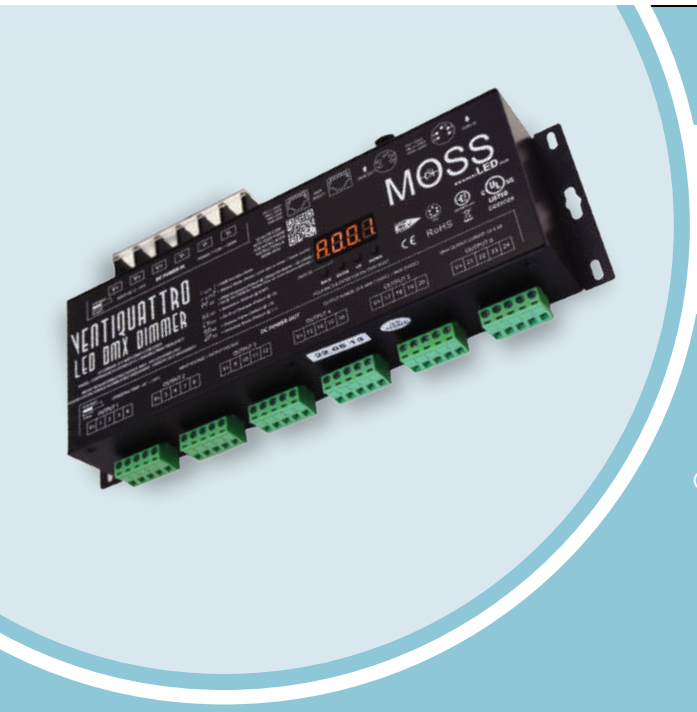
MOSS LED
WWW.MOSSLED.COM



VENTIQUATTRO

24 CHANNEL FLICKER-FREE 16-BIT DIMMER

V1.1 - Indoor use only

The VENTIQUATTRO LED DMX Dimmer is BY FAR the most advanced standalone DMX Decoder controller unit on the market, EVER! The VENTIQUATTRO builds off of the successes of the Cinque-LED DMX Dimmer, by introducing a 24-channel version of the controller. NEW Protect-A-FET technology. When a short circuit occurs all the outputs will stop functioning and the LED display will flash. Power cycle the unit (turn it off then on again) to restore normal operation. RDM ability to change PWM frequency and DMX address remotely. Factory default frequency now set to 10khz
If you experience any 'flickering' or 'banding' on camera please try adjusting the PWM freqeuncy to 12kHz or higher.

New Features in V 1.1

1. PWM Frequency adjustable via RDM
2. Gamma curve adjustable via RDM
3. Default PWM Frequency now set to 10khz.

Input
96A MAX
12V-24V DC

Output
24 x 24V DC @ 4A/Channel
(96A max)
24 X 12VDC @ 4A/Channel
(96A max)

PROTECT-A-FET
Protect-A-FET

PWM Frequency
Settable between
500Hz - 35kHz

DC OUTPUT - 5 POSITION TERMINAL BLOCK

1	COMMON
2	CHANNEL 1
3	CHANNEL 2
4	CHANNEL 3
5	CHANNEL 4

DMX 512
DMX 512

Over Temperature

Kg
Weight
816.41g 1.8 lbs

Temperature Range
- 20°C to +50°C

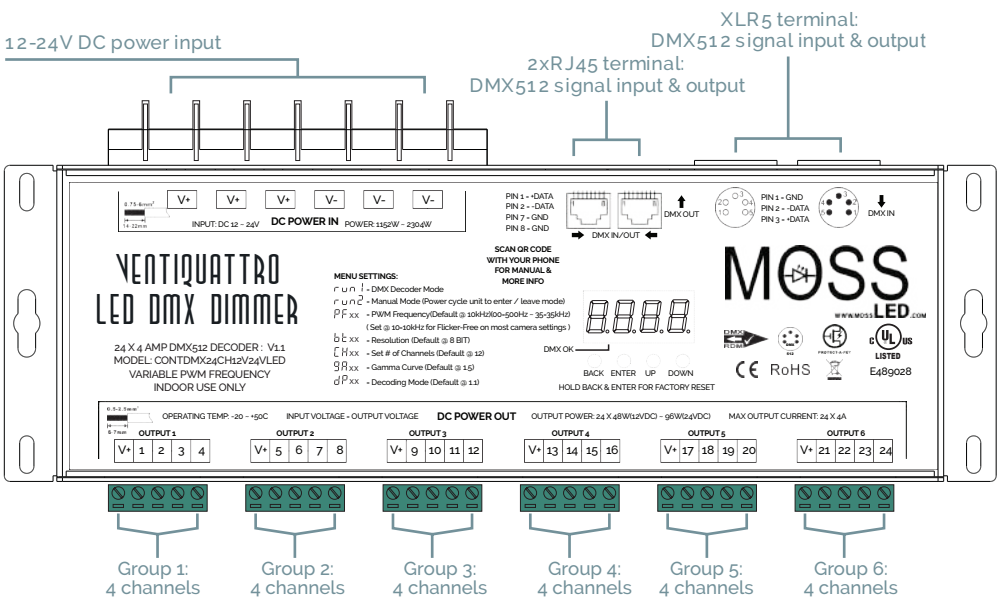
DMX RDM
Remote
Device
Management

Dimensions
L 265mm 10.43"
W 111.5mm 4.38"
H 40mm 1.5"

RoHS
RoHS Certified

c UL us LISTED
UL Fully
Listed Product

Short Circuit
Protection



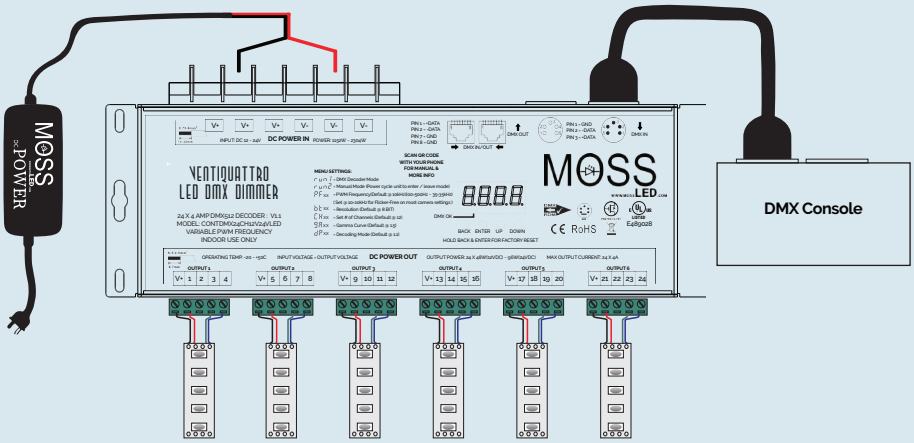
DO NOT install with power applied to device.
DO NOT expose device to excessive moisture.
Indoor use only.

CONT	DMX	24CH	12V24V	LCD
Controller	Input Signal	Number of Channels	Input Voltage	Display

WIRING DIAGRAM

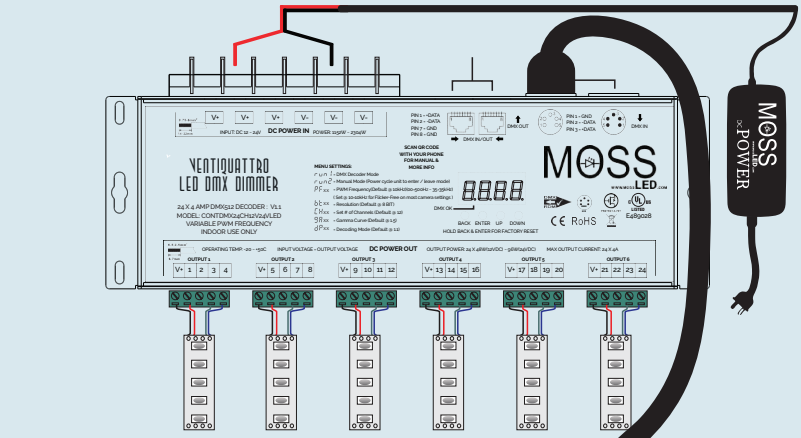
DMX Decoder Mode

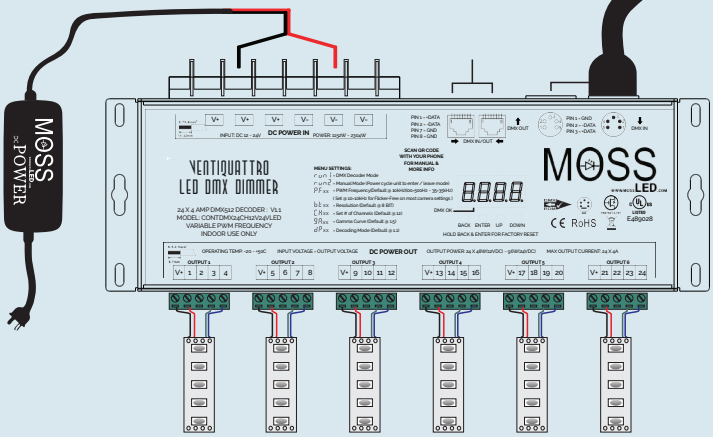
run 1



Master Manual Mode

run 2





Please note: We do not recommend powering more than one Dodici dimmer with one power supply. Conversely, we do not recommend powering on Dodici dimmer with multiple power supplies.
1 power supply should power 1 Dodici.

OPERATION

Prior to adjusting any values please decide if you would like to operate in DMX mode or Manual mode. DMX mode is is run 1 and and Manual mode is run 2. DMX mode operates in conjunction with a device that outputs DMX. Please connect device via the XLR ports or the RJ45 ports. In Manual mode the unit can be controlled via the on-board LED read-out. Any settings manually selected will also output DMX values downstream to other connected devices. To switch between run1 and run2 mode you must select the mode and then you will see the new set of menu options.

DMX Mode (Decoder Mode) run 1

Using the "Up/DOWN" buttons you can cycle through the following menus.

A.xxx	DMX address 1 to 507, default set to 001. The decimal after the "A" indicates reciving a DMX signal.
CH xx	DMX channel quantity, default set to CH24
BT xx	Bit resolution 8bit/16bit, default set to 16bit
PF xx	PWM frequency 500Hz to 35KHz, default set to 10kHz. Most camera settings please set to 10kHz.
GA xx	Dimming gamma curve value, default set to1.5
DP xx	Decoding mode, default set to dP1.1
RUN 1	Switch between DMX Mode and Manual Mode. Power cycle the unit to complete the mode change.

Manual Mode (Master Mode) run 2

To enter Manual Mode use the "UP/DOWN" and set to " run 1" press "ENTER"
then with the "UP" button set to " run 2". Press "BACK" to confirm.
The following menu will apear.

CA.xx	Chasing effects. 4 effets to choose from.
SP.xx	Program speed 1 to 9
xx.xx	Manual control over channels 1 to 24 from 00 to FL
run 2	Switch between DMX Mode and Manual Mode. Power cycle the unit to complete the mode change.

1. Set DMX Address (Can be adjusted remotely via RDM)

To set the DMX address select menu A.xxx , press "ENTER" the display will flash.
Press "UP/DOWN"to set the DMX address. Press "BACK" to confirm.

2. Set Channel Quantity (DMX Footprint)

Select menu CH xx, press "ENTER" the display will flash. Press "UP/DOWN"
and set the DMX channel quantity. Press "BACK" to confirm.
Example: DMX address is set to 001.
CH01 : Footprint DMX = 1 (One DMX address for all the output channels)
CH04 : Footprint DMX = 4 (Four DMX addresses 001, 002, 003, 004, etc. grouped together)
CH24 : Footprint DMX = 24 (24 DMX addresses. Factory Default. Output 1-24 is address 001-024 respectively.)

3. Resolution

Select menu bt xx , press "ENTER" the display will flash. Press "UP/DOWN"
to choose 8bit or 16bit. Press "BACK" to confirm.
Proceed to Decoding Mode. Select menu dP xx , press "ENTER" the display will flash.
Press "UP/DOWN" to choose the decoding mode, and choose dp2.1
Press "BACK" to confirm.
DMX footprint is now 48 channels.
Please refer to chart on page 4, item 8 for more Decoding Mode details.

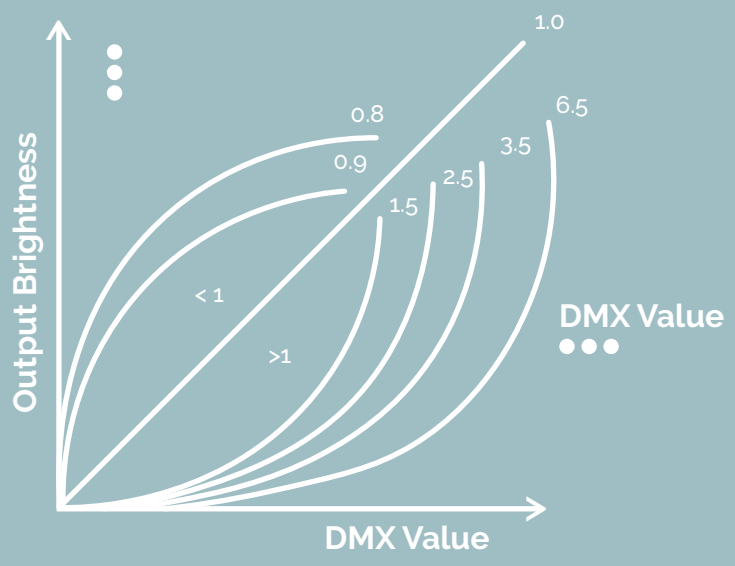
4. PWM Frequency (Can be adjusted remotely via RDM - Firmware V1.1)

Select menu PF xx , press "ENTER" the display will flash. Press "UP/DOWN"
to choose from 00 to 35. Press "BACK" to confirm. Default mode is 10 KHz. Please set to 10kHz for flicker free use.

00 = 500Hz	03 = 3KHz	06 = 6KHz	09 = 9KHz	14 = 14KHz	20 = 20KHz	35 = 35KHz
01 = 1KHz	04 = 4KHz	07 = 7KHz	10 = 10KHz	16 = 16KHz	25 = 25KHz	
02 = 2KHz	05 = 5KHz	08 = 8KHz	12 = 12kHz	18 = 18KHz	30 = 30KHz	

5. Gamma Curve Value

Select menu GA xx , press "ENTER" the display will flash.
Press "UP/DOWN" to choose 0.1 to 9.9. Press "BACK" to confirm.



*Gamma adjusts the dimming curve of the unit so you can have an extremely high resolution low end or an extremely high resolution high end.

6. RDM Functions

The data definitions for strobe channel are as follows:

[0, 7], //undefined
[8, 65],//slow strobe ->fast strobe
[66, 71],//undefined
[72, 127],//slow push fast close
[128, 133],//undefined
[134, 189],//slow close fast push
[190, 195],//undefined
[196, 250],//random strobe
[251, 255],//undefined

The supported RDM PIDs are as follows:

DISC_UNIQUE_BRANCH
DISC_MUTE
DISC_UN_MUTE
DEVICE_INFO
DMX_START_ADDRESS
IDENTIFY_DEVICE
SOFTWARE_VERSION_LABEL
DMX_PERSONALITY
DMX_PERSONALITY_DESCRIPTION
SLOT_INFO
SLOT_DESCRIPTION
MANUFACTURER_LABEL
SUPPORTED_PPARAMETERS

7. Factory Default Settings

Restore to Factory Default Settings

Press and hold down both "Menu" & "Enter" keys until the digital display turns off, then release the keys. The system will reset and the digital display will turn on again. All settings will be restored to factory default.

Factory default settings are:
DMX Address Code: A001
DMX Address Quantity: SW1=0: ch24, SW1=1: ch01
PWM Resolution Mode: BT 16
PWM Frequency: PF 10
Gamma: GA 1.5
Decoding Mode: DP 1.1

8. Decoding Mode

Select menu dP XX , press "ENTER" the display will flash. Press "UP/DOWN" to choose the decoding mode. Press "BACK" to confirm. Default mode is 1.1. Please refer to chart on back page for more details.

dp 1.1 = DMX Channel 1 = Output 1. DMX footprint is 24 channels.
dp 2.1 = True 16 bit dimming mode. DMX footprint is 48 channels.
dp 3.2 = Combines two Outputs on DMX channels 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34. DMX footprint is 36 channels.
dp 3.4 = Combines 4 Outputs on DMX channels 1, 4, 7, 10, 13, 16. DMX footprint is 18 channels.
dp 4.3 = Combines 3 Outputs on DMX channels 1, 5, 9, 13, 17, 21, 25, 29. DMX footprint is 32 channels.
dp 5.3 = Multiple Combinations of Outputs & strobe functions. DMX footprint is 40 channels.
dp 5.4 = Combines 4 Outputs on DMX channels 1, 6, 11, 16, 21, 26. DMX footprint is 30 channels.
dp 6.4 = Multiple Combinations of Outputs & strobe functions. DMX footprint is 36 channels.
dp 8.6 = Multiple Combinations of Outputs & strobe functions. DMX footprint is 32 channels.
dp 9.6 = Multiple Combinations of Outputs & strobe functions. DMX footprint is 36 channels.

DECODING PROGRAM MODE

	FACTORY DEFAULT STANDARD 8-BIT	TRUE 16-BIT	24 CHANNEL OUTPUT MODE. DECODING MODE VARIATIONS							
DMX CHANNEL	dp 1.1	dp 2.1	dp 3.2	dp 3.4	dp 4.3	dp 5.3	dp 5.4	dp 6.4	dp 8.6	dp 9.6
01	Output 1 dim	Output 1 dim	Output 1,2 dim	Output 1, 2 , 3, 4 dim	Output 1, 2 ,3 dim	Output 1, 2 ,3 dim	Output 1, 2 , 3, 4 dim	Output 1, 2 , 3, 4 dim	Output 1, 2 , 3, 4 dim	Output 1, 2 , 3, 4 dim
02	Output 2 dim	Output 1 fine dim	Output 1 dim	Output 1, 3 dim	Output 1 dim	Output 1 dim	Output 1 dim	Output 1 dim	Output 1 dim	Output 1 dim
03	Output 3 dim	Output 2 dim	Output 2 dim	Output 2, 4 dim	Output 2 dim	Output 2 dim	Output 2 dim	Output 2 dim	Output 2 dim	Output 2 dim
04	Output 4 dim	Output 2 fine dim	Output 3, 4 dim	Output 5, 6, 7, 8 dim	Output 3 dim	Output 3 dim	Output 3 dim	Output 3 dim	Output 3 dim	Output 3 dim
05	Output 5 dim	Output 3 dim	Output 3 dim	Output 5, 7 dim	Output 4, 5 ,6 dim	Output 1, 2 ,3 strobe	Output 4 dim	Output 4 dim	Output 4 dim	Output 4 dim
06	Output 6 dim	Output 3 fine dim	Output 4 dim	Output 6, 8 dim	Output 4 dim	Output 4, 5 ,6 dim	Output 5, 6, 7, 8 dim	Output 1, 2, 3, 4 strobe	Output 5, 6 dim	Output 5, 6 dim
07	Output 7 dim	Output 4 dim	Output 5, 6 dim	Output 9, 11, 10, 12 dim	Output 5 dim	Output 4 dim	Output 5 dim	Output 5, 6, 7, 8 dim	Output 5 dim	Output 5 dim
08	Output 8 dim	Output 4 fine dim	Output 5 dim	Output 9, 11 dim	Output 6 dim	Output 5 dim	Output 6 dim	Output 5 dim	Output 6 dim	Output 6 dim
09	Output 9 dim	Output 5 dim	Output 6 dim	Output 10, 12 dim	Output 7, 8 ,9 dim	Output 6 dim	Output 7 dim	Output 6 dim	Output 7, 8, 9, 10 dim	Output 1, 2, 3 4, 5, 6 strobe
10	Output 10 dim	Output 5 fine dim	Output 7, 8 dim	Output 13, 14 15, 16 dim	Output 7 dim	Output 4, 5 ,6 strobe	Output 8 dim	Output 7 dim	Output 7 dim	Output 7, 8 9, 10 dim
11	Output 11 dim	Output 6 dim	Output 7 dim	Output 13, 15 dim	Output 8 dim	Output 7, 8 ,9 dim	Output 9, 10 11, 12 dim	Output 8 dim	Output 8 dim	Output 7 dim
12	Output 12 dim	Output 6 fine dim	Output 8 dim	Output 14, 16 dim	Output 9 dim	Output 7 dim	Output 9 dim	Output 5, 6 7, 8 strobe	Output 9 dim	Output 8 dim
13	Output 13 dim	Output 7 dim	Output 9, 10 dim	Output 17, 18 19, 20 dim	Output 10 11, 12 dim	Output 8 dim	Output 10 dim	Output 9, 10 11, 12 dim	Output 10 dim	Output 9 dim
14	Output 14 dim	Output 6 fine dim	Output 9 dim	Output 17, 19 dim	Output 10 dim	Output 9 dim	Output 11 dim	Output 9 dim	Output 10, 11 dim	Output 10 dim
15	Output 15 dim	Output 8 dim	Output 10 dim	Output 18, 20 dim	Output 11 dim	Output 7, 8, 9 strobe	Output 12 dim	Output 10 dim	Output 11 dim	Output 11, 12 dim
16	Output 16 dim	Output 8 fine dim	Output 11, 22 dim	Output 21, 22 23, 24 dim	Output 12 dim	Output 10, 11, 12 dim	Output 13, 14, 15, 16 dim	Output 11 dim	Output 12 dim	Output 11 dim
17	Output 17 dim	Output 9 dim	Output 11 dim	Output 21, 23 dim	Output 13, 14, 15 dim	Output 10 dim	Output 13 dim	Output 12 dim	Output 13, 14, 15, 16 dim	Output 12 dim
18	Output 18 dim	Output 9 fine dim	Output 12 dim	Output 22, 24 dim	Output 13 dim	Output 11 dim	Output 14 dim	Output 9, 10, 11, 12 strobe	Output 13 dim	Output 7, 8, 9 , 10, 11, 12 strobe
19	Output 19 dim	Output 10 dim	Output 13, 14 dim		Output 14 dim	Output 12 dim	Output 15 dim	Output 13, 14, 15, 16 dim	Output 14 dim	Output 13, 14, 15, 16 dim
20	Output 20 dim	Output 10 fine dim	Output 13 dim		Output 15 dim	Output 10 11, 12 strobe	Output 16 dim	Output 13 dim	Output 15 dim	Output 13 dim
21	Output 21 dim	Output 11 dim	Output 14 dim		Output 16, 17, 18 strobe	Output 13, 14, 15 dim	Output 17, 18 19, 20 strobe	Output 14 dim	Output 16 dim	Output 14 dim
22	Output 22 dim	Output 11 fine dim	Output 15, 16 dim		Output 16 dim	Output 13 dim	Output 17 dim	Output 15 dim	Output 17, 18 dim	Output 15 dim
23	Output 23 dim	Output 12 dim	Output 15 dim		Output 17 dim	Output 14 dim	Output 18 dim	Output 16 dim	Output 17 dim	Output 16 dim
24	Output 24 dim	Output 12 fine dim	Output 16 dim		Output 18 dim	Output 15 dim	Output 19 dim	Output 13, 14, 15, 16	Output 18 dim	Output 17, 18 dim

DECODING PROGRAM MODE

	FACTORY DEFAULT STANDARD 8-BIT	TRUE 16-BIT	24 CHANNEL OUTPUT MODE. DECODING MODE VARIATIONS							
DMX CHANNEL	dp 1.1	dp 2.1	dp 3.2	dp 3.4	dp 4.3	dp 5.3	dp 5.4	dp 6.4	dp 8.6	dp 9.6
25		Output 13 dim	Output 17, 18 dim		Output 19, 20, 21 dim	Output 13, 14, 15 strobe	Output 20 dim	Output 17, 18, 19, 20 dim	Output 19, 20, 21 , 22 dim	Output 17 dim
26		Output 13 fine dim	Output 17 dim		Output 20 dim	Output 16, 17, 18	Output 21, 22, 23, 24 dim	Output 17 dim	Output 19 dim	Output 18 dim
27		Output 14 dim	Output 18 dim		Output 21 dim	Output 16 dim	Output 21 dim	Output 18 dim	Output 20 dim	Output 13, 14, 15, 16, 17, 18 strobe
28		Output 14 fine dim	Output 19, 20 dim		Output 22 dim	Output 17 dim	Output 22 dim	Output 19 dim	Output 21 dim	Output 19, 20, 21, 22 dim
29		Output 15 dim	Output 19 dim		Output 22, 23, 24 dim	Output 18 dim	Output 23 dim	Output 20 dim	Output 22 dim	Output 19 dim
30		Output 15 fine dim	Output 20 dim		Output 22 dim	Output 16, 17, 18 strobe	Output 24 dim	Output 17, 18, 19, 20 strobe	Output 23, 24 dim	Output 20 dim
31		Output 16 dim	Output 21, 22 dim		Output 23 dim	Output 19, 20, 21 dim		Output 21, 22, 23, 24 dim	Output 23 dim	Output 21 dim
32		Output 16 fine dim	Output 21 dim		Output 24 dim	Output 19 dim		Output 21 dim	Output 24 dim	Output 22 dim
33		Output 17 dim	Output 22 dim			Output 20 dim		Output 22 dim		Output 23, 24 dim
34		Output 17 fine dim	Output 23, 24 dim			Output 21 dim		Output 23 dim		Output 23 dim
35		Output 18 dim	Output 23 dim			Output 19, 20, 21 strobe		Output 24 dim		Output 24 dim
36		Output 18 fine dim	Output 24 dim			Output 22, 23, 24 dimming		Output 21, 22, 23, 24 strobe		Output 19, 20, 21, 22, 23, 24 strobe
37		Output 19 dim				Output 22 dim				
38		Output 19 fine dim				Output 23 dim				
39		Output 20 dim				Output 24 dim				
40		Output 20 fine dim				Output 22, 23, 24 strobe				
41		Output 21 dim								
42		Output 21 fine dim								
43		Output 22 dim								
44		Output 22 fine dim								
45		Output 23 dim								
46		Output 23 fine dim								
47		Output 24dim								
48		Output 24 fine dim								