CLUB SPI

Standalone lighting playback controller

The CLUB SPI is a compact USB to SPI & DMX standalone interface for LED and DMX lighting control. It operates in three independent modes: Live (PC-controlled), Stand-Alone (no PC required) and LED Driver (DMX-to-SPI converter).

It is compatible with most of SPI ICs (WS2812, APA102, SK6812 and more), it delivers up to 3,072 SPI channels (1,020 RGB pixels) and 512 DMX-RDM channels simultaneously.

Bundled free software: PRO DMX 2, STUDIO DMX and PIXXEM Windows, macOS, Linux & Raspberry Pi.



CLUB SPI

KEY FEATURES

3-in-1 device	Live (PC), Stand-Alone (no PC), LED Driver (DMX-to-SPI converter), all in one unit
Simultaneous I/O	1x 512 ch. DMX-RDM output + 3,072 SPI channels on a single terminal block
SPI ICs	WS2812/2811/2813/2815, SK6812, APA102, LPD8806, UCS, TM series and more
Stand-Alone	256 Mb memory | 512 scenes | 8,000 steps | IR remote, 3 dry-contact triggers
Free software	PRO DMX 2 | STUDIO DMX | PIXXEM | Wi Light, Windows, MacOS, Linux, Raspberry Pi
Upgradable on site	Art-Net IN/OUT, PIXXEM up to 512 universes, FULL feature unlock via DeviceTool
Compatible Fixtures	Addressable pixel LEDs (WS2811, WS2812, SK6812, UCS1903, etc.) Pixel LED strips, bars and matrices All DMX512 fixtures: LED PARs, bars, strobes, simple moving heads, dimmers

SAFETY INSTRUCTIONS

Intended use	This device is intended solely for controlling lighting fixtures and effects via compatible software or hardware triggers. Any other use may result in personal injury or property damage. Chromateq accepts no liability for damage resulting from improper use.
Do not use in	Direct sunlight | Extreme temperature or humidity conditions | Dusty or wet environments | Areas near strong magnetic fields | Any situation where the unit is or may become damaged
General handling	Never use force when installing connectors. Do not immerse in water. Clean only with a dry cloth, do not use solvents, benzene, thinners or flammable cleaning agents.
Electrical safety	Verify supply voltage before connection (5 V USB-C or 9-24 V DC). Ensure proper strain relief on all wiring. Do not exceed maximum current ratings listed in specifications.
Children	Keep packaging materials out of reach of children, choking hazard. Small components may detach; ensure children cannot access them.
Disclaimer	Read all documentation before use. Retain this guide for future reference. If transferring the product to a third party, include this document.

Technical information

PC: Personal Computer (Live)
SA: Stand Alone (no computer use)

Interface, Output, Input (PC + SA)

DMX output	1 x 512 channels
RDM	Yes, Via DMX port + software (PC)
DMX In	1 x 512 channels (PC)
DMX Pixels	Up to 170 RGB or 128 RGBW
SPI output	3072 channels @ 15 fps (PC) to 25 fps (SA)
SPI Pixels	Up to 1,020 px RGB or 768 px RGBW
USB-C	USB-C power compliant
Memory	256 Mb
Max devices	10 via USB
LED Driver	Yes, 512 channels input, 170 RGB pixels
Upgrade	Yes, FULL or UxU for Art-Net / sACN
Triggers	x3 Dry contacts (GND), Infrared remote, DMX in

Software, APP & OS

PRO DMX 2	Free, live lighting control & stand alone
PIXXEM	Free, Pixel-mapping, DVI capture, video
STUDIO DMX	Free, real time 3D viewer
Windows	Windows 10 / 11 (64-bit)
Mac OS	MacOS 10.14 and latest
Linux	Ubuntu, Debian
Raspberry	Raspberry Pi OS
USB drivers	For Intel, AMD, Qualcomm cpu
Wi Light APP	Free, iOS & Android, LAN commands
UDP / SDK	Open UDP protocol for 3rd part software
DeviceTool	Setting, firmware, upgrade

Supported SPI IC's

Voltage	5 V, 12 V, 5-12 V, 5-24 V, 5-32 V (per IC)
RGBW	SK6805/6812, TM1814, WS2814, SM16703/16704, UCS2904B
RGBWAL	FW1906
RGB	WS2811, 2812, 2812B, 2813, 2815, 2815B, 2818, APA102, SK9822, LPD6803, 8803, 8806, 1101 UCS1903, 1909, 1912, 2903, 2909, 2912, 6909, 6912, TM1804, 1809, 1903, 1914, 1934, CS8812, GS8206, 8208, D705, HD107S, SM16703P, WS2801, 2803

Specifications

Power input	5 V USB-C (0.3 A) or 9-24 V DC
Power consumption	0.7 W
DMX isolation	3 kV / 0.12 A (fuses & diodes)
DC isolation	1.5 kV / 0.3 A
Dimensions	103 x 50 x 37.5 mm (4 x 2 x 1.5 in)
Net / Gross weight	0.10 / 0.16 kg (0.22 / 0.35 lbs)
Housing / IP rating	Aluminium, IP42
Operating temperature	-40 °C to +85 °C
Mounting	Desktop or screw-fix (no DIN rail)

Stand Alone

Step capacity	8,000 steps for 7 U (1 DMX + 6 SPI)
Scene played	1 (DMX + SPI combined)
Scene number	512 max
SPI driver	DMX to SPI, 512 channels input to 170 RGB pixels
SPI driver options	Pixel grouping, pixel repeating, start address, RDM
Auto Startup	Play default scenes when power on
Scene recovery	Resume last scenes after a power cut

Upgrade & Live (PC)

Upgrade on site	Yes, FULL and UxU via DeviceTool
Multiple device	Up to 10 devices via USB
Art-Net / sACN Out	Up to 64 U. (Pro DMX 2), 512 U. (Pixxem)
Art-Net / sACN In	Up to 16 U. (PC)
DVI resolution	Up to 1920 x 1080 via PIXXEM
Timeline	Up to 24H, need FULL Upgrade
UxU upgrade	Adds Art-Net / sACN universes

Triggering & 3rd Part Connectivity

Smart dry contacts	3 x (A / B / C on Ground) (5 ms)
Contact options	On, On/Off, auto-release, restart, debounce
DMX In	512 channel (PC), triggers, merge
Infrared	Scenes 1-15, Zones, Dimmer / Speed / Colour / Blackout / Pause. Via IR remote (included)

Warranty & Certifications

International warranty	3 years
Certifications	CE, FCC, RoHS, UKCA
HS customs code	8537.10.91
HTS/TARIC/UKGT/CN	8537.10.91

Protocols & Communication

DMX 512 / RDM	USITT E1.11-2008. All DMX512 / RDM devices
RS232	Via RS232 port (PC + SA)
UDP (SA)	Triggers & commands via Ethernet devices
UDP (PC)	Via Pro DMX 2 or Pixxem software
SMPTE	Need FULL upgrade, via software (PC)
MIDI / MTC	Devices (PC), Time Clock (need FULL upgrade)
Art-Net / sACN	In/Out, up to 64 U. (Pro DMX 2) or 512 U. (Pixxem)
RDM Art-Net / sACN	Via software and Upgrades
Calendar / Clock / Time	Via software (FULL Upgrade) or via device RTC
SPI	Data + Clock | 3,072 channels
DALI	Via CLUB DALI
Wi-Light APP	Via software (PC) or Ethernet devices
Audio BEAT & BPM	Via software (PC)
Keyboard / Hyperlinks	Via software (PC)
DMX split & boost	Via SPLIT RDM

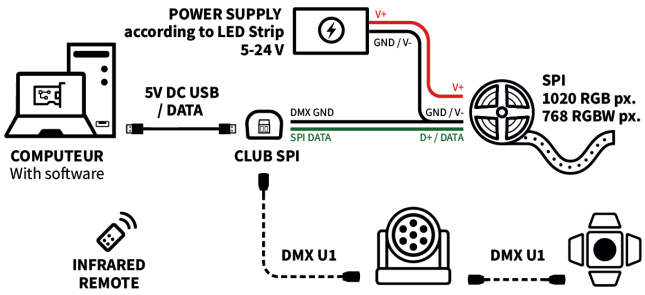
Tools and Accessories

DIN mounting	Via DIN rail mounting unit
Power supply	Not included
Infrared remote	x1 Included
DMX cable	Not included
USB cable	x1 Included
Mounting strap	Not Included

Operating Modes

* LIVE MODE

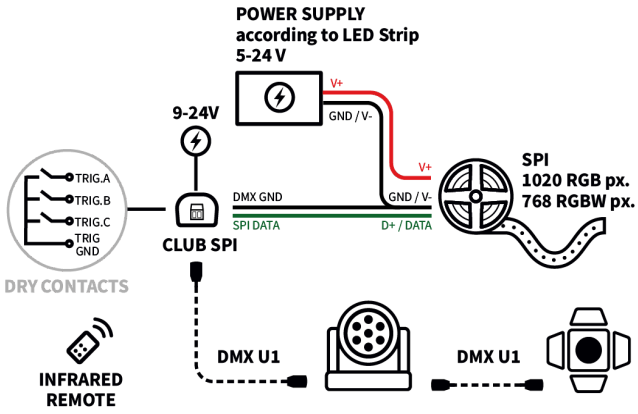
1. Download and install the latest software and USB drivers
2. Connect the CLUB SPI to your computer via the included USB-C cable
3. Start the software, the interface is detected automatically (green LED flash)
4. Configure the software according to your DMX fixtures or SPI pixels
5. Program scenes and sequences using the lighting control software
6. Play your show and scenes



Live mode wiring

* STAND-ALONE MODE

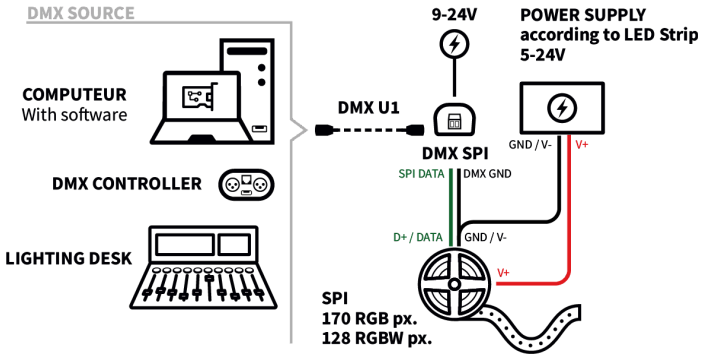
1. Program scenes in Live mode with the software
2. Save scenes to its internal memory
3. Close the software to test
4. Power the unit via USB-C (5V) or terminal block (9-24V DC)
5. The default start scene plays automatically (green LED flash slow)
6. Use the IR remote or dry contacts to select a scene to play



Stand-Alone mode wiring

* LED DRIVER MODE (DMX to SPI)

1. Open the DeviceTool (included in the software directory)
2. Connect the CLUB SPI and open it from the DeviceTool
3. In the MODE tab, select DMX-SPI mode and apply
4. Close, red LED flash fast: DMX to SPI converter mode is active
   Note: no PC needed during operation
5. Power the unit via USB-C (5V) or terminal block (9-24V DC)



LED Driver mode wiring

IMPORTANT NOTE: For a stable communication and a proper Data transmission, it is necessary to connect the GND or V- pin of the LED strip's external power supply with the DMX GND of the SPI interface.

WARNING: Installation and wiring must be carried out by qualified personnel, in strict accordance with the instructions provided and with applicable electrical standards. The manufacturer's warranty does not cover any damage resulting from incorrect wiring, improper installation, misuse or unauthorised modification. To the fullest extent permitted by law, the manufacturer accepts no liability for any damage or personal injury arising therefrom.

Triggers

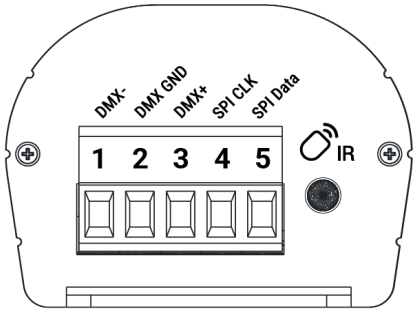
CONTACTS #	
Trigger A (T1)	01
Trigger B (T2)	02
Trigger C (T3)	04
A + B (Muxed)	03
A + C (Muxed)	05
B + C (Muxed)	06
A+B+C (Muxed)	07

TRIGGER TYPES			
Type	**Press**	**Hold**	**Condition**
Starts the event	**Trigger** each press or action	**Held auto-release** While the contact is closed *	**Trigger if X plays** **Trigger if X doesn't play** depends on scene X
Sends a command	**Short command** e.g. Blackout	**Held command** Repeats while held	—

SCENE MODES		
Mode	**If stopped**	**If playing**
On	starts	continues
Go + restart	starts	restarts
Off	—	stops
On / Off	starts	stops
Pause / Resume	—	pause, resume

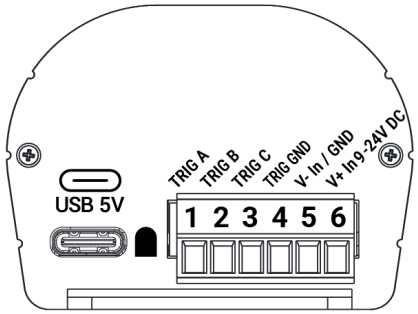
* On release, scenes in On / Off mode stop.

FRONT PANEL (SPI & DMX)

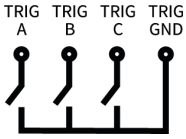


Terminal Block -- 5 pins	1. DMX- 2. GND 3. DMX+ 4. SPI Clock 5. SPI Data
IR receiver LED	Front-facing, 1 x IR LED (remote included)

REAR PANEL (USB & TRIGGERS)



USB-C	Data + 5 V DC input (0.3 A)
Status LED	Green / Red, Powered | Bootloader | Live USB | Stand-Alone | LED Driver | Error
Terminal Block, 6 pins	1. Trig A 2. Trig B 3. Trig C 4. GND 5. V- 6. V+ (9-24 V DC)



STATUS LED STATES (G = Green | R = Red)

Green OFF + Red OFF	Interface not connected or powered
Green ON + Red OFF	Powered, no stored scenes
Green flash x3	Bootloader preparation
Green / Red alternating ON	Bootloader mode active
Green fast flash + Red OFF	Live mode, active USB communication
Green slow flash + Red OFF	Stand-Alone mode, scenes stored
Green + Red fast flash	Blacklist active
Red fast flash	LED Driver mode, DMX-to-SPI conversion active

TECHNICAL SUPPORT & RESOURCES

Download Software: chromateq.com/dmx-software-downloads/

Technical Support and commercial: chromateq.com/contact/

CHROMATEQ SARL -- 191 allée de Lauzard, 34980 Saint-Gély-du-Fesc, France | +33 (0)9 52 21 07 55