GDS
LED
PROFILES
ACCESSORIES
GRAPHIC. DISPLAY. SYSTEMS

PRODUCT DATA SHEET

PRODUCT : DMX512 DECODER
VOLTAGE : 12-24V DC
CURRENT : 8A/CHANNEL
CHANNEL QTY : 4 CHANNELS

GDS-DMX-T4CH

PRODUCT DESCRIPTION

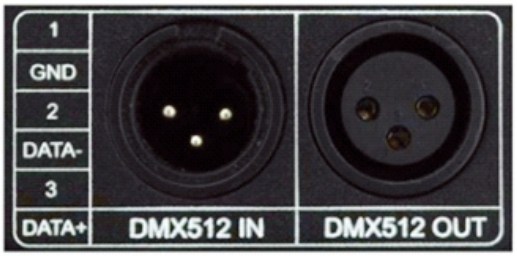
● THIS DMX DECODER ADOPTS ADVANCED COMPUTER CONTROL CHIP,CAN RECEIVE THE INTERNATIONAL DMX - 512 STANDARD DIGITAL CONTROL SIGNALS AND CONVERTED INTO PWM CONTROLLER SIGNAL TO DRIVE THE LED.IT CAN BE CONTROLLED BY THE DMX CONSOLE,AND CAN CONNECTED WITH NUMBERS OF DMX DECODER TO INCREASE THE OUTPUT POWER TO REALIZE ALL KINDS OF CHANGING MODE.BESIDES, THIS DMX DECODER CAN BE USED AS THE SYNCHRONOUS CONTROLLER TO CONTROLLED THE LED ALONE,IT CAN REALIZE THE SYNCHRONOUS EFFECTS.THIS DECODER ADOPT THE DIGITAL TUBE TO SHOW THE ADDRESS CODE,AND WITH 3 BUTTONS TO SETTING,MAKE IT MORE EASY TO USED.

TECHNICAL PARAMETERS

PRODUCTS NAME	4 CHANNEL DMX512 DECODER
WORKING TEMPERATURE	-20-60°C
SUPPLY VOLTAGE	DC12～24V
EFFICENCY	250LM/W
OUTPUT CURRENT	EACH CHANNEL8A
OUTPUT POWER	8A EACH CHANNEL 12V:<384W, 24V:<768W
EXTERNAL DIMENSION	L166×W67×H41MM
OUTPUT	4 CHANNELS
DMX512STANDARD	DMX512/1990
ACCESSORIES	1 PAIR OF DMX512 IN AND DMX512 OUT CONNECTORS

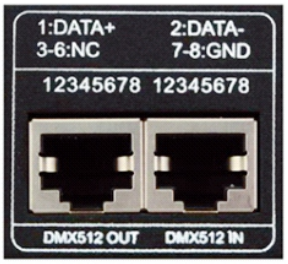
CONNECTION DESCRIPTION

- DMX INPUT/OUTPUT INTERFACE



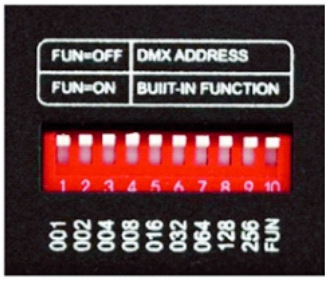
STANDARD XLR-3 CARON SOCKET

- DMX INPUT/OUTPUT INTERFACE RJ45 PORT



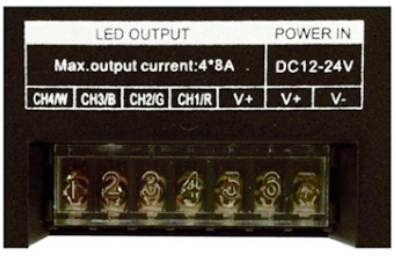
STANDARD CABLE RJ45 PORT

- ADDRESS CODE AND FUNCTION SETTING BUTTON:



ADOPT 10 BIT SITE DIAL TYPE DIP SWITCH

- POWER INPUT AND LOAD OUTPUT INTERFACE:



ADOPT BLACK COLUMN TYPE TERMINAL (WITH CAP)

DIRECTION FOR USE

- THIS PRODUCT IS IN COMPLIANCE WITH DMX512 PROTOCOL, AND COMPATIBLE AUTOINDEX ADDRESSING AND MANUAL ESTABLISHMENT ADDRESS.

EACH UNIVERSAL DMX CONTROLLER TAKES UP 4 DMX ADDRESSES. IT ADOPTS 2 WAYS (AUTO-INDEX ADDRESSING AND CODE SWITCH) TO SET UP THE ADDRESS. WHEN ADOPTING THE AUTO-INDEX ADDRESSING, ALL SWITCHES ARE "OFF" STATUS. WHEN ADOPTING THE CODE SWITCH TO SET UP ADDRESS, THE 10TH BIT(FUN) IS "OFF" STATUS, AND OTHER 9 BITS ARE BINARY VALUE CODE SWITCH WHICH ARE USED TO SET UP THE DMX STARTING ADDRESS CODE. THE FIRST BIT IS THE LOWEST ORDER BIT, AND THE NINTH IS THE HIGHEST ORDER BIT. THAT CAN SET UP 511 ADDRESS CODES. THE DMX STARTING ADDRESS CODE IS EQUAL TO THE SUM OF 1ST TO 9TH BIT. IF MOVE DOWN ONE BIT OF CODE SWITCH ("ON" SET "1"), YOU CAN GET THE PLACE-VALUE OF THIS BIT. IF MOVE UP (SET "0"), THE PLACE-VALUE IS 0. FOR EXAMPLE: IF YOU WANT TO SET UP DMX STARTING ADDRESS CODE FOR 73, YOU SHOULD MOVE DOWN THE 7TH, 4TH, AND 1ST BIT OF CODE SWITCH FOR "1", AND OTHERS FOR "0", THEN THE PLACE-VALUE'S SUM OF 1ST TO 9TH BIT IS 64+8+1. THAT IS TO SAY, THE DMX512 STARTING ADDRESS CODE IS 73. (THE CORRESPONDENCE DIALS CODE POSITION IS AS FOLLOWS)

- TO CHOOSE THE CHANNEL FROM THE DIAL IN-LINE PACKAGE(DIP) SWITCH:

DECIMALS	1		2	3	4	5	6	7	8	9	10
WEIGHT- NUMBER	1		2	4	8	16	32	64	128	256	FUN

- **EXAMPLE 1:**

LIKE FIGURE 1, TO SET UP THE DMX STARTING ADDRESS CODE FOR 37, SHOULD MOVE DOWN THE 6TH, 3TH, 1ST BIT FOR "1", OTHERS FOR "0". THEN THE PLACE-VALUE'S SUM OF 1ST TO 9TH BIT IS 32+4+1, AS IS FOR 37.

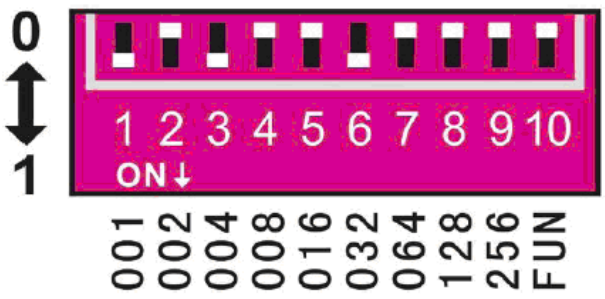


FIGURE 1

● **EXAMPLE 2:**

LIKE FIGURE 2, TO SET UP THE DMX STARTING ADDRESS CODE FOR 328, SHOULD MOVE DOWN THE 9TH, 7TH, 4TH BIT FOR "1", OTHERS FOR "0". THEN THE PLACE-VALUE'S SUM OF 1ST TO 9TH BIT IS 256+64+8, AS IS FOR 328.

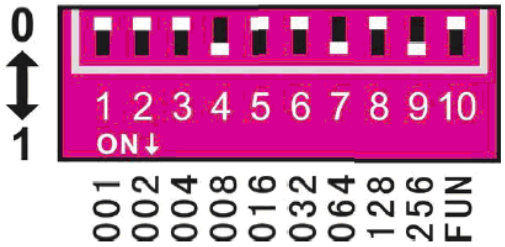


FIGURE 2

OTHER FUNCTION'S DIRECTION FOR USE

● **TEST FUNCTION:**

THE DIP SWITCH'S 10TH BIT IS "FUN", FOR BUILT-IN FUNCTION KEY. WHEN "FUN"="OFF", IS FOR DMX DECODER FUNCTION. THIS IS USED TO ADOPT DMX SIGNAL. WHEN "FUN"="ON", THE TEST FUNCTION LIKE FIGURE 3:

1-9 SWITCH OFF	: BLACK
SWITCH 1=ON	: RED
SWITCH 2=ON	: GREEN
SWITCH 3=ON	: BLUE
SWITCH 4=ON	: YELLOW
SWITCH 5=ON	: PURPLE
SWITCH 6=ON	: CYAN
SWITCH 7=ON	: WHITE
SWITCH 8=ON	: SEVEN-COLOR JUMPY CHANGING (8 GRADES OF SPEEDS ARE AVAILABLE)
SWITCH 9=ON	: ALL-COLOR GRADUAL CHANGING (8 GRADES OF SPEEDS ARE AVAILABLE)

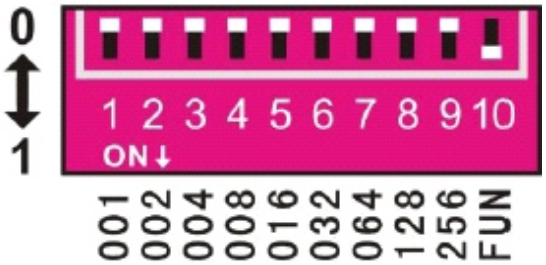


FIGURE 3

- SPEED CHOICE OF JUMPY CHANGING AND GRADUAL CHANGING EFFECT:

IN TEST FUNCTION, WHEN SWITCH 8=ON, IS FOR SEVEN-COLOR JUMPY CHANGING EFFECT. WHEN SWITCH 9=ON, IS FOR SEVEN-COLOR GRADUAL CHANGING EFFECT. 8 GRADES OF SPEEDS ARE AVAILABLE FOR EACH EFFECT:

1-7 SWITCH OFF : 0 GRADES OF SPEEDS
SWITCH 1=ON : 1 GRADE OF SPEEDS
SWITCH 2=ON : 2 GRADES OF SPEEDS
SWITCH 3=ON : 3 GRADES OF SPEEDS
SWITCH 4=ON : 4 GRADES OF SPEEDS
SWITCH 5=ON : 5 GRADES OF SPEEDS
SWITCH 6=ON : 6 GRADES OF SPEEDS
SWITCH 7=ON : 7 GRADES OF SPEEDS (MAXIMUM SPEED)

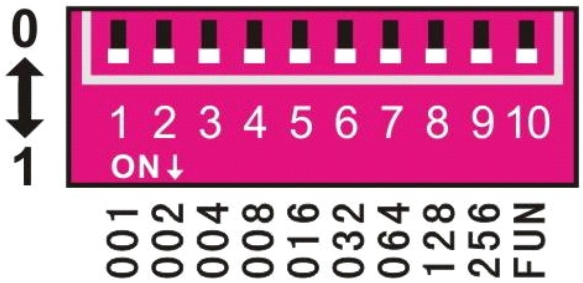


FIGURE 4

LIKE FIGURE 4, WHEN ALL SWITCHES ARE "ON" AT THE SAME TIME, THE MORE VALUE IS TAKEN AS FINAL. THE STATE OF DECODER IS GRADUAL CHANGING OF TEST FUNCTION. ITS VARIABLE SPEED IS 7. IN ADDITION, WHEN SIGNAL INDICATOR (GREEN) BLINKS SLOWLY, IT RUNS THE BUILT-IN PROGRAM EFFECTIVENESS OF DECODER. WHEN THE DECODER RECEIVES THE DMX SIGNAL, SIGNAL INDICATOR WILL FLASH RAPIDLY.

TYPICAL APPLICATION: