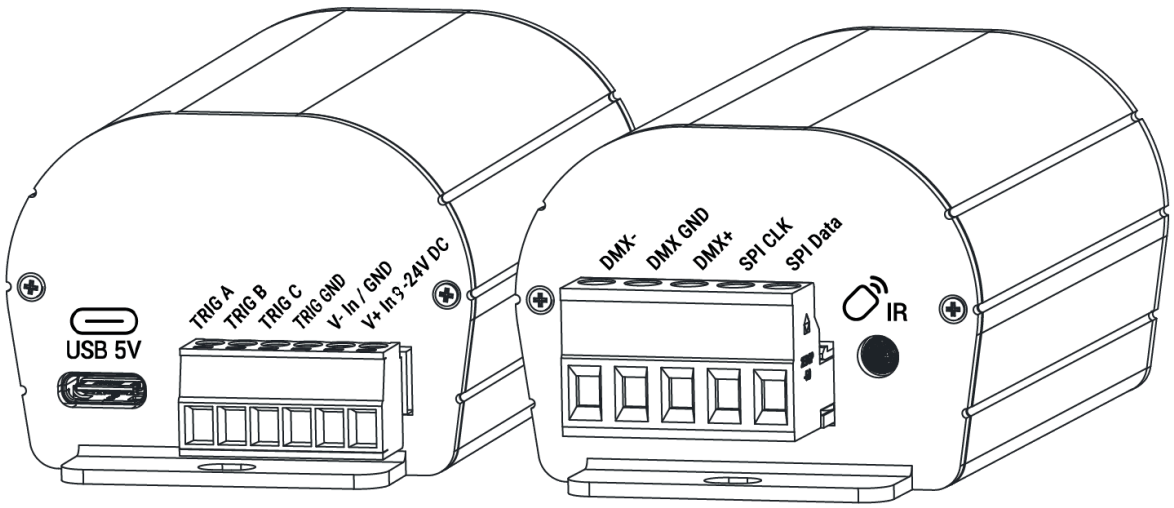
DMX SPI

Convert DMX to SPI



Datasheet &
Quickstart Guide

CHROMATEQ

Technical Manual & Quick Start Guide

Congratulations on your purchase of a CHROMATEQ controller.

Please read this manual carefully and thoroughly before using the DMX SPI Chromateq.

The information presented here provides a useful introduction to the wide range of features, settings and functions available in this compact and versatile DMX SPI.

All products and software are developed and designed in France.

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Package Contents
1x DMX SPI
1x USB cable
1x software download link and technical documentation

Caution: Check the contents of the package and the condition of the interface after unpacking! Contact your supplier if something is missing or is damaged. Do not use the device if it appears to be damaged!

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Introduction

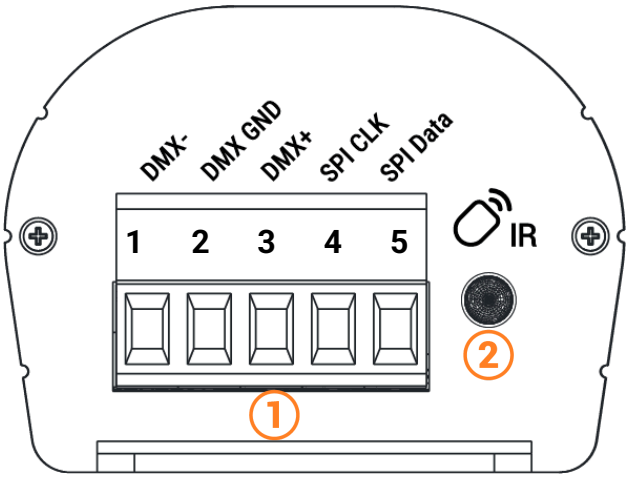
The DMX SPI is a compact and reliable DMX-to-SPI converter designed for effortless integration into any LED installation. It transforms standard DMX512 signals into SPI pixel data with precision, driving up to 170 RGB or 128 RGBW pixels just like a traditional LED driver. Its small footprint, broad SPI compatibility, and professional-grade performance make it the ideal choice for LED strips, and creative lighting projects.

Features

DMX Inputs	512 ch.
SPI Out (Data + Clock)	3072 ch. (grouping) / 170 Px. RGB / 128 Px. RGBW
DMX-RDM	Compatible
Options	Pixel Grouping, Start DMX address, Pixel repeating
Ports	USB-C
Connector	Screw terminal block
Power DC	5V USB / 9-24V ; 0.3 A
IP rating	IP40
Dimensions (mm)	H : 103 (4.06 in) / W : 50mm(1.96in) / D : 37,5mm (1.47in)
Net Weight	0.1 Kgs
Gross weight	0.16 Kgs
Power / Consumption	0,43 W
High Voltage Protection	Yes, fuses & diodes 3KV, 0.15A on DMX and 1.5K, 0.3A on Power
Housing	Strong Aluminium
Operating environment	Indoor
Storage	keep dry
Operating Temperature	-45~+85°C
Certifications	CE, RoHS
International Warranty	yes, 1 year

Housing connectivity

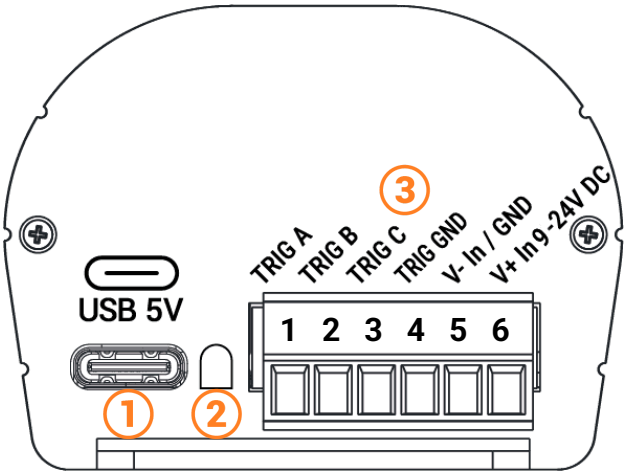
Front panel



1. **Terminal Block Connector** with screws :
    1. DMX-
    2. DMX Ground
    3. DMX +
    4. SPI Clock
    5. SPI Data

2. **Infrared Receiver LED**, (Remote unit include)

Back panel



1. **USB-C Connector** (5V DC input)
2. **LED Signal**
3. **Terminal Block Connector** with screws :
    1. Trigger A (not available)
    2. Trigger B (not available)
    3. Trigger C (not available)
    4. Trigger GND (not available)
    5. V- Input / Ground
    6. V+ Input 9-24V DC

USB Signal LED operating states

G=Green; R = Red

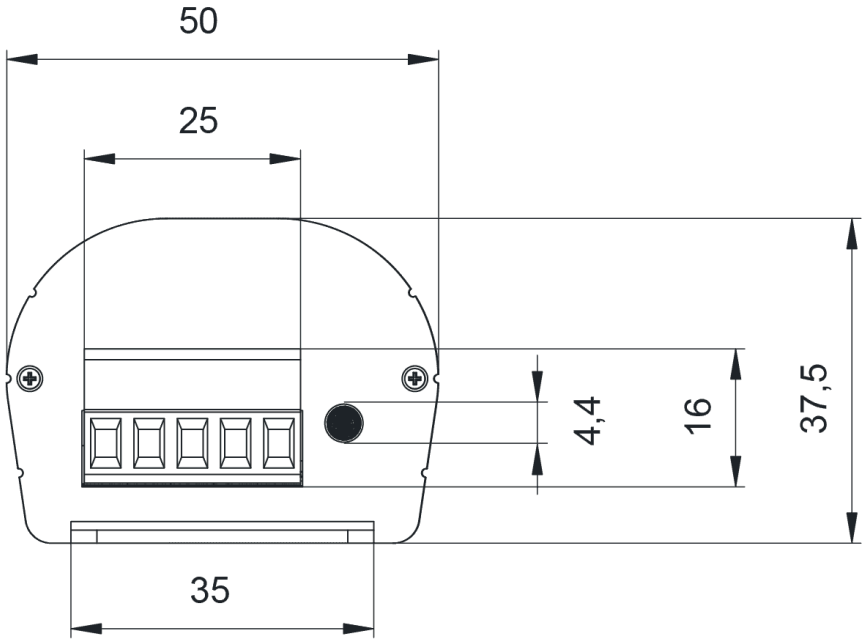
LED State	Meaning / Operating Mode
G Off + R Off	Interface not connected
G On + R Off	Interface powered (USB / External), no scene stored
G On – 3× Flash	Bootloader preparation phase
Alternating G On ↔ R On	Bootloader Mode active
G Fast Flash + R Off	Active USB communication (Live)
G+R Fast Flash	Blacklist active
R Fast Flash	SPI Driver Mode, DMX-IN to SPI conversion

CHROMATEQ's supported ICs and protocols

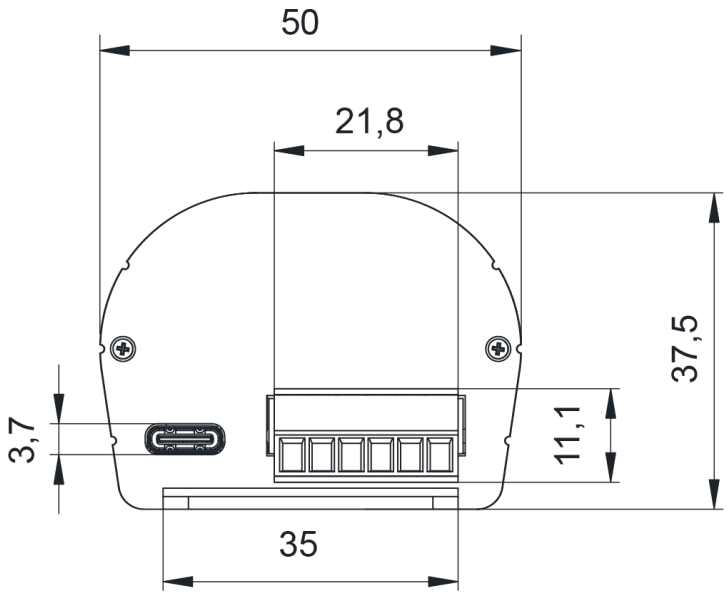
Other ICs	WS2812	WS2811S	WS2811F	WS2813	WS2815	SK6812	WS2801	LPD8806	LPD6803	APA102	TYPE	Power
APA102										Yes	RGB	5V
CS8812	Yes										RGB	12V
D705									Yes		RGB	12V
FW1906	Yes		Yes	Yes	Yes	Yes					RGBWAL	5-24V
GS8206	Yes										RGB	5-24V
GS8208	Yes										RGB	12V
HD107S	Yes	Yes	Yes	Yes	Yes	Yes					RGB	5V
LPD1101									Yes		RGB	5V
LPD6803									Yes		RGB	5-12V
LPD8803								Yes			RGB	5-12V
LPD8806								Yes			RGB	5-12V
SK6805	Yes		Yes	Yes	Yes	Yes					RGBW	5V
SK6812						Yes					RGBW	5V
SK6813	Yes	Yes	Yes	Yes	Yes	Yes					RGB	5-12V
SK9822										Yes	RGB	5V
SM16703	Yes		Yes	Yes	Yes	Yes					RGBW	5-24V
SM16703P	Yes	Yes									RGB	5-24V
SM16704	Yes	Yes									RGBW	5-24V
TM1804	Yes										RGB	5-24V
TM1809	Yes										RGB	5-24V
TM1809	Yes										RGBW	5-32V
TM1814	Yes	Yes									RGBW	5-32V
TM1903	Yes		Yes	Yes	Yes	Yes					RGB	5-24V
TM1914	Yes	Yes	Yes	Yes	Yes	Yes					RGB	5-24V
TM1934	Yes		Yes	Yes	Yes	Yes					RGB	5-24V
UCS1903	Yes		Yes	Yes	Yes	Yes					RGB	5-12V
UCS1909	Yes										RGB	5V
UCS1912	Yes										RGB	5V
UCS2903	Yes										RGB	5-12V
UCS2904B	Yes	Yes									RGBW	5-24V
UCS2909	Yes										RGB	5V
UCS2912	Yes										RGB	5-24V
UCS6909									Yes		RGB	5V
UCS6912									Yes		RGB	5V
WS2801							Yes				RGB	5V
WS2803							Yes				RGB	5V
WS2811	Yes		Yes	Yes	Yes	Yes					RGB	5V
WS2812	Yes										RGB	5-12V
WS2812B	Yes		Yes	Yes	Yes	Yes					RGB	5-12V
WS2813	Yes	Yes	Yes	Yes	Yes	Yes					RGB	5-12V
WS2814	Yes		Yes	Yes	Yes	Yes					RGBW	5-12V
WS2815	Yes	Yes			Yes	Yes					RGB	12V
WS2815B	Yes	Yes	Yes	Yes	Yes	Yes					RGB	12V
WS2818	Yes		Yes	Yes	Yes	Yes					RGB	5-24V

Housing dimensions

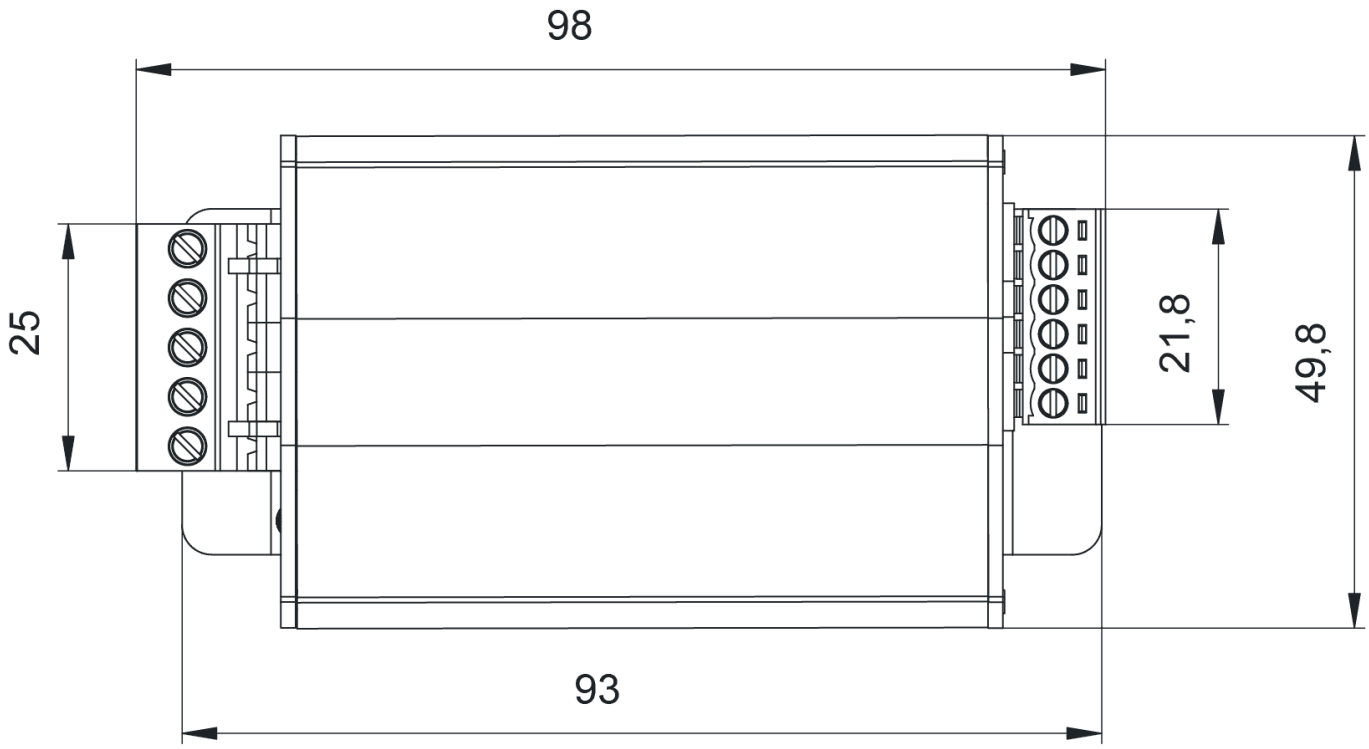
Front with Terminal Block



Back without Terminal Block



Top



Wiring Diagram