

TECHNICAL DATA SHEET

PIXEL LED AMPLIFIER



PRODUCT DESCRIPTION :

TTL SIGNAL ISOLATION | LONG-DISTANCE DRIVER AMPLIFIER

PIXEL LED AMPLIFIER IS DESIGNED WITH TTL (SPI) SIGNAL ISOLATION TECHNOLOGY, USING AN OPTICAL COUPLER TO ISOLATE INPUT AND OUTPUT SIGNALS. THIS PREVENTS SIGNAL INTERFERENCE OR DAMAGE CAUSED BY WRONG WIRING OR LIGHTNING STRIKES.

WITH A BUILT-IN DRIVER AMPLIFICATION CIRCUIT, IT SUPPORTS STABLE SIGNAL TRANSMISSION UP TO 50-300 METERS BETWEEN CONTROLLERS AND LED STRIPS OR BETWEEN MULTIPLE LED STRIPS.

IT SUPPORTS DC 5V TO 24V POWER INPUT AND IS SUITABLE FOR IC1903 LED STRIPS, PROVIDING MAXIMUM PERFORMANCE AND EXTENDED LED STRIP LENGTH WITHOUT SIGNAL LOSS.

PRODUCT FEATURES

- SIGNAL AMPLIFICATION
- WIDE COMPATIBILITY
- EXTENDED LOAD CAPACITY
- DUAL POWER INPUT
- EASY WIRING DESIGN
- STABLE PERFORMANCE
- COMPACT & DURABLE DESIGN

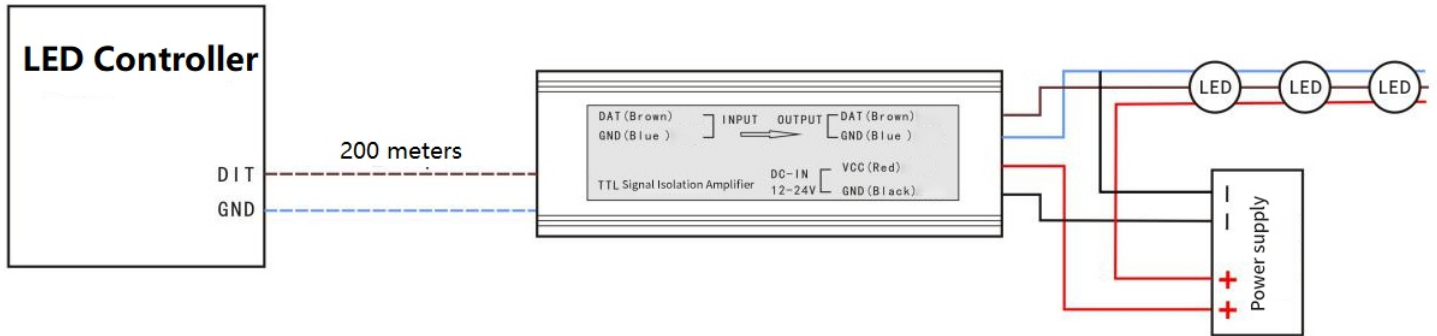
APPLICATIONS

- BUILDING FACADE LIGHTING ● STAGE DECORATION ● DJ BOOTH LIGHTING
- OUTDOOR PIXEL SCREEN PROJECTS ● ARCHITECTURAL LED PROJECTS

TECHNICAL PARAMETERS

PARAMETER	SPECIFICATION
PRODUCT NAME	PIXEL LED SIGNAL AMPLIFIER
WORKING VOLTAGE	DC12V / DC24V (DEPENDS ON MODEL)
SIGNAL TYPE	TTL LEVEL SIGNAL (DATA)
OUTPUT CHANNEL	2 CHANNELS (DATA, GROUND)
TRANSMISSION DISTANCE	5M - 20M (DEPENDS ON SIGNAL TYPE & WIRE QUALITY)
SIGNAL AMPLIFICATION	ONE-TO-ONE COPY OF ORIGINAL SIGNAL
SUPPORTED IC TYPES	WS2811, WS2812, WS2815, TM1903, TM1814, SK6812, ETC.
WORKING TEMPERATURE	-20°C ~ +60°C
STORAGE TEMPERATURE	-30°C ~ +80°C
MATERIAL	ABS / ALUMINUM ALLOY HOUSING
DIMENSIONS	84MM X 33MM X 21MM (APPROX.)
NET WEIGHT	60G (APPROX.)
PROTECTION	ISOLATION PROTECTION

CONNECTION LAYOUT



Note : There are total 3 channels in the purple led controller and IC 1903 led strips is DC 12V, 14.4W / meter, *(so we advise each channel to hold 40m led strips maximum .)*