

**Main Input Voltage
 DMX512 Decoder**



High Power DMX Decoder & Driver

Meets DMX 512/1990 Protocol
 1210132 can drive 350mA (Each Channel)
 Capable of driving many kinds of RGB LED lamps and luminaires

STAR ALLIANCE TECHNOLOGIES
 Home & Building Applications

CHKD	Ford					MATL:	McNell	24.09.2008		
						FINISH	Wilson			
DRW:	Carter		TOLERANCE	Peterson	DATE					
APPD:	Jackson				Sheet No. 1 from 7	Part No.:				1210132

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

INTRODUCTION

Thank you for choosing 1210132 DMX512 decoder. With advanced micro-computer control technology, 1210131 convert the widely used DMX512/1990 signal to analog signal. It allows user to choose 1~3 output channel, 256-level brightness control. This compact decoder connects to light console and analog device, RGB LED lamps or lighting & building lamps allowing its user to create endless possibilities of light shows.

FEATURES

- Meets DMX512/1990 protocols
- 256-level brightness, full-color control
 - 3 output channels
- 1210132 can drive 350mA current (each channel)
- Compatible with any DMX512 controller to produce perfect lighting effects.
 - Capable to drive 1 - 3 channel of lamps
 - Can set the DMX addresses freely
- Indicator light of each channel state within (optional)
- Modular design, can be combined with LED luminaires neatly
 - Low input voltage, safe to operate.
 - Custom-made size is available

TECHNICAL CHARACTERISTICS

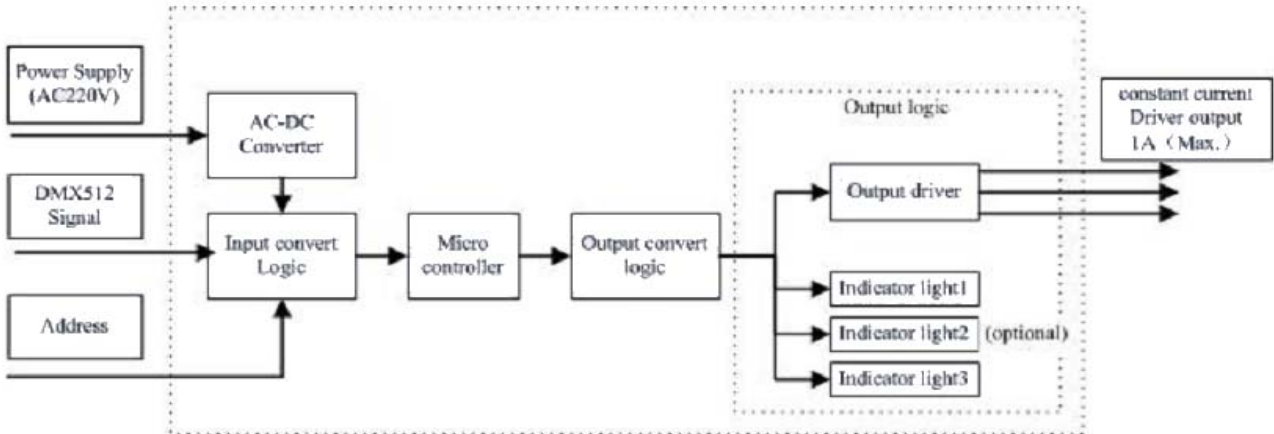
Decode Channel:	1~3
Input Signal:	DMX-512/1990 digital signal
Output Signal:	0~48V PWM signal
Power Supply:	195~265V AC 50-60Hz
Power Rating:	< 50W
Operating Temperature:	0°C ~ 70°C
Size:	345 mm x 60 mm x 48 mm, Custom size available
Weight:	≤ 300 g

STAR ALLIANCE TECHNOLOGIES
Home & Building Applications

CHKD	Ford					MATL:	McNell	24.09.2008			
						FINISH	Wilson				
DRW:	Carter		TOLERANCE	Peterson	DATE						
APPD:	Jackson			Sheet No. 2 from 7			Part No.:	1210132			

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

INTERNAL BLOCK DIAGRAM



APPEARANCE



- (1) DMX signal input interface (RJ11)
- (2) DMX signal output interface (RJ11)
- (3) Address setting interface
- (4) Driver output interface
- (5) Power input interface

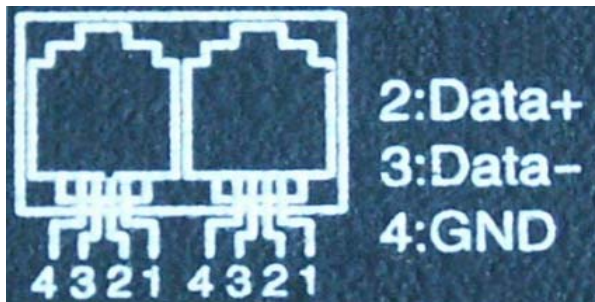
STAR ALLIANCE TECHNOLOGIES
 Home & Building Applications

CHKD	Ford					MATL:	McNell	24.09.2008		
						FINISH	Wilson			
DRW:	Carter		TOLERANCE	Peterson	DATE					
APPD:	Jackson				Sheet No. 3 from 7	Part No.:				1210132

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

INTERFACE INTRODUCTION

- DMX signal interface



- 1: No Connection
- 2: Data +
- 3: Data -
- 4: Ground

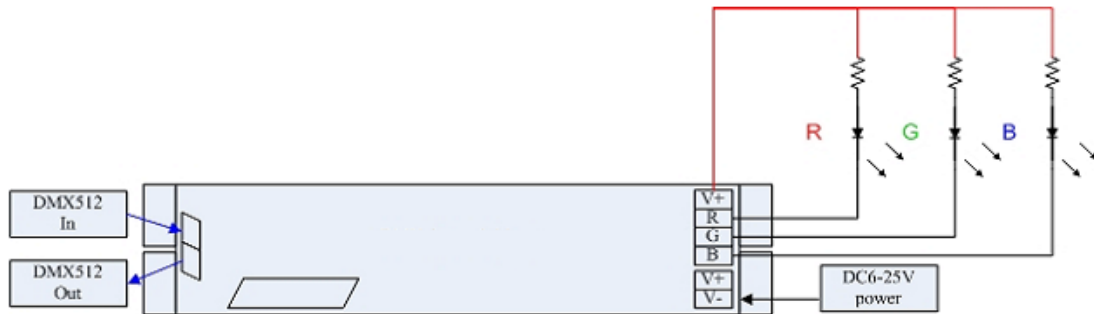
- Address setting interface: Please find the detailed instruction for Address setting at Page
- Power input interface: DC 85-265V input
- Driver output interface: Common anode, V+ and R,G,B interface, can drive kinds of RGB module or single-color module, Can regulate output current according to the actual load

STAR ALLIANCE TECHNOLOGIES
 Home & Building Applications

CHKD	Ford					MATL:	McNell	24.09.2008		
						FINISH	Wilson			
DRW:	Carter		TOLERANCE	Peterson	DATE					
APPD:	Jackson				Sheet No. 4 from 7	Part No.:				1210132

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

TYPICAL APPLICATIONS (RGB LED)



Connection of DMX-512 Signal

- The wire for DMX signal is STP, the DMX signal has positive and negative signal. Pay attention to the polarity while soldering. Connect the positive signal, negative signal and GND to the corresponding signal of 1210131.
- Connect a signal terminal at the end of the whole connection.

Connection of DMX-512 Signal

This product has a wide input/output voltage(DC 6-25V), it's rating current is 5A, so the rated power is different in different input voltage, for example:

Rating power in 12V: $12V \times 5A \times 3 = 180\text{ W}$

Rating power in 24V: $24V \times 5A \times 3 = 360\text{ W}$

DMX-512 Address Setting

The DIP switch on 1210131 can set the binary value of the DMX512 address to receive data. The correlative bits is the 1-9 bits of the DIP switch, the 1st bit is LSB, the 9th bit MSB 512 addresses totally. The start address is the number of the first channel of the decoder, the second channel will receive the data of start address+1, and the third channel will receive the data of start address+2. There are two way to find out the relation between the DIP switch and DMX address.

STAR ALLIANCE TECHNOLOGIES
 Home & Building Applications

CHKD	Ford					MATL:	McNeill	24.09.2008		
						FINISH	Wilson			
DRW:	Carter		TOLERANCE	Peterson	DATE					
APPD:	Jackson				Sheet No. 5 from 7	Part No.:				1210132

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

Calculation Method:

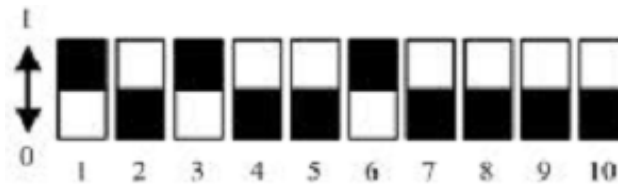
calculational formula:[the sum of 1~9 bit of the DIP switch] + 1 = DMX start address
 Set the n(th) bit of the DIP switch up (set to "1")to get the value of such bit;
 Set the n(th) bit of the DIP switch down "0", so the value of this bit is 0.
 Note:the 10th bit is not use.

DIP:

DIP	1	2	3	4	5	6	7	8	9
Value	1	2	4	8	16	32	64	128	256

Example 1: Set to 38

Set the 6th,3rd,1st bit of the DIP switch to "1", others set to "0",
 then the sum of the 1~9 is 32+4+1, then add 1 to it,
 is the start address 38. That is: [32 + 4 + 1] + 1 = 38



Example 2: Set to 226

Set the 8th, 7th, 6th, 1st bit to "1", others set to "0",
 then the sum of the 1~9 is 128+64+32+1, then add 1 to it,
 is the start address 226. That is: [128 + 64 + 32 + 1] + 1 = 226

STAR ALLIANCE TECHNOLOGIES
Home & Building Applications

CHKD	Ford					MATL:	McNell	24.09.2008			
						FINISH	Wilson				
DRW:	Carter		TOLERANCE	Peterson	DATE						
APPD:	Jackson			Sheet No. 6 from 7			Part No.:	1210132			

STAR ALLIANCE TECHNOLOGIES Home and Building Applications

Warranty Discription

EDCON WARRANTY

Manufacturer warrants to the Purchaser that each Product manufactured and sold by it will be free from defects in material and workmanship in its intended use (normal wear and tear excepted) for the period of one year from date of Purchasers purchase (the invoice date) from Manufacturer. Manufacturers warranty flows only to Purchaser. If any Product covered by this warranty is returned by Purchaser in accordance with Manufacturers Products Return Policy, including without limitation its return authorization provisions, within the applicable warranty period set forth above, and upon examination Manufacturer determines to its satisfaction that such Product was defective in material or workmanship at the time of delivery to the Purchaser. Manufacturer will, at its option, repair or replace the Product or the defective part thereof, or reimburse Purchaser for the purchase price. For purposes of clarity, "repair or replace the Product or the defective part thereof" does not include any reinstallation costs or expenses. If Manufacturer chooses to replace the Product and is not able to do so because it has been discontinued or is not available, Manufacturer may replace it with a comparable product. The Products Return Policy is posted on Manufacturers Internet web site at <http://www.edcon-components.com>. The foregoing notwithstanding, Manufacturer will not be responsible for damage to any Product resulting from misuse, negligence, acts of God or accident or resulting from repairs or alterations made by any person or firm not duly authorized by Manufacturer in writing. Purchaser shall convey with each Product distributed to end users the MANUFACTURERS WARRANTY included by Manufacturer with such Product, and, if Manufacturer determines that the appropriate remedy for a defective product is refund of Purchasers purchase price, Purchaser shall refund to the end user (or arrange for the refund to the end user of) the full purchase price paid by the end user for such defective Product. The Products Return Policy is posted on Manufacturers Internet web site at <http://www.edcon-components.com>. The foregoing notwithstanding, Manufacturer will not be responsible for damage to any Product resulting from misuse, negligence, acts of God or accident or resulting from repairs or alterations made by any person or firm not duly authorized by Manufacturer in writing. Purchaser shall convey with each Product distributed to end users the MANUFACTURERS WARRANTY included by Manufacturer with such Product, and, if Manufacturer determines that the appropriate remedy for a defective product is refund of Purchasers purchase price, Purchaser shall refund to the end user (or arrange for the refund to the end user of) the full purchase price paid by the end user for such defective Product.

THIRD PARTY WARRENTIES

With respect to products sold to the Purchaser by Manufacturer but not manufactured by Manufacturer, MANUFACTURER MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION; ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, but will make available to the Purchaser, to the extent permitted by law and relevant contracts, the warranties of manufacturer of the relevant product upon the Purchasers timely written request. NON-IMPLIED WARRANTIES

NON-IMPLIED WARRENTIES

THE WARRANTIES GIVEN IN THESE ARE THE ONLY WARRANTIES GIVEN BY THE MANUFACTURER WITH RESPECT TO THE PRODUCTS AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, OF NON INFRINGEMENT AND OF FITNESS FOR A PARTICULAR PURPOSE. PURCHASERS EXCLUSIVE REMEDIES, AND MANUFACTURERS SOLE LIABILITY, FOR ANY NONCONFORMITY OR DEFECT IN ANY PRODUCT SHALL BE THOSE EXPRESSED HEREIN. LIMITATION OF LIABILITY

LIMITATION OF LIABILITY

An essential purpose of the limited exclusive liabilities and remedies in this Agreement is allocation of risks between Manufacturer and Purchaser, which allocation of risks is reflected in the purchase price for the Products. UNDER NO CIRCUMSTANCES SHALL MANUFACTURERS LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR MANUFACTURERS PERFORMANCE OR ASSERTED FAILURE TO PERFORM HEREUNDER, IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EXCEED THE PURCHASE PRICE OF THE PRODUCT TO WHICH SUCH LIABILITY RELATES. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES RESULTING FROM LOSS OF USE, PROFITS, BUSINESS OR GOODWILL, WHETHER OR NOT MANUFACTURER HAS BEEN ADVISED OF THE POSSIBILITY THEREOF.

STAR ALLIANCE TECHNOLOGIES
Home & Building Applications

CHKD	Ford					MATL:	McNeill	24.09.2008		
						FINISH	Wilson			
DRW:	Carter		TOLERANCE	Peterson	DATE					
APPD:	Jackson				Sheet No. 7 from 7	Part No.:		1210132		