

# INSTALLATION INSTRUCTIONS | TLPINT DMX Series: DMX/RDM 4CH CV Decoder

The important safeguards and instructions in this manual are not meant to cover all possible conditions and situations that may occur.

**Note:** Before attempting installation please refer to your local electrical code.

## IMPORTANT SAFETY INSTRUCTIONS

### • READ AND SAVE THESE INSTRUCTIONS FOR LATER USE

- Decoder shall be installed and serviced by an Electrician in accordance with Article 450 of the National Electric Code (NEC)
- This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will prolong the working life of the Decoder
- Must be installed in a well-ventilated area, free from explosive gases and vapors; proper operation requires for free flow of air
- Check if the output voltage of the LED power supply used complies with the working voltage of the product
- Ensure that adequate sized cable is used from the controller to the LEDs to carry the current and ensure that the cable is secured tightly in the connector
- Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LEDs
- If the driver has any visible damage, do not install it
- Installing contrary to instructions may cause unsafe conditions
- Turn off power at fuse or circuit breaker box before installation or any maintenance work; driver must be grounded to avoid potential electric shock and any other potential hazards

- Product must be mounted in locations and at heights consistent with its intended use and in compliance with the National Electrical Code (NEC) and local building codes

### • WARNING: TO AVOID FIRE, SHOCK OR ELECTROCUTION

- Turn off the power at fuse or circuit breaker box before installation or maintenance work
- Wear rubber soled shoes and work on a sturdy wooden or non-conductive ladder
- Ground the driver to avoid potential electric shocks and to ensure reliable starting
- Double check all connections and screws, making sure they are tight and correct

### • WARNING: RISK OF FIRE

- Most dwellings built before 1985 have supply wire rated at 60°C
- Supply conductors (power wires) connecting the fixture must be rated at minimum of 90°C
- If a fault occurs, return the product to your supplier; do not attempt to fix this product by yourself
- Call the Technical Support department at ConTech Lighting with any installation questions: 847.559.5500

## INSTRUCTIONS



The TLPINT DMX Series Decoders, with the standard RDM (Remote Device Management) protocol, support DMX512 signal bi-directional communication, achieve remote management of reading and writing DMX addresses (DMX Master Controller must recognize the RDM protocol). Equipped with DMX standard 3-PIN XLR, RJ45, green terminal block connectors. Allows for 0-100% dimming or different lighting effects; compatible with Single Color, Tunable White, RGB, or RGBW Strip Lighting.

**INPUT SIGNAL:** DMX512, RDM

**INPUT VOLTAGE:** 5~24VDC

**CURRENT LOAD:** 5A (4CH Max: 20A)

**OUTPUT POWER:** 25W Min. to 120W Max. (4CH Max: 480W)

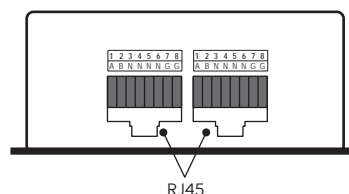
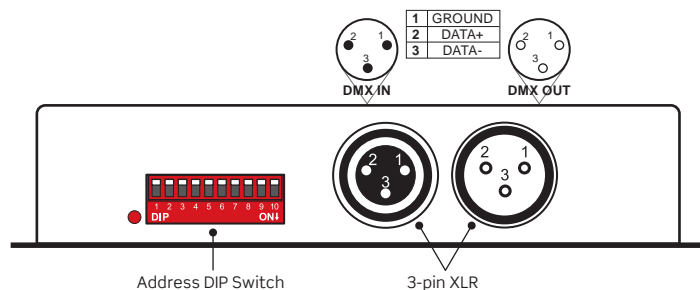
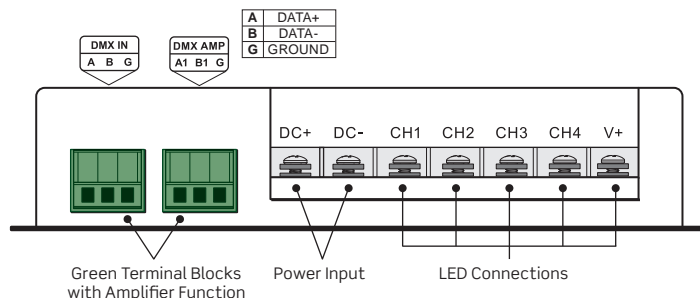
**DMX512 SOCKET:** 3-PIN XLR, RJ45, Green Terminal Block

**DIMMING RANGE:** 0 to 100%

**PROTECTION:** Short circuit / Over current

**WORKING TEMP:** -22°F to 149°F (-30°C to 65°C)

**WEIGHT (G.W.):** 0.98 Lbs



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### DIP SWITCH OPERATION

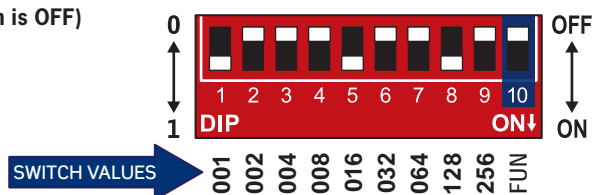
#### RDM MODE

DIP Switches 1 through 10 are OFF



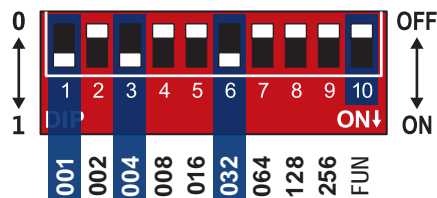
#### SETTING DMX ADDRESS

FUN = OFF (10th DIP Switch is OFF)

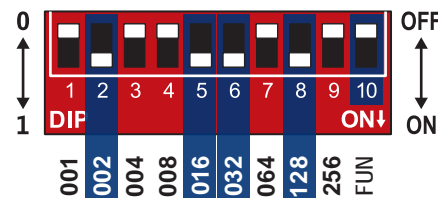


DMX Address Value = total value of DIP Switches 1 through 9

To set DMX Address, slide Switch to the ON position to register Switch value, otherwise Switch will be OFF and register as 0



To set address to 37:  
001 + 004 + 032 = 37



To set address to 178:  
002 + 016 + 032 + 128 = 178

#### SELF-TESTING MODE

FUN = ON (10th DIP Switch is ON)

For changing effects:

- DIP Switches 8 and 9 = ON
- DIP Switches 1 through 7 are used to adjust the seven (7) speed levels; Switch 7 is the fastest speed level

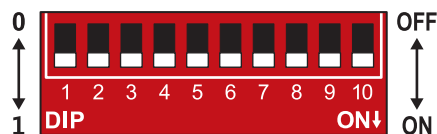


FIGURE 1

**NOTE:** When several DIP Switches are on, the Decoder defaults to the highest Switch value. As Figure 1 shows, the effect will be 7 colors smooth at 7 speed level.

DIP SWITCH	10 ON	1-9 OFF	1 ON	2 ON	3 ON	4 ON	5 ON	6 ON	7 ON	8 ON	9 ON
SELF-TEST FUNCTION	Self-Test Mode	Static Black	Static Red	Static Green	Static Blue	Static Yellow	Static Purple	Static Cyan	Static White	7 Colors Switching	7 Colors Smooth

#### DMX DIMMING INSTRUCTION

Each TLPINT DMX Decoder occupies four (4) DMX addresses when connecting the Decoder. The initial default address is 1, please find the corresponding relationship in Table 1.

Table 1		
CHANNEL	DMX CONSOLE	DMX DECODER
CH1	0-255	PWM 0-100% (R LED)
CH2	0-255	PWM 0-100% (G LED)
CH3	0-255	PWM 0-100% (B LED)
CH4	0-255	PWM 0-100% (W LED)

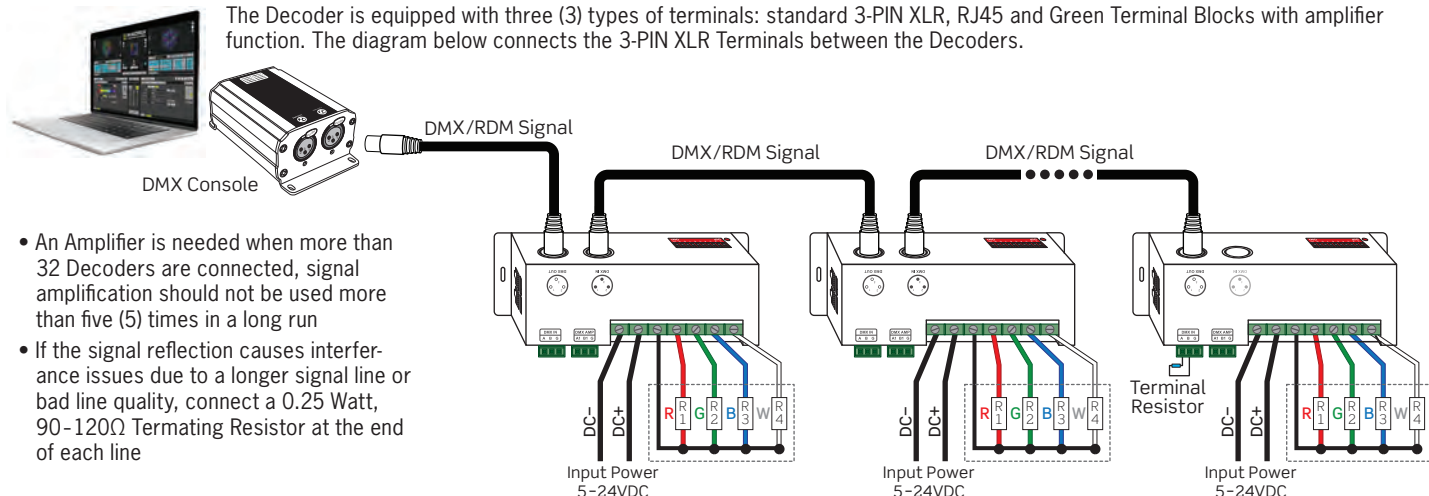
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### WIRING DIAGRAMS

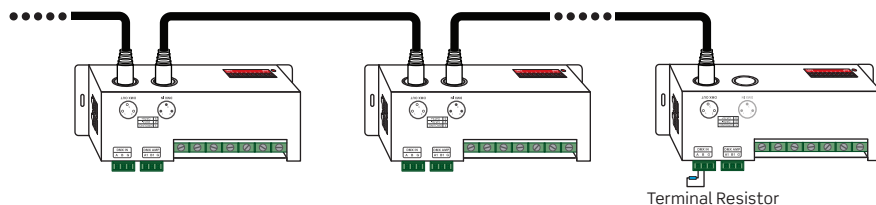
#### CONNECTING MULTIPLE STANDARD DMX512 DECODERS



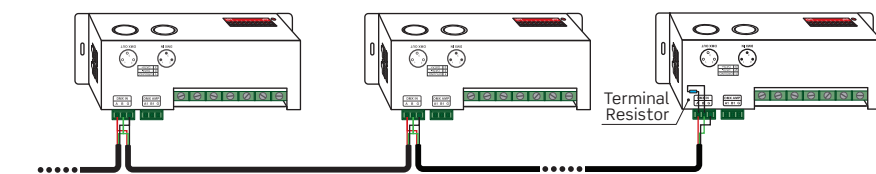
#### STANDARD DMX512 DECODER CONNECTIONS

Decoders can be connected in the following ways:

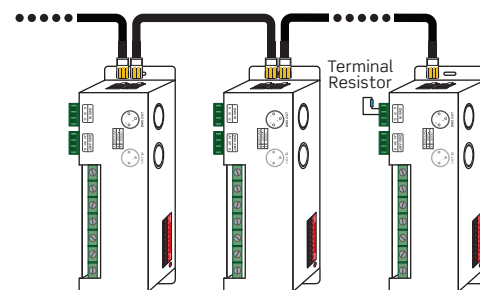
##### 3-PIN XLR Terminals Connected in Parallel



##### Green Terminal Blocks Connected in Parallel



##### RJ45 Terminals Connected in Parallel



#### CONNECTING THE AMP SIGNAL AMPLIFIER TERMINAL

Use the Green Terminal Blocks to amplify the signal for long runs when necessary; Signal amplification should not be used more than five (5) times in a long run

DMX Signal Input

