 & 5
005		Dimming output 3	Master dimming	Master dimming
006		Micro-dimming output 3		Strobe
007		Dimming output 4 & 5		
008		Micro-dimming output 4 & 5		

CH05

DMX Channel	Decoding Mode			
	dP1.1	dP2.1	dP6.5	dP7.5
001	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1
002	Dimming output 2	Micro-dimming output 1	Dimming output 2	Dimming output 2
003	Dimming output 3	Dimming output 2	Dimming output 3	Dimming output 3
004	Dimming output 4	Micro-dimming output 2	Dimming output 4	Dimming output 4
005	Dimming output 5	Dimming output 3	Dimming output 5	Dimming output 5
006		Micro-dimming output 3	Master dimming	Master dimming
007		Dimming output 4		Strobe
008		Micro-dimming output 4		
009		Dimming output 5		
010		Micro-dimming output 5		

Appendix B: 12 and 24 Channel Decoding Mode Tables

CH01

DMX Channel	Decoding Mode			
	dP1.1	dP2.1	dP2.2	dP3.1
001	Dimming all channels	Dimming all channels	Dimming all channels	Dimming all channels
002		Micro-dimming all channels	Strobe all channels	Micro-dimming all channels
003				Strobe all channels

CH12

DMX Channel	Decoding Mode									
	dP1.1	dP2.1	dP3.2	dP3.4	dP4.3	dP5.3	dP5.4	dP6.4	dP8.6	dP9.6
001	Dimming output 1	Dimming output 1	Dimming output 1&2	Dimming output 1&2&3&4	Dimming output 1&2&3	Dimming output 1&2&3	Dimming output 1&2&3&4	Dimming output 1&2&3&4	Dimming output 1&2&3&4	Dimming output 1&2&3&4
002	Dimming output 2	Micro-dimming output 1	Dimming output 1	Dimming output 1&3	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1
003	Dimming output 3	Dimming output 2	Dimming output 2	Dimming output 2&4	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2
004	Dimming output 4	Micro-dimming output 2	Dimming output 3&4	Dimming output 5&6&7&8	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3
005	Dimming output 5	Dimming output 3	Dimming output 3	Dimming output 5&7	Dimming output 4&5&6	Strobe 1&2&3	Dimming output 4	Dimming output 4	Dimming output 4	Dimming output 4
006	Dimming output 6	Micro-dimming output 3	Dimming output 4	Dimming output 6&8	Dimming output 4	Dimming output 4&5&6	Dimming output 5&6&7&8	Strobe 1&2&3&4	Dimming output 5&6	Dimming output 5&6
007	Dimming output 7	Dimming output 4	Dimming output 5&6	Dimming output 9&10&11&12	Dimming output 5	Dimming output 4	Dimming output 5	Dimming output 5&6&7&8	Dimming output 5	Dimming output 5
008	Dimming output 8	Micro-dimming output 4	Dimming output 5	Dimming output 9&11	Dimming output 6	Dimming output 5	Dimming output 6	Dimming output 5	Dimming output 6	Dimming output 6
009	Dimming output 9	Dimming output 5	Dimming output 6	Dimming output 10&12	Dimming output 7&8&9	Dimming output 6	Dimming output 7	Dimming output 6	Dimming output 7&8&9&10	Strobe 1&2&3&4&5&6
010	Dimming output 10	Micro-dimming output 5	Dimming output 7&8		Dimming output 7	Strobe 4&5&6	Dimming output 8	Dimming output 7	Dimming output 7	Dimming output 7&8&9&10
011	Dimming output 11	Dimming output 6	Dimming output 7		Dimming output 8	Dimming output 7&8&9	Dimming output 9&10&11&12	Dimming output 8	Dimming output 8	Dimming output 7
012	Dimming output 12	Micro-dimming output 6	Dimming output 8		Dimming output 9	Dimming output 7	Dimming output 9	Strobe 5&6&7&8	Dimming output 9	Dimming output 8
013		Dimming output 7	Dimming output 9&10		Dimming output 10&11&12	Dimming output 8	Dimming output 10	Dimming output 9&10&11&12	Dimming output 10	Dimming output 9
014		Micro-dimming output 7	Dimming output 9		Dimming output 10	Dimming output 9	Dimming output 11	Dimming output 9	Dimming output 11&12	Dimming output 10
015		Dimming output 8	Dimming output 10		Dimming output 11	Strobe 7&8&9	Dimming output 12	Dimming output 10	Dimming output 11	Dimming output 11&12
016		Micro-dimming output 8	Dimming output 11&12		Dimming output 12	Dimming output 10&11&12		Dimming output 11	Dimming output 12	Dimming output 11
017		Dimming output 9	Dimming output 11			Dimming output 10		Dimming output 12		Dimming output 12
018		Micro-dimming output 9	Dimming output 12			Dimming output 11		Strobe 9&10&11&12		Strobe 7&8&9&10&11&12
019		Dimming output 10				Dimming output 12				
020		Micro-dimming output 10				Strobe 10&11&12				
021		Dimming output 11								
022		Micro-dimming output 11								
023		Dimming output 12								
024		Micro-dimming output 12								

CH24

DMX Channel	Decoding Mode									
	dP1.1	dP2.1	dP3.2	dP3.4	dP4.3	dP5.3	dP5.4	dP6.4	dP8.6	dP9.6
001	Dimming output 1	Dimming output 1	Dimming output 1&2	Dimming output 1&2&3&4	Dimming output 1&2&3	Dimming output 1&2&3	Dimming output 1&2&3&4	Dimming output 1&2&3&4	Dimming output 1&2&3&4	Dimming output 1&2&3&4
002	Dimming output 2	Micro-dimming output 1	Dimming output 1	Dimming output 1&3	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1	Dimming output 1
003	Dimming output 3	Dimming output 2	Dimming output 2	Dimming output 2&4	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2	Dimming output 2
004	Dimming output 4	Micro-dimming output 2	Dimming output 3&4	Dimming output 5&6&7&8	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3	Dimming output 3
005	Dimming output 5	Dimming output 3	Dimming output 3	Dimming output 5&7	Dimming output 4&5&6	Strobe 1&2&3	Dimming output 4	Dimming output 4	Dimming output 4	Dimming output 4
006	Dimming output 6	Micro-dimming output 3	Dimming output 4	Dimming output 6&8	Dimming output 4	Dimming output 4&5&6	Dimming output 5&6&7&8	Strobe 1&2&3&4	Dimming output 5&6	Dimming output 5&6
007	Dimming output 7	Dimming output 4	Dimming output 5&6	Dimming output 9&10&11&12	Dimming output 5	Dimming output 4	Dimming output 5	Dimming output 5&6&7&8	Dimming output 5	Dimming output 5
008	Dimming output 8	Micro-dimming output 4	Dimming output 5	Dimming output 9&11	Dimming output 6	Dimming output 5	Dimming output 6	Dimming output 5	Dimming output 6	Dimming output 6
009	Dimming output 9	Dimming output 5	Dimming output 6	Dimming output 10&12	Dimming output 7&8&9	Dimming output 6	Dimming output 7	Dimming output 6	Dimming output 7&8&9&10	Strobe 1&2&3&4&5&6
010	Dimming output 10	Micro-dimming output 5	Dimming output 7&8	Dimming output 13&14&15&16	Dimming output 7	Strobe 4&5&6	Dimming output 8	Dimming output 7	Dimming output 7	Dimming output 7&8&9&10
011	Dimming output 11	Dimming output 6	Dimming output 7	Dimming output 13&15	Dimming output 8	Dimming output 7&8&9	Dimming output 9&10&11&12	Dimming output 8	Dimming output 8	Dimming output 7
012	Dimming output 12	Micro-dimming output 6	Dimming output 8	Dimming output 14&16	Dimming output 9	Dimming output 7	Dimming output 9	Strobe 5&6&7&8	Dimming output 9	Dimming output 8
013	Dimming output 13	Dimming output 7	Dimming output 9&10	Dimming output 17&18&19&20	Dimming output 10&11&12	Dimming output 8	Dimming output 10	Dimming output 9&10&11&12	Dimming output 10	Dimming output 9
014	Dimming output 14	Micro-dimming output 7	Dimming output 9	Dimming output 17&19	Dimming output 10	Dimming output 9	Dimming output 11	Dimming output 9	Dimming output 11&12	Dimming output 10
015	Dimming output 15	Dimming output 8	Dimming output 10	Dimming output 18&20	Dimming output 11	Strobe 7&8&9	Dimming output 12	Dimming output 10	Dimming output 11	Dimming output 11&12
016	Dimming output 16	Micro-dimming output 8	Dimming output 11&12	Dimming output 21&22&23&24	Dimming output 12	Dimming output 10&11&12	Dimming output 13&14&15&16	Dimming output 11	Dimming output 12	Dimming output 11
017	Dimming output 17	Dimming output 9	Dimming output 11	Dimming output 21&23	Dimming output 13&14&15	Dimming output 10	Dimming output 13	Dimming output 12	Dimming output 13&14&15&16	Dimming output 12
018	Dimming output 18	Micro-dimming output 9	Dimming output 12	Dimming output 22&24	Dimming output 13	Dimming output 11	Dimming output 14	Strobe 9&10&11&12	Dimming output 13	Strobe 7&8&9&10&11&12
019	Dimming output 19	Dimming output 10	Dimming output 13&14		Dimming output 14	Dimming output 12	Dimming output 15	Dimming output 13&14&15&16	Dimming output 14	Dimming output 13&14&15&16
020	Dimming output 20	Micro-dimming output 10	Dimming output 13		Dimming output 15	Strobe 10&11&12	Dimming output 16	Dimming output 13	Dimming output 15	Dimming output 13
021	Dimming output 21	Dimming output 11	Dimming output 14		Dimming output 16&17&18	Dimming output 13&14&15	Dimming output 17&18&19&20	Dimming output 14	Dimming output 16	Dimming output 14
022	Dimming output 22	Micro-dimming output 11	Dimming output 15&16		Dimming output 16	Dimming output 13	Dimming output 17	Dimming output 15	Dimming output 17&18	Dimming output 15
023	Dimming output 23	Dimming output 12	Dimming output 15		Dimming output 17	Dimming output 14	Dimming output 18	Dimming output 16	Dimming output 17	Dimming output 16
024	Dimming output 24	Micro-dimming output 12	Dimming output 16		Dimming output 18	Dimming output 15	Dimming output 19	Strobe 13&14&15&16	Dimming output 18	Dimming output 17&18
025		Dimming output 13	Dimming output 17&18		Dimming output 19&20&21	Strobe 13&14&15	Dimming output 20	Dimming output 17&18&19&20	Dimming output 19&20&21&22	Dimming output 17
026		Micro-dimming output 13	Dimming output 17		Dimming output 19	Dimming output 16&17&18	Dimming output 21&22&23&24	Dimming output 17	Dimming output 19	Dimming output 18
027		Dimming output 14	Dimming output 18		Dimming output 20	Dimming output 16	Dimming output 21	Dimming output 18	Dimming output 20	Strobe 13&14&15&16&17&18
028		Micro-dimming output 14	Dimming output 19&20		Dimming output 21	Dimming output 17	Dimming output 22	Dimming output 19	Dimming output 21	Dimming output 19&20&21&22
029		Dimming output 15	Dimming output 19		Dimming output 22&23&24	Dimming output 18	Dimming output 23	Dimming output 20	Dimming output 22	Dimming output 19
030		Micro-dimming output 15	Dimming output 20		Dimming output 22	Strobe 16&17&18	Dimming output 24	Strobe 17&18&19&20	Dimming output 23&24	Dimming output 20
031		Dimming output 16	Dimming output 21&22		Dimming output 23	Dimming output 19&20&21		Dimming output 21&22&23&24	Dimming output 23	Dimming output 21
032		Micro-dimming output 16	Dimming output 21		Dimming output 24	Dimming output 19		Dimming output 21	Dimming output 24	Dimming output 22
033		Dimming output 17	Dimming output 22			Dimming output 20		Dimming output 22		Dimming output 23&24
034		Micro-dimming output 17	Dimming output 23&24			Dimming output 21		Dimming output 23		Dimming output 23
035		Dimming output 18	Dimming output 23			Strobe 19&20&21		Dimming output 24		Dimming output 24
036		Micro-dimming output 18	Dimming output 24			Dimming output 22&23&24		Strobe 21&22&23&24		Strobe 19&20&21&22&23&24
037		Dimming output 19				Dimming output 22				
038		Micro-dimming output 19				Dimming output 23				
039		Dimming output 20				Dimming output 24				
040		Micro-dimming output 20				Strobe 22&23&24				
041		Dimming output 21								
042		Micro-dimming output 21								
043		Dimming output 22								
044		Micro-dimming output 22								
045		Dimming output 23								
046		Micro-dimming output 23								
047		Dimming output 24								
048		Micro-dimming output 24								

Appendix C: 5 Channel Decoder Dynamic Modes

Program Setting	Modes
00	All Off
01	Static Red
02	Static Green
03	Static Blue
04	Static Yellow
05	Static Orange
06	Static Cyan
07	Static Purple
08	Static White
09	7 Color Gradual Cycle - ROYGCBM
10	All Color Gradual Cycle
11	RGB Fade In and Fade Out
12	RGB Step Cycle
13	RGB Fade In
14	RGB Fade Out
15	RGB Strobe
16	White Strobe
17	7 Color Fade in and Fade Out - ROYGCBM
18	7 Color Fade in and Fade Out - ROYGCBM
19	7 Color Strobe - ROYGCBM
20	Red/White Gradual Cycle
21	Green/White Gradual Cycle
22	Blue/White Gradual Cycle
23	Red/Orange Gradual Cycle
24	Red/Purple Gradual Cycle
25	Green/Yellow Gradual Cycle
26	Green/Cyan Gradual Cycle
27	Blue/Purple Gradual Cycle
28	Blue/Cyan Gradual Cycle
29	Red/Yellow/Green Gradual Cycle
30	Red/Purple/Blue Gradual Cycle
31	Green/Cyan/Blue Gradual Cycle

Appendix D: 25 Channel Decoding Mode Tables

DMX address is 001, CH01

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp2.2	dp3.1
1	all output dimming	all output dimming	all output dimming	all output dimming
2		all output fine dimming	all output strobe effects	all output fine dimming
3				all output strobe effects

DMX address is 001, CH02

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp2.2	dp3.2	dp4.3
1	output1,3,6,8,11,13 16,18,21,23dimming	output1,3,6,8,11,13 16,18,21,23dimming	output1-4,6-9,11-14, 16-19,21-24dimming	output1-4,6-9,11-14, 16-19,21-24dimming	output1-4,6-9,11-14, 16-19,21-24dimming
2	output2,4,7,9,12,14 17,19,22,24dimming	output1,3,6,8,11,13,16 18,21,23fine dimming	output1+2,3+4,6+7,8+9,11 +12,13+14,16+17,18+19, 21+22,23+24color tuning	output1,3,6,8,11,13 16,18,21,23dimming	output1,3,6,8,11,13 16,18,21,23dimming
3		output2,4,7,9,12,14 17,19,22,24dimming		output2,4,7,9,12,14 17,19,22,24dimming	output2,4,7,9,12,14 17,19,22,24dimming
4		output2,4,7,9,12,14,17 19,22,24fine dimming			strobe effects

DMX address is 001, CH03

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp4.3	dp5.3
1	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming	output1-3,6-8,11-13 16-18,21-23dimming	output1-3,6-8,11-13 16-18,21-23dimming
2	output2,7,12, 17,22dimming	output1,6,11, 16,21fine dimming	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming
3	output3,8,13, 18,23dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming
4		output2,7,12, 17,22fine dimming	output3,8,13, 18,23dimming	output3,8,13, 18,23dimming
5		output3,8,13, 18,23dimming		strobe effects
6		output3,8,13, 18,23fine dimming		

DMX address is 001, CH05

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp6.5	dp7.5
1	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming	output1-25 dimming	output1-25 dimming
2	output2,7,12, 17,22dimming	output1,6,11, 16,21fine dimming	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming
3	output3,8,13, 18,23dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming
4	output4,9,14, 19,24dimming	output2,7,12, 17,22fine dimming	output3,8,13, 18,23dimming	output3,8,13, 18,23dimming
5	output5,10,15, 20,25dimming	output3,8,13, 18,23dimming	output4,9,14, 19,24dimming	output4,9,14, 19,24dimming
6		output3,8,13, 18,23fine dimming	output5,10,15, 20,25dimming	output5,10,15, 20,25dimming
7		output4,9,14, 19,24dimming		strobe effects
8		output4,9,14, 19,24fine dimming		
9		output5,10,15, 20,25dimming		
10		output5,10,15, 20,25fine dimming		

DMX address is 001, CH04

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp5.4	dp6.4
1	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming	output1-4,6-9,11-14, 16-19,21-24dimming	output1-4,6-9,11-14, 16-19,21-24dimming
2	output2,7,12, 17,22dimming	output1,6,11, 16,21fine dimming	output1,6,11, 16,21dimming	output1,6,11, 16,21dimming
3	output3,8,13, 18,23dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming	output2,7,12, 17,22dimming
4	output4,9,14, 19,24dimming	output2,7,12, 17,22fine dimming	output3,8,13, 18,23dimming	output3,8,13, 18,23dimming
5		output3,8,13, 18,23dimming	output4,9,14, 19,24dimming	output4,9,14, 19,24dimming
6		output3,8,13, 18,23fine dimming		strobe effects
7		output4,9,14, 19,24dimming		
8		output4,9,14, 19,24fine dimming		

DMX address is 001, CH25

DMX Console Slider number / DMX channel	dp1.1	dp2.1	dp2.2	dp3.2	dp4.2	dp4.3	dp5.3	dp5.4	dp6.4	dp6.5	dp7.5
1	output 1 dimming	output 1 dimming	output 1&2 dimming	output 1&2 dimming	output 1&2 dimming	output 1&2 &3 dimming	output 1&2 &3 dimming	output 1&2 &3&4 dimming	output 1&2 &3&4 dimming	output 1&2 &3&4&5 dimming	output 1&2 &3&4&5 dimming
2	output 2 dimming	output 1 fine dimming	adjust 1&2 color temperature	output 1 dimming	output 1 dimming	output 1 dimming	output 1 dimming	output 1 dimming	output 1 dimming	output 1 dimming	output 1 dimming
3	output 3 dimming	output 2 dimming	output 3&4 dimming	output 2 dimming	output 2 dimming	output 2 dimming	output 2 dimming	output 2 dimming	output 2 dimming	output 2 dimming	output 2 dimming
4	output 4 dimming	output 2 fine dimming	adjust 3&4 color temperature	output 3&4 dimming	strobe effects	output 3 dimming	output 3 dimming	output 3 dimming	output 3 dimming	output 3 dimming	output 3 dimming
5	output 5 dimming	output 3 dimming	output 6&7 dimming	output 3 dimming	output 3&4 &6 dimming	output 6&7 &8 dimming	strobe effects	output 4 dimming	output 4 dimming	output 4 dimming	output 4 dimming
6	output 6 dimming	output 3 fine dimming	adjust 6&7 color temperature	output 4 dimming	output 3 dimming	output 6 dimming	output 6&7 &8 dimming	output 6&7&8 &9 dimming	strobe effects	output 5 dimming	output 5 dimming
7	output 7 dimming	output 4 dimming	output 8&9 dimming	output 6&7 dimming	output 4 dimming	output 7 dimming	output 6 dimming	output 6 dimming	output 6&7&8 &9 dimming	output 6&7 &8&9&10 dimming	strobe effects
8	output 8 dimming	output 4 fine dimming	adjust 8&9 color temperature	output 6 dimming	strobe effects	output 8 dimming	output 7 dimming	output 7 dimming	output 6 dimming	output 6 dimming	output 6&7 &8&9&10 dimming
9	output 9 dimming	output 5 dimming	output 11&12 dimming	output 7 dimming	output 6&7 &9 dimming	output 11&12 &13 dimming	output 8 dimming	output 8 dimming	output 7 dimming	output 7 dimming	output 6 dimming
10	output 10 dimming	output 5 fine dimming	adjust 11&12 color temperature	output 8&9 dimming	output 6 dimming	output 11 dimming	strobe effects	output 9 dimming	output 8 dimming	output 8 dimming	output 7 dimming
11	output 11 dimming	output 6 dimming	output 13&14 dimming	output 8 dimming	output 7 dimming	output 12 dimming	output 11&12&13 dimming	output 11&12&13 &14 dimming	output 9 dimming	output 9 dimming	output 8 dimming
12	output 12 dimming	output 6 fine dimming	adjust 13&14 color temperature	output 9 dimming	strobe effects	output 13 dimming	output 11 dimming	output 11 dimming	strobe effects	output 10 dimming	output 9 dimming
13	output 13 dimming	output 7 dimming	output 16&17 dimming	output 11&12 dimming	output 8&9 &12 dimming	output 16&17 &18 dimming	output 12 dimming	output 12 dimming	output 11&12&13 &14dimming	output 11&12&13 &14&15 dimming	output 10 dimming
14	output 14 dimming	output 7 fine dimming	adjust 16&17 color temperature	output 11 dimming	output 8 dimming	output 16 dimming	output 13 dimming	output 13 dimming	output 11 dimming	output 11 dimming	strobe effects
15	output 15 dimming	output 8 dimming	output 18&19 dimming	output 12 dimming	output 9 dimming	output 17 dimming	strobe effects	output 14 dimming	output 12 dimming	output 12 dimming	output 11&12&13 &14&15 dimming
16	output 16 dimming	output 8 fine dimming	adjust 18&19 color temperature	output 13&14 dimming	strobe effects	output 18 dimming	output 16&17 &18 dimming	output 16&17&18 &19dimming	output 13 dimming	output 13 dimming	output 11 dimming
17	output 17 dimming	output 9 dimming	output 21&22 dimming	output 13 dimming	output 11&12 &15 dimming	output 21&22 &23dimming	output 16 dimming	output 16 dimming	output 14 dimming	output 14 dimming	output 12 dimming
18	output 18 dimming	output 9 fine dimming	adjust 21&22 color temperature	output 14 dimming	output 11 dimming	output 21 dimming	output 17 dimming	output 17 dimming	strobe effects	output 15 dimming	output 13 dimming
19	output 19 dimming	output 10 dimming	output 23&24 dimming	output 16&17 dimming	output 12 dimming	output 22 dimming	output 18 dimming	output 18 dimming	output 16&17&18 &19 dimming	output 16&17&18 &19&20 dimming	output 14 dimming
20	output 20 dimming	output 10 fine dimming	adjust 23&24 color temperature	output 16 dimming	strobe effects	output 23 dimming	strobe effects	output 19 dimming	output 16 dimming	output 16 dimming	output 15 dimming
21	output 21 dimming	output 11 dimming		output 17 dimming	output 13&14 &18 dimming		output 21&22 &23 dimming	output 21&22&23 &24dimming	output 17 dimming	output 17 dimming	strobe effects
22	output 22 dimming	output 11 fine dimming		output 18&19 dimming	output 13 dimming		output 21 dimming	output 21 dimming	output 18 dimming	output 18 dimming	output 16&17&18 &19&20 dimming
23	output 23 dimming	output 12 dimming		output 18 dimming	output 14 dimming		output 22 dimming	output 22 dimming	output 19 dimming	output 19 dimming	output 16 dimming
24	output 24 dimming	output 12 fine dimming		output 19 dimming	strobe effects		output 23 dimming	output 23 dimming	strobe effects	output 20 dimming	output 17 dimming
25	output 25 dimming	output 13 dimming		output 21&22 dimming	output 16&17 &21 dimming		strobe effects	output 24 dimming	output 21&22&23 &24 dimming	output 21&22&23 &24&25dimming	output 18 dimming
26		output 13 fine dimming		output 21 dimming	output 16 dimming				output 21 dimming	output 21 dimming	output 19 dimming
27		output 14 dimming		output 22 dimming	output 17 dimming				output 22 dimming	output 22 dimming	output 20 dimming
28		output 14 fine dimming		output 23&24 dimming	strobe effects				output 23 dimming	output 23 dimming	strobe effects
29		output 15 dimming		output 23 dimming	output 18&19 dimming				output 24 dimming	output 24 dimming	output 21&22&23 &24&25 dimming
30		output 15 fine dimming		output 24 dimming	output 18 dimming				strobe effects	output 25 dimming	output 21 dimming
31		output 16 dimming			output 19 dimming						output 22 dimming
32		output 16 fine dimming			strobe effects						output 23 dimming
33		output 17 dimming			output 21&22 dimming						output 24 dimming
34		output 17 fine dimming			output 21 dimming						output 25 dimming
35		output 18 dimming			output 22 dimming						strobe effects
36		output 18 fine dimming			strobe effects						
37		output 19 dimming			output 23&24 dimming						
38		output 19 fine dimming			output 23 dimming						
39		output 20 dimming			output 24 dimming						
40		output 20 fine dimming			strobe effects						
41		output 21 dimming									
42		output 21 fine dimming									
43		output 22 dimming									
44		output 22 fine dimming									
45		output 23 dimming									
46		output 23 fine dimming									
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48		output 24 fine dimming									
49		output 25 dimming									
50		output 25 fine dimming									