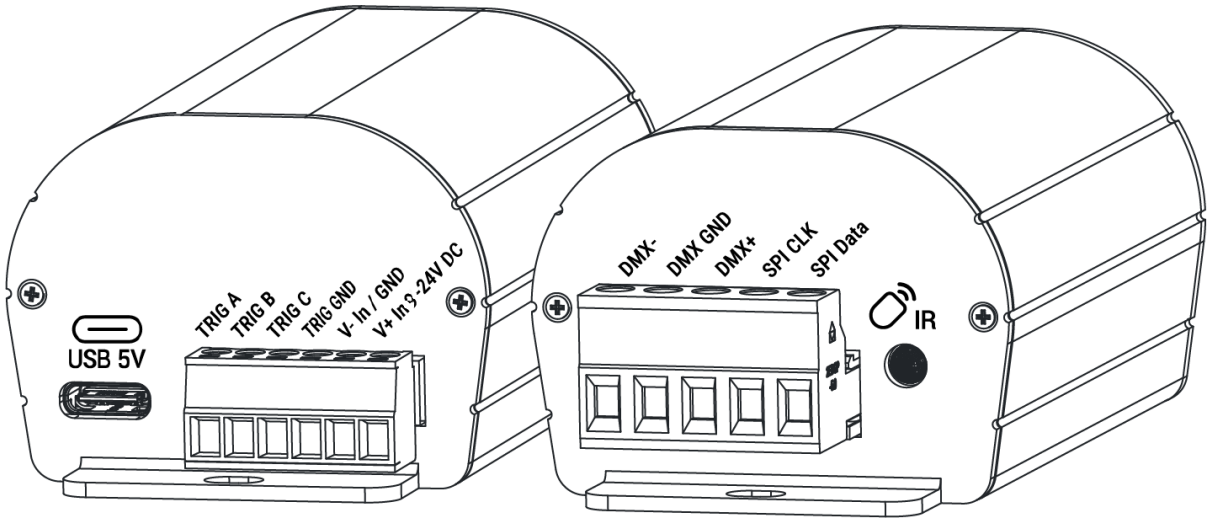
CHROMATEQ

CLUB SPI – Stand-alone programming with PRO DMX 2

Interface firmware: 23.1.0.0

Software: PRO DMX 2 version 2.5.0

Edition: 11/2026



CLUB SPI interface: rear panel (left) and front panel (right)

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1. About this manual

What stand-alone mode lets you do

The CLUB SPI interface controls an SPI LED strip and a DMX line. You prepare the show on a computer with PRO DMX 2, then you write it to the interface memory. After that, the interface works on its own, without a computer:

- it starts its show at power-up (if a start event is chosen);
- it responds to the contacts wired to its **TRIG A**, **TRIG B** and **TRIG C** inputs;
- it responds to the infrared remote control supplied;
- it can also respond to commands from a DMX console.

This manual explains how to program the CLUB SPI interface for this stand-alone use, step by step.

Two ways to use the interface

Use	How it works	Where to find the information
LIVE	The computer stays connected. PRO DMX 2 controls the lights live.	PRO DMX 2 manual
Stand-alone	The show is written to the interface memory. The interface plays on its own and the computer can be disconnected.	This manual

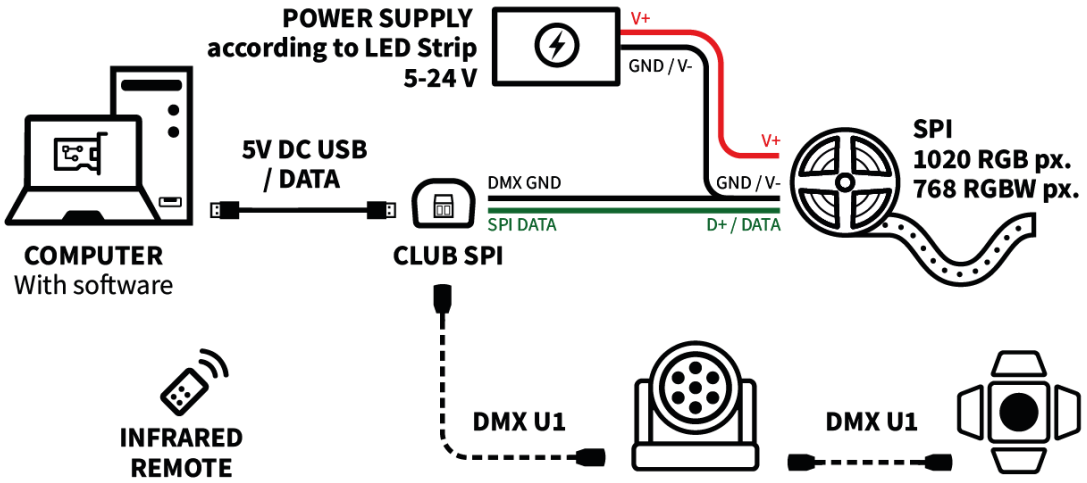
> **Note:** when PRO DMX 2 controls the interface live, the stand-alone show stops. It resumes as soon as the software releases the interface or the USB cable is unplugged.

The principle: scenes, events, triggers

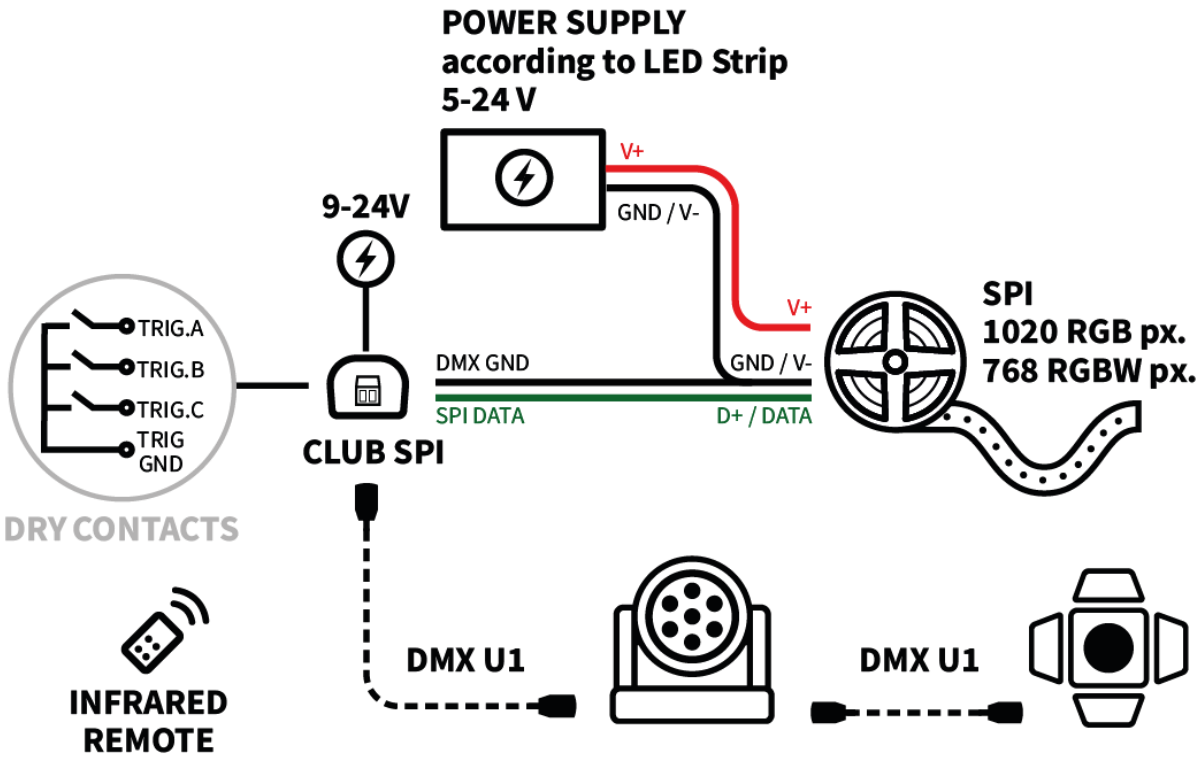
A stand-alone show is built on three ideas:

1. *The scene*: a lighting effect created in PRO DMX 2 (a colour, a chase, an animation on the strip…).
2. *The event*: it tells the interface which scene to play. On the CLUB SPI interface, an event starts a single scene.
3. *The trigger*: what starts an event. For example: pressing a button wired to **TRIG A**, a key on the remote control or a command from a DMX console.

A special event, the *start event*, is played automatically at every power-up.



Programming: the computer, running PRO DMX 2, is connected to the interface by USB



Stand-alone operation: the interface plays the show on its own, controlled by the contacts or the remote control

> **Note:** the CLUB SPI interface plays only one scene at a time. When a trigger starts a new scene, it replaces the current scene (recommended setting, see chapter 8).

What you are going to do

1. Wire up the interface and the LED strip (chapter 3).
2. Connect the interface to PRO DMX 2 (chapter 4).
3. Set up the LED strip and the outputs (chapters 5 and 6).
4. Prepare the scenes and create the events (chapters 7 and 8).
5. Program the triggers (chapter 9).
6. Check the configuration, then write the show to the interface (chapters 10 and 11).
7. Check that the interface works on its own (chapter 12).

The following chapters explain everyday use, control from a DMX console, firmware updates and troubleshooting.

> **Note:** creating the scenes themselves (colours, steps, effects) is explained in the PRO DMX 2 manual. This manual only describes their settings for stand-alone mode.

Conventions used in this manual

- Text displayed by the software is written in **bold**, exactly as it appears on screen. This manual uses PRO DMX 2 in English.
- Warnings and useful information are shown in a box:

> **Caution:** indicates a risk of data loss or damage to equipment.
>
> **Note:** gives useful information.

2. Before you start

Equipment required

- The CLUB SPI interface.
- The USB-C cable, supplied, to connect the interface to the computer.
- The software download link, supplied. The technical documentation is on the product page: https://www.chromateq.com/club-spi/
- The infrared remote control, supplied with the interface.
- An SPI LED strip of one of the supported types (see the table below), with its own power supply, suited to the strip.
- Depending on your installation: buttons, switches or contacts to connect to the **TRIG A**, **TRIG B** and **TRIG C** inputs.
- Depending on your installation: a DMX console or DMX fixtures.
- Optional: a 9 to 24 V DC power supply. The interface can also be powered through its USB-C cable.

> **Note:** the interface does not power the LED strip. Provide a power supply for the strip, following its manufacturer's instructions.

Supported LED strips

The CLUB SPI interface controls LED strips fitted with the following chips:

Strip chip	Data wires to connect
WS2811, WS2812, WS2813, WS2815, SK6812	**SPI Data** only
WS2801, LPD8806, LPD6803, APA102	**SPI CLK** and **SPI Data**

> **Note:** the interface controls a maximum of 1,024 RGB pixels or 768 RGBW pixels. Strip setup is explained in chapter 5.

Computer and software

Install PRO DMX 2, version 2.5.0 or later, on a computer matching one of the following configurations.

	Windows	macOS	Linux	Raspberry Pi
Operating system	Windows 10, 11 (64-bit)	macOS 10.14 and later	Ubuntu, Debian	Raspberry Pi OS – Pi 3 B, Pi 4 and later
Processor	1.5 GHz (Celeron, Intel i5, AMD Ryzen 5)	1.5 GHz (Celeron, Intel i5, AMD Ryzen 5)	1.5 GHz (Celeron, Intel i5, AMD Ryzen 5)	ARM Cortex-A53 or A72 quad-core, 1.4 GHz and above
RAM	4 GB (8 GB recommended)	4 GB (8 GB recommended)	4 GB (8 GB recommended)	1 GB (LPDDR2 or LPDDR4) and above
Graphics card	Standard (Intel, office, UHD)	Standard (Intel, office, UHD)	Standard (Intel, office, UHD)	—
Disk space	600 MB	600 MB	600 MB	600 MB
Screen	1600 × 900 (1920 × 1080 recommended)	1600 × 900 (1920 × 1080 recommended)	1600 × 900 (1920 × 1080 recommended)	1920 × 1080 recommended
USB ports	1 USB port per interface	1 USB port per interface	1 USB port per interface	1 USB port

> **Note:** the CLUB SPI interface connects by USB only. The Ethernet port and Wi-Fi mentioned in the general PRO DMX 2 configuration are not needed for this manual.

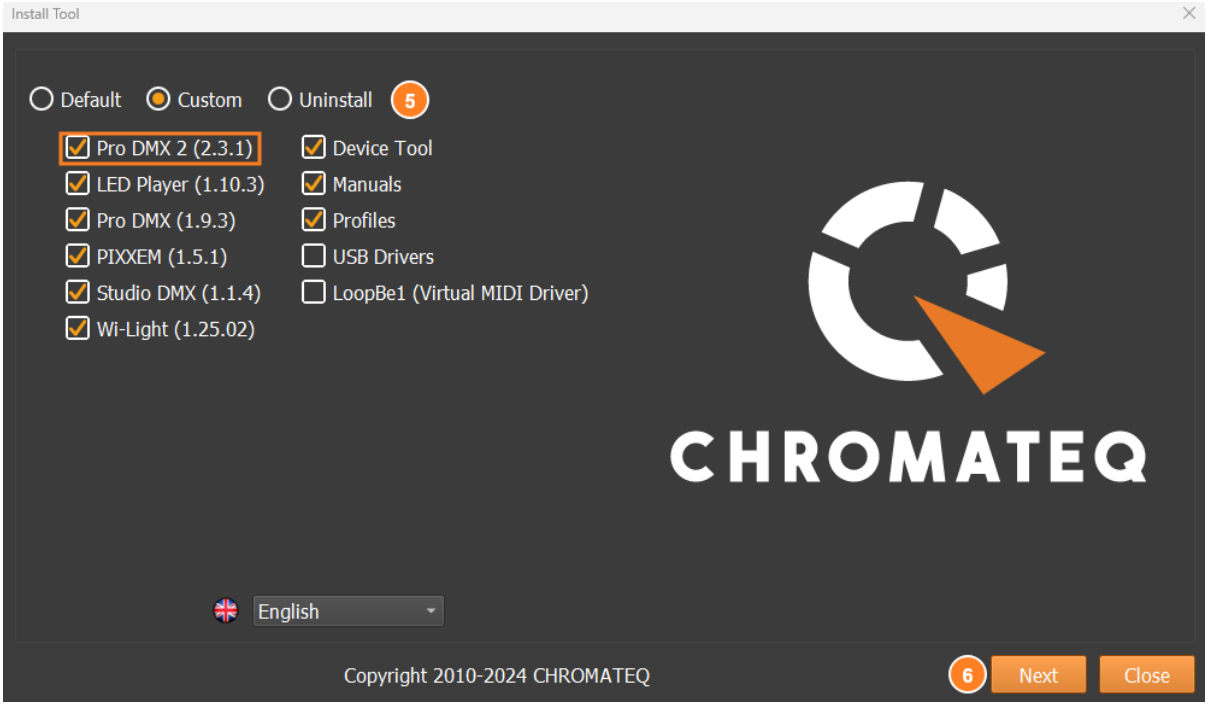
Install PRO DMX 2

Before you start: the computer must be connected to the Internet to download the software. You need administrator rights on the computer.

1. Open the download page: https://www.chromateq.com/dmx-software-downloads/
2. Download the installer for your operating system.
3. Run the installation program.
4. Accept the administrator rights request (on Windows, click **Yes**). The **Install Tool** window opens.
5. Choose the installer language from the list at the bottom of the window.
6. Choose the installation type:
    - **Default**: installs PRO DMX 2 and the other Chromateq software offered by default;
    - **Custom**: you choose which software to install. Check that **Pro DMX 2** is ticked.
7. Click **Next**.
8. Choose the installation folder.
9. Complete the installation.



Installer window: choosing the installation type



Custom installation: choosing the software to install (version numbers shown are examples)

Check

- PRO DMX 2 starts. The version number is shown in the start-up window.
- You can also read the version in the **Options** window (**Tools** > **Options** menu), **General** page.
- The version is 2.5.0 or later.

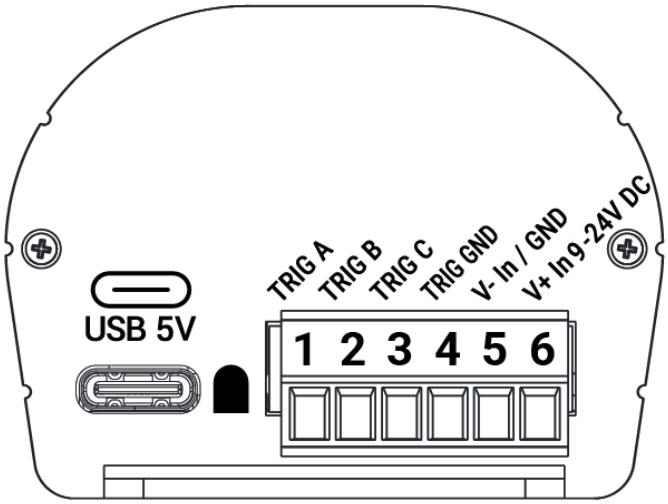
3. Wire up the interface

Before you start:

- Switch off the LED strip power supply and disconnect the interface.
- Locate the two terminal blocks: 6 pins at the rear, 5 pins at the front.

Caution: always wire with the power off. A wiring mistake can damage the interface or the LED strip.

Rear panel: USB, contacts and power



Rear panel of the CLUB SPI interface: USB-C socket, status LED and 6-pin terminal block

Marking	Function
USB 5V (USB-C socket)	Connection to the computer. Also powers the interface (5 V, 0.3 A).
Status LED (to the right of the USB-C socket)	Green or red depending on the interface state: powered, communicating with the computer, stand-alone operation, update, LED Driver mode. Details are given in chapter 13.
Terminal block, pin 1: **TRIG A**	Contact input A.
Terminal block, pin 2: **TRIG B**	Contact input B.
Terminal block, pin 3: **TRIG C**	Contact input C.
Terminal block, pin 4: **TRIG GND**	Common ground for the contacts.
Terminal block, pin 5: **V- In / GND**	Power supply, negative pole.
Terminal block, pin 6: **V+ In 9-24V DC**	Power supply, positive pole (9 to 24 V DC).

Status LED states

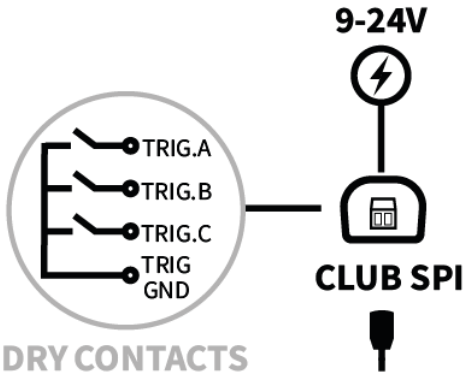
LED	Meaning
Off	The interface is not powered.
Steady green	The interface is powered and its memory contains no show.

LED	Meaning
Green, slow flashing	The interface is working on its own and playing the show in memory.
Green, fast flashing	PRO DMX 2 is communicating with the interface over USB.
Green, 3 flashes	Preparing the firmware update.
Alternating green and red	Firmware update in progress.
Red, fast flashing	LED Driver mode (chapter 14a).
Green and red, fast flashing	Contact Chromateq support.

Connect the contacts

1. Connect one terminal of the button (or switch) to the **TRIG A**, **TRIG B** or **TRIG C** input.
2. Connect the other terminal of the button to **TRIG GND**.
3. Repeat for each button.

When the button is closed, the input is connected to **TRIG GND**: the interface treats the contact as pressed.



Example wiring of three buttons on TRIG A, TRIG B and TRIG C

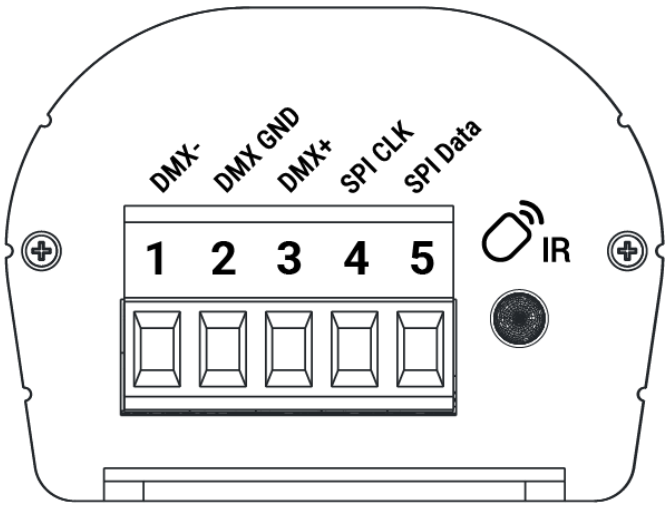
> **Note:** each input has its own trigger number (chapter 9).

Power the interface

Choose one of the two options:

- Through the USB-C cable: the interface is powered by the computer or by a USB charger. This option is also sufficient for stand-alone operation.
- Through the terminal block: connect a 9 to 24 V DC power supply to the **V- In / GND** (negative) and **V+ In 9-24V DC** (positive) pins.

Front panel: DMX, LED strip and remote control



Front panel of the CLUB SPI interface: 5-pin terminal block and infrared receiver

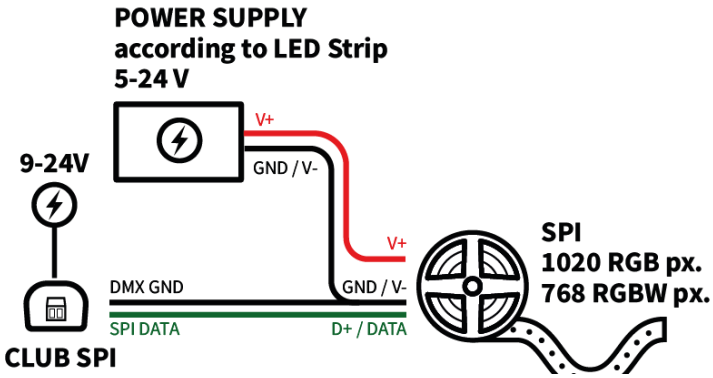
Marking	Function
Terminal block, pin 1: **DMX-**	DMX line, negative signal.
Terminal block, pin 2: **DMX GND**	DMX line, ground.
Terminal block, pin 3: **DMX+**	DMX line, positive signal.
Terminal block, pin 4: **SPI CLK**	LED strip clock (for certain chips only).
Terminal block, pin 5: **SPI Data**	LED strip data.
IR	Infrared remote control receiver (remote control supplied). It faces forwards.

Connect the LED strip

1. Identify the chip type of your strip (given by the strip manufacturer).
2. Connect the data input of the strip to **SPI Data**.
3. If your strip uses a WS2801, LPD8806, LPD6803 or APA102 chip, also connect the clock input of the strip to **SPI CLK**.
4. Connect the ground (GND) of the strip power supply to the **DMX GND** pin of the interface.
5. Connect the strip power supply, following its manufacturer's instructions.

Strip chip	Wires to connect to the interface
WS2811, WS2812, WS2813, WS2815, SK6812	**SPI Data**
WS2801, LPD8806, LPD6803, APA102	**SPI CLK** and **SPI Data**

> **Note:** without a common ground between the strip power supply and the interface (**DMX GND** pin), the strip does not receive the data correctly.



Example LED strip wiring: SPI Data to D+ / DATA, strip ground on DMX GND, separate strip power supply

Connect the DMX line (if needed)

Connect the DMX line to the **DMX-**, **DMX GND** and **DMX+** pins.

- To control DMX fixtures, the line runs from the interface to the fixtures.
- To receive commands from a DMX console, the line comes from the console. The corresponding setting is explained in chapters 6 and 14.

> **Note:** the interface has a single DMX line. It is used either as an output or as an input, never both at the same time.

Position the interface

Point the front panel (**IR** marking) towards where you will use the remote control.

Check

1. Power up the interface (USB-C cable or terminal block).
2. Look at the status LED, next to the USB-C socket:
    - steady green: the interface is powered and its memory does not yet contain a show;
    - slow flashing green: the interface is powered and already contains a show.
3. If the LED stays off, check the power supply.

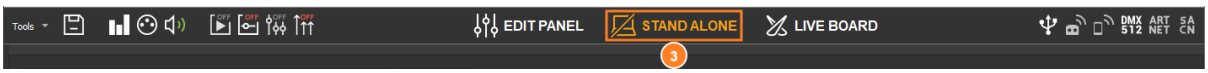
4. Connect the CLUB SPI to PRO DMX 2

Before you start:

- PRO DMX 2 is installed (chapter 2).
- The interface is wired up (chapter 3).

Open the stand-alone window

1. Connect the interface to the computer with the USB-C cable.
2. Start PRO DMX 2. The interface LED flashes green quickly: the software is communicating with the interface.
3. Click the **STAND ALONE** tab, at the top of the window. The **Stand Alone** window opens.
4. The first time you open stand-alone mode after each start of PRO DMX 2, the software offers a guided tour of stand-alone mode. Click **Yes** to follow it, **No** to skip it, or **Don't ask anymore**.



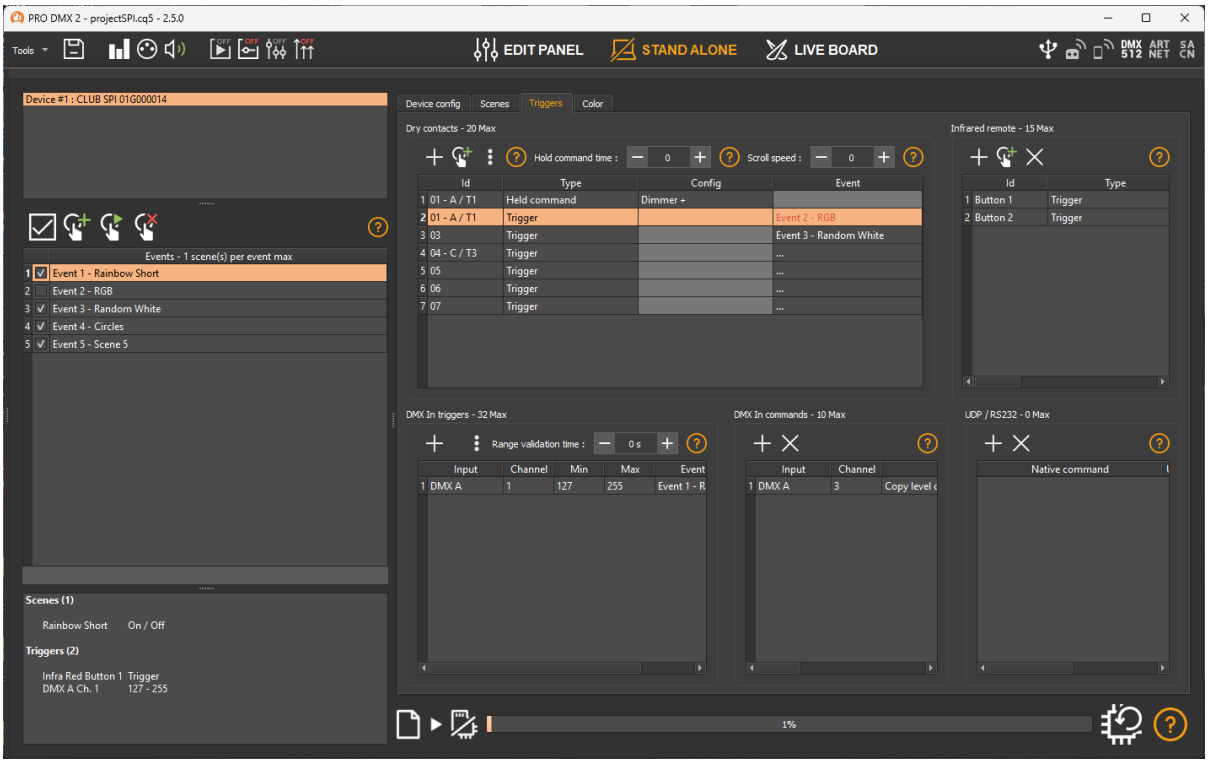
STAND ALONE tab in the PRO DMX 2 main window

> **Note:** you can restart the tour at any time with the **Tour of the stand-alone mode** button (help icon).

Check that the interface is recognised

At the top of the **Stand Alone** window, the list of interfaces shows one row per connected interface:

- **Device #1 : CLUB SPI**, followed by the interface serial number: the interface is recognised. You can continue.
- **Device #1 : Disconnected** (greyed-out row): the interface is detected but not recognised. See chapter 18.
- **Device #1 : Bootloader** (greyed-out row): the interface is in firmware update mode. See chapter 16.



Stand Alone window: the CLUB SPI interface is recognised

If the interface does not appear:

1. Check the USB-C cable.
2. Click the **Tools** menu, then **Open Devices**. PRO DMX 2 searches again for connected interfaces.

> **Note:** to refresh the information for an interface already in the list, right-click its row, then click **Refresh**.

The gauge at the bottom of the window, between the **Save in Memory** and **Reset memory** buttons, shows how much memory is used. Hover the pointer over it to read the details, for example "1 200 / 33 542 144 bytes".

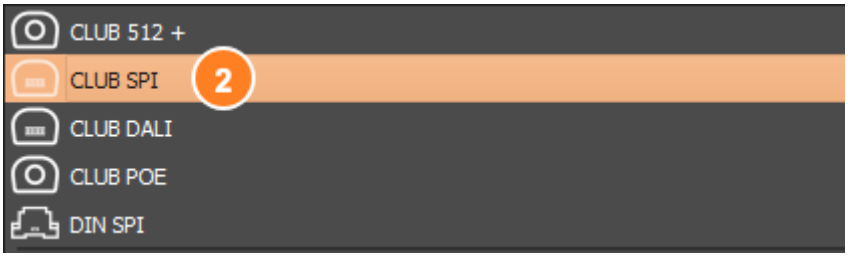
Prepare a show without an interface connected (optional)

You can prepare the show in advance, without an interface connected.

1. Open the **STAND ALONE** tab without connecting an interface.
2. In the **Select your device :** list, choose **CLUB SPI**.

PRO DMX 2 then displays the settings and limits of the CLUB SPI. You will write the show to the interface later, once it is connected.

Check: **CLUB SPI** is shown in the **Select your device :** list.



Select your device list, with CLUB SPI chosen

Leave stand-alone mode

To leave the **Stand Alone** window, click another tab at the top of the window: **EDIT PANEL** or **LIVE BOARD**.

Check

- The **Device #1 : CLUB SPI** row is displayed.
- While the **Stand Alone** window is open, PRO DMX 2 lets the interface work on its own. The LED changes to:
  - steady green if the interface does not yet contain a show;
  - slow flashing green if it already contains a show, which starts playing.

5. Set up the LED strip

These settings tell the interface which LED strip is connected. They are stored in the interface, independently of the show.

> **Note:** make these settings before writing the show to the interface (chapter 11). Without them, the strip may stay off or display the wrong colours.

Before you start:

- The interface is connected and recognised (chapter 4).
- You know your strip's chip type, colour order and number of pixels (given by the strip manufacturer).

Open the strip settings

From the **Stand Alone** window:

1. Click the interface icon, at the top right of the window. The **Options** window opens directly at the **Device** page, with the list of connected interfaces.

2. In the CLUB SPI interface row, open the **SPI** section.



Interface icon, at the top right of the window

> **Note:** outside stand-alone mode, you can also use the **Tools** > **Options** menu, then the **Device** page.

Set each value

1. Click the value to change.
2. Choose or enter the new value (see the table below).
3. Repeat for each value to change.
4. Click the **Apply** button in the **SPI** section. The settings are written to the interface immediately.

> **Note:** if even one value is out of range, the interface rejects all the settings in the section and keeps the previous ones. For example: **Period** less than 33 ms, **Color mapping** containing a digit greater than **Input color depth**, **Number of pixels** or **Number of repetitions** set to 0. Then check the values (see "Check").



Options window, Device page: SPI section of the CLUB SPI interface and Apply button

Setting	Function	Factory value
Protocol :	Chip type of the strip. Choose the name of your strip's chip. If it is not listed, see the list of compatible chips on the CLUB SPI product page: https://www.chromateq.com/club-spi/	WS2812

Setting	Function	Factory value
Color mapping :	Colour order of the strip. Each digit stands for a colour received from the show: 1 = red, 2 = green, 3 = blue, 4 = white, 5 = amber. For example **123** for an RGB strip, **213** for a GRB strip. A **0** switches off the corresponding colour.	123
Input color depth :	Number of colours per pixel in the show: 3 for RGB, 4 for RGBW.	3
Output color depth :	Number of colours per pixel on the strip: 3 for an RGB strip, 4 for an RGBW strip.	3
Number of pixels :	Number of pixels controlled by the show.	1020
Grouping :	Number of strip pixels lit together, as a single pixel. 1 = each pixel is controlled separately.	1
Number of repetitions :	Number of times the sequence of pixels is repeated along the strip.	1
Period :	Interval between two strip updates. Leave the factory value. For a **WS2811_SLOW** chip, set at least 64 ms.	33 ms

> **Note:** the show controls a maximum of 1,020 RGB pixels or 768 RGBW pixels. With grouping and repetitions, the strip can have up to 1,024 RGB pixels or 768 RGBW pixels. Beyond that, the end of the strip is not controlled.

Close the Options window

Click the **Ok** button (icon) to close the **Options** window. The **Cancel** button closes the window without saving the other changes to the options.

> **Note:** the strip settings are already written to the interface as soon as you have clicked **Apply**.

Check

- Reopen the **Options** window (interface icon, at the top right), **Device** page, **SPI** section: the values shown are the ones you set.
- Correct operation of the strip is checked after writing the show (chapter 12).

6. Configure the outputs and colours

These settings tell the interface what it sends on each output, and how it handles colours. Unless stated otherwise, they are saved with the show.

Before you start:

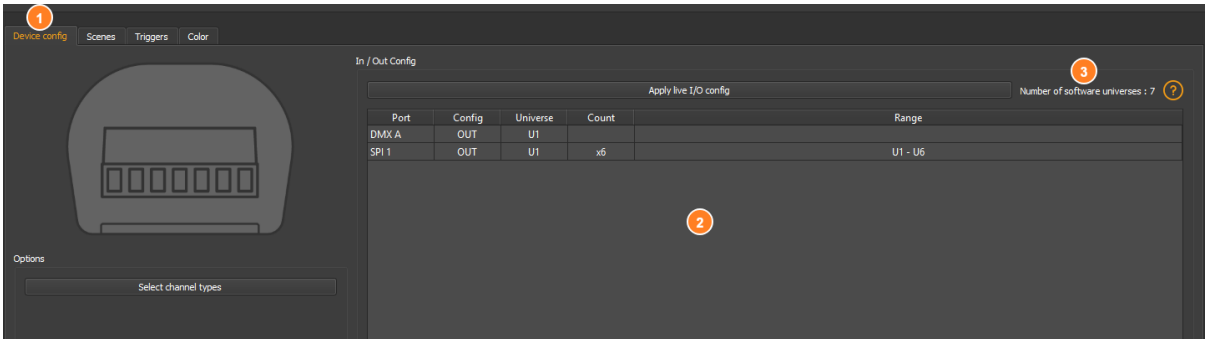
- The **Stand Alone** window is open and the CLUB SPI interface is recognised (chapter 4).
- The LED strip is set up (chapter 5).

Set the outputs

1. Click the **Device config** tab. The **In / Out Config** table shows one row per output:
    - **DMX A**: the DMX line (front terminal block, DMX pins);
    - **SPI 1**: the LED strip (front terminal block, SPI pins).
2. For each row, set the following columns:

Column	Function	Usual setting
Config	**OUT**: the output sends the show. **IN**: the DMX line receives commands from a console (chapter 14). **OFF**: output not used.	**OUT**
Universe	Universe of the show sent on this output (**U1**, **U2**…).	**U1**
Count	For **SPI 1**: number of universes sent in sequence to the strip (**x1** to **x6**).	**x6**
Range	Universes actually sent (calculated automatically), for example **U1 - U6**.	—

1. Read the **Number of software universes** shown at the top right: it shows the capacity of the interface, 7 universes (1 DMX universe + 6 SPI universes).



Device config tab: In / Out Config table

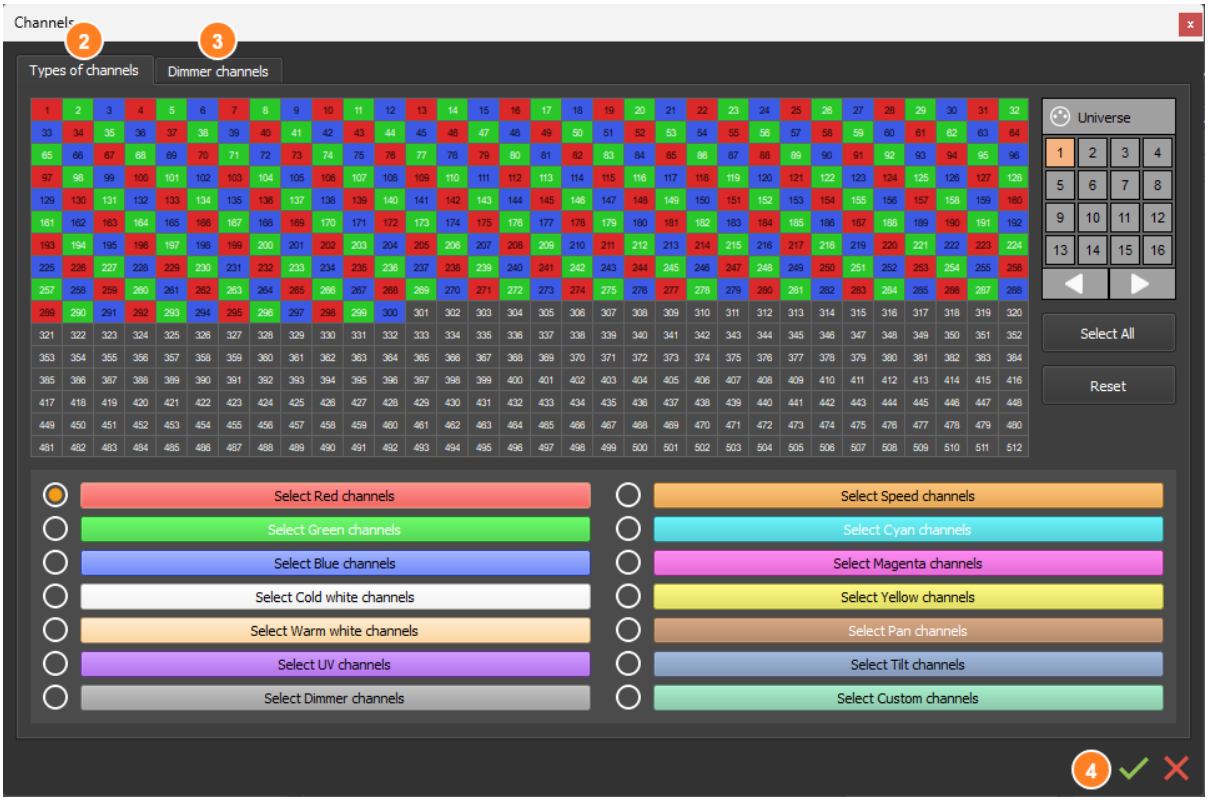
> **Note:** with the usual settings, the DMX line and the strip both start at universe **U1**. The DMX fixtures then receive the same values as the start of the strip.

Check the channel types

The colour and brightness commands (remote control, contacts, DMX console) need to know which channels are red, green, blue, white, or act as a dimmer.

By default, the interface uses the types given in the profiles of the fixtures patched in PRO DMX 2. You have nothing to set if your patch is complete. To check or correct these types:

1. In the **Options** frame, click **Select channel types**. The **Channels** window opens.
2. In the **Types of channels** tab:
    - **Select All** takes the types of all channels from the patch;
    - **Select … channels** (one button per type, for example red or green) lets you choose the channels of that type by hand;
    - **Reset** clears the types.
3. In the **Dimmer channels** tab, check the dimmer channels.
4. Click the **Ok** button (icon) to close the window.

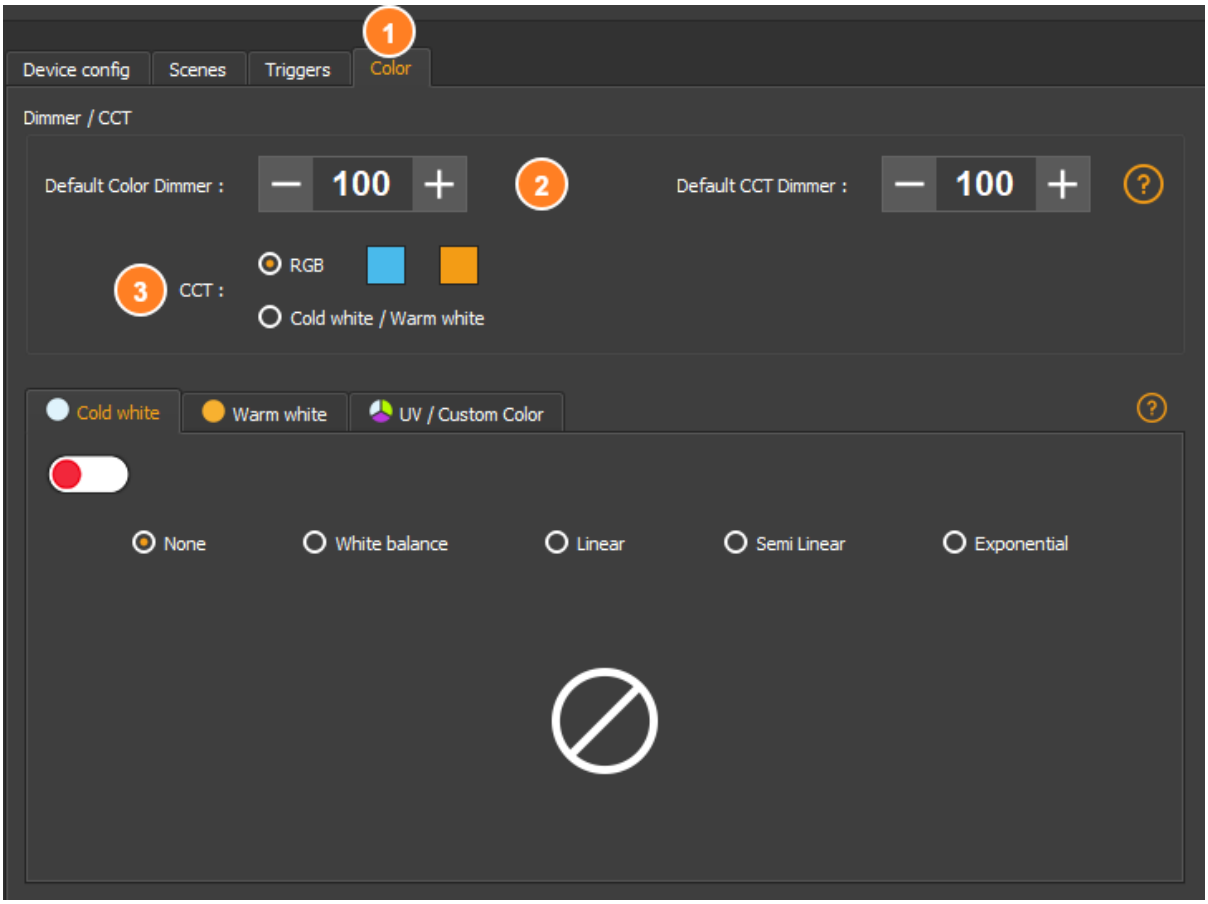


Channels window, Types of channels tab

Set the colours

1. Click the **Color** tab.
2. In the **Dimmer / CCT** frame, set:
    - **Default Color Dimmer :** the starting brightness of colours, as a percentage;
    - **Default CCT Dimmer :** the starting brightness of whites, as a percentage.
3. For **CCT**, choose how the interface produces white (warm or cold white):
    - **RGB**: the interface produces the cold white and warm white shown next to this option by mixing the red, green and blue channels. Click either colour to change it;
    - **Cold white / Warm white**: the interface uses the white and warm white channels of the fixtures or the strip.

Default values: **Default Color Dimmer :** 100 %, **Default CCT Dimmer :** 100 %, **CCT** set to **RGB**.



Color tab

> **Note:** these settings are used by the colour commands of the remote control and the contacts (chapters 9 and 13).
>
> **Note:** these colour settings are stored on the computer, not in the PRO DMX 2 project. They are copied to the interface each time the show is written. If you write the show from another computer, check this tab before writing.

Set the DMX signal (advanced setting)

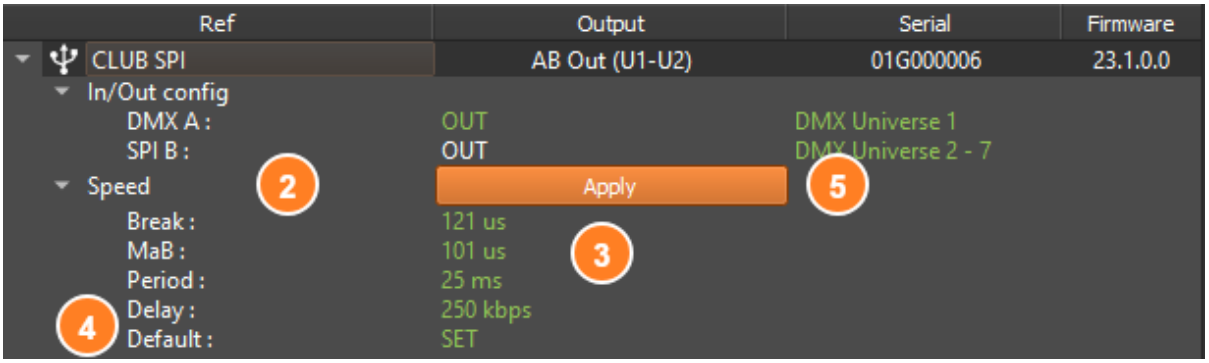
The interface's DMX signal is factory-set to work with most DMX fixtures. Change these settings only if a fixture behaves badly (flicker, random reactions, fixture not responding). These settings apply to the **DMX A** line. The LED strip has its own settings (chapter 5).

Setting	Function	Factory value
Break	Length of the pause that marks the start of each DMX frame.	121 µs
MaB	Length of the signal that follows this pause.	101 µs
Period	Interval between two DMX frames.	25 ms (40 frames per second)
Delay	Data rate: 245, 250 or 255 kbit/s.	250 kbit/s

These settings are stored in the interface. They also apply without a computer.

With PRO DMX 2:

1. Click the interface icon, at the top right of the window. The **Options** window opens at the **Device** page.
2. Expand the interface's row, then the **Speed** section.
3. Change **Break :**, **MaB :**, **Period :** or **Delay :**.
4. To return to the factory values, click **SET** on the **Default :** row.
5. Click the **Apply** button in the **Speed** section. The settings are written to the interface immediately.



Options window, Device page, Speed section

The same setting is available in **DMX Device Tool**: **Config** tab, under "--- DMX ---" (**Apply**; **Default** offers the factory values). Close PRO DMX 2 first: only one program can communicate with the interface at a time.

Check

- In the **Device config** tab, the **Range** column of **SPI 1** shows the expected universes (for example **U1 - U6**).
- If you changed the DMX signal: reopen **Options**, **Device** page, **Speed** section. The values shown are the ones you set.

7. Prepare the scenes

Scenes are created in PRO DMX 2 (colours, steps, effects): see the PRO DMX 2 manual. This chapter explains how to set each scene for stand-alone mode.

Before you start:

- The show scenes are created in PRO DMX 2.
- The **Stand Alone** window is open (chapter 4).

Set the scene parameters used in stand-alone mode

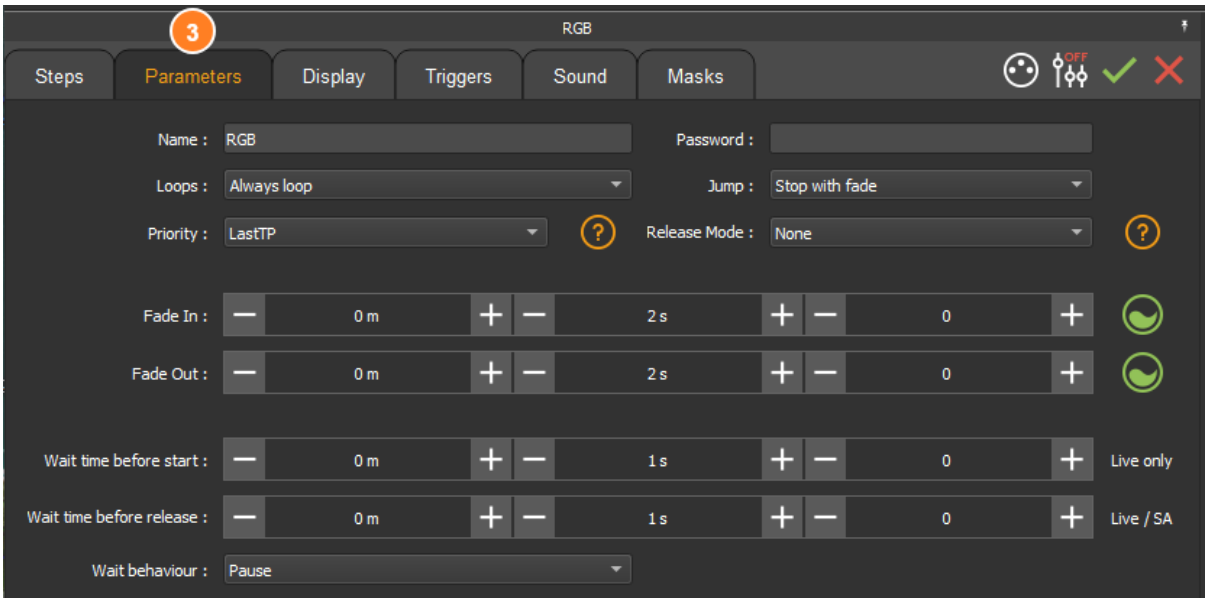
Some scene parameters, set in PRO DMX 2, are also written to the interface. They decide how the scene plays and ends. To open them:

1. Click the **EDIT PANEL** tab.
2. Open the scene for editing. How you do this depends on the PRO DMX 2 mode (chapter 15):
    - Pro mode: right-click the scene, then click **Edit**;

- Player mode: select the scene in the list of scenes, then click the **Edit** icon, in the icon bar of the list.

3. Click the **Parameters** tab.

Parameter	Function in stand-alone mode
Loops	Number of times the scene plays, from 1 to 255. **Always loop**: the scene plays endlessly, and **Jump** is never applied.
Jump	What happens at the end of the scene: **Stop with fade**, **Stop**, **Restart**, **Pause**, **Next** (the next scene starts; after the last one, back to the first), or the name of a scene to play next.
Fade In / **Fade Out**	Length of the fades at the start and end of the scene. **Dynamic** (button next to the duration): the scene keeps playing during the fade. Otherwise, the picture stays frozen during the fade. The fade-out does not apply when **Jump** is set to **Stop** or **Pause**.
Wait time before release	Wait at the end of the scene. With **Wait behaviour** set to **Pause**, the wait comes before the fade-out; with **Blackout**, it comes after it.
Wait behaviour	During this wait: **Pause** (the last frame stays) or **Blackout** (black).
Priority / **Release Mode**	Advanced settings: hover over the **?** help icon next to them to read their explanation.



Scene parameters in PRO DMX 2

Note: the **Wait time before start** and the scene password are not used in stand-alone mode. The other tabs of the scene editing window are used only in live mode (LIVE).

Note: with **Jump**, you can chain several scenes without any trigger: set **Loops** to a number of plays, then **Jump** to **Next** or to the scene to play next.

Note: the scene chosen in **Jump** or **Scene at stop** must be part of a ticked event (chapter 8). Otherwise, it is not written to the interface and nothing starts.

Display the list of scenes

1. Click the **Scenes** tab. The list shows all the scenes of the show, with their settings for stand-alone mode.
2. For each scene, set the columns described below.



Scenes tab of the Stand Alone window

Note: the tick box in the first column places the scene in the selected event. It is explained in chapter 8.

Column	Function	How to set it
Name	Name of the scene, given in PRO DMX 2.	—
Duration	Duration of the scene.	—
Mode	What the scene does when the **selected event** is triggered (see the next table).	First select the event in the list on the left, then click in the cell and choose the mode. With no event selected, the cell stays empty. Choosing a mode also places the scene in the selected event.
Recovery	**ON**: after a power cut, the interface restarts this scene.	Click in the cell: the value switches from **OFF** to **ON**, and back.
Scene at stop	Scene started automatically when this scene is stopped. Empty cell: nothing starts.	Click in the cell and choose a scene. This scene must be part of a ticked event (chapter 8).
Fade on channels	Channel types to which the scene's fades apply.	Click in the cell: a window opens.
Disabled triggers	Triggers ignored while this scene is playing.	Click in the cell: the **Disabled triggers while playing** window opens.
Events	Events that contain this scene (chapter 8).	— (updated automatically)

Choose the mode of each scene

The mode is set **for each event**: the same scene can start with one event and stop with another. Example: the "Ambience" event starts the scene in **On**; the "All off" event contains the same scene in **Off** (chapter 8).

Mode	When the event is triggered
On	The scene starts.
Off	The scene stops.
On / Off	The scene starts if it is stopped, and stops if it is playing.
Pause / Resume	The scene pauses, then resumes at the next trigger. No effect if the scene is stopped.
Go + restart	The scene starts; if it is already playing, it starts again from the beginning.

Note: with the **On** mode, triggering a scene that is already playing does not make it start again from the beginning. Choose **Go + restart** to restart it from the beginning.

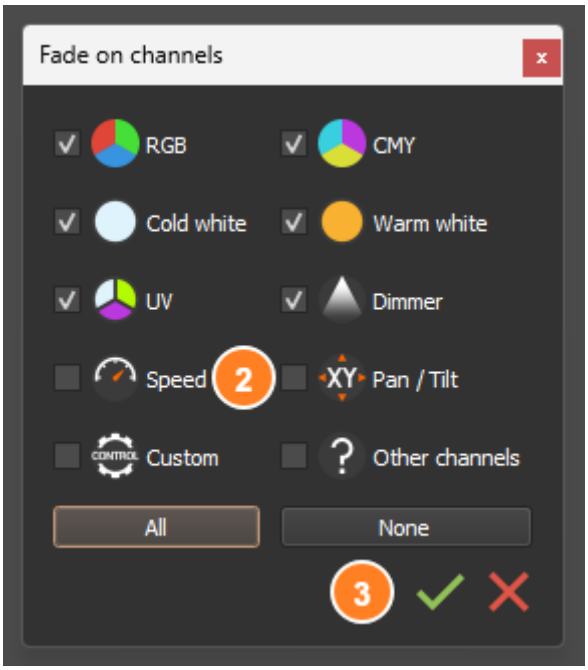
Resume a scene after a power cut

Set **Recovery** to **ON** for the scenes that must resume after a power cut.

- If a scene marked **ON** was playing when the power was cut, the interface restarts it when the power returns. It starts again from the beginning.
- Otherwise, the interface plays the start event (chapter 8).

Set the fades

1. Click in the scene's **Fade on channels** cell. The **Fade on channels** window opens.
2. Tick the channel types affected by the fade. The **All** and **None** buttons tick or untick all the types.
3. Confirm. The cell shows the chosen types.

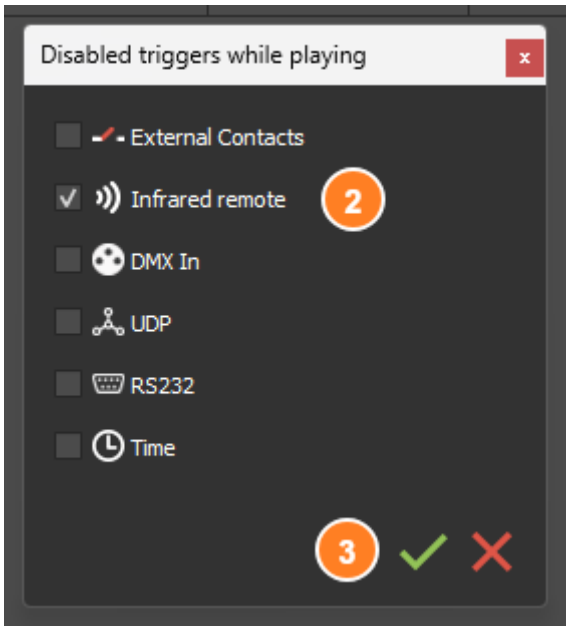


Fade on channels window

Disable triggers during a scene

During certain scenes, you can stop the buttons, the remote control or the DMX console from changing the scene.

1. Click in the scene's **Disabled triggers** cell. The **Disabled triggers while playing** window opens.
2. Tick the triggers to ignore during this scene. On the CLUB SPI interface, only these three choices are useful:
    - **External Contacts** (TRIG A, TRIG B, TRIG C inputs);
    - **Infrared remote**;
    - **DMX In** (DMX console).
3. Confirm.



Disabled triggers while playing window

> **Note:** if you disable all triggers during a scene, neither the buttons, nor the remote control, nor the DMX console can stop it while it is playing.

Check

- Each scene has the required mode.
- The scenes to restart after a power cut are set to **ON** in **Recovery**.
- The parameters of each scene (loops, end of scene, fades) are the ones you want.

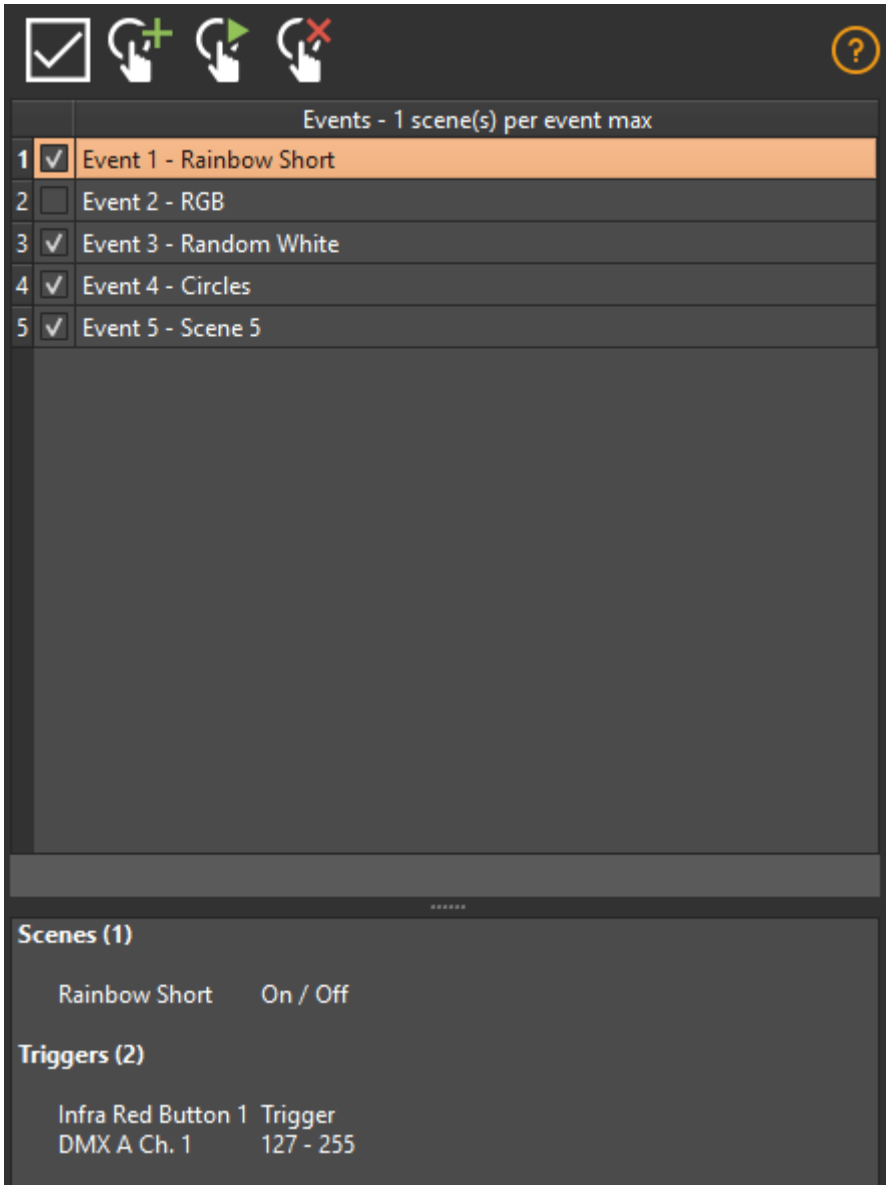
8. Create the events

An event tells the interface which scene to play. Events are what the triggers start (chapter 9). On the CLUB SPI interface, each event contains a single scene.

Before you start:

- The scenes are set (chapter 7).
- The **Stand Alone** window is open (chapter 4).

The list of events is on the left of the **Stand Alone** window. Its title shows the interface limit: **Events - 1 scene(s) per event max**.



List of events, on the left of the Stand Alone window

Create an event for each scene (quick method)

1. Click the **Add a new event for each scene** button (icon, above the list).
2. PRO DMX 2 creates one event per scene, named for example "Event 2 - RGB".

Create an event by hand

1. Click the **Add** button (icon). A new event appears, for example "Event 6".
2. Select this event in the list.
3. Click the **Scenes** tab.
4. Tick the box in the first column in front of the scene to play. The scene is placed in the selected event.

Note: an event contains only one scene. If you tick another scene, it replaces the previous one.

To rename an event, double-click its name in the list, type the new name, then press **Enter**.

To delete an event, select it, then click the **Remove** button (icon).

Choose the events to write to the interface

Only the events ticked in the list are written to the interface.

- Tick or untick the box in front of each event.
- The **Select** button (icon) ticks all the events. If they are all already ticked, it unticks them all.

Note: a scene that is not played by any ticked event is not written to the interface.

Check the content of an event

Click an event: the summary, below the list, shows:

- **Scenes**: the scene played;
- **Triggers**: the buttons, remote control keys or DMX commands that start this event (chapter 9).

Choose the start event

The start event is played automatically every time the interface is powered up.

1. Click the **Scenes** tab. The **Default start event :** list is in the bar of this tab.
2. Open the **Default start event :** list.
3. Choose the event to play at start-up.

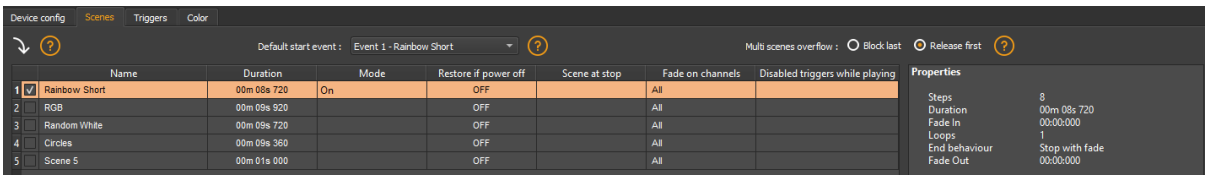
Note: if no start event is chosen, the interface waits for a trigger after power-up.

Choose what happens when a new scene is started

The CLUB SPI interface plays only one scene at a time. The **Multi scenes overflow :** setting, in the bar of the **Scenes** tab, decides what happens when a trigger starts another scene:

- **Release first**: the current scene stops and the new one replaces it. This is the recommended setting.
- **Block last**: the new scene is not started while a scene is playing.

Note: with **Block last**, triggers can no longer change the scene while a scene is playing. The show appears to stop responding.



Default start event and Multi scenes overflow

Check

- Each event contains the required scene (summary below the list).
- The events to write are ticked.
- The **Default start event** is chosen, if needed.
- **Multi scenes overflow** is set to **Release first**.

9. Program the triggers

A trigger starts an event (chapter 8). The CLUB SPI interface accepts three trigger sources:

- the contacts wired to **TRIG A**, **TRIG B** and **TRIG C**;
- the infrared remote control;
- a DMX console connected to the DMX line.

Note: the CLUB SPI interface has no clock. Triggers at a set time are not available.

Before you start:

- The events are created (chapter 8).
- The **Stand Alone** window is open (chapter 4).

The Triggers tab

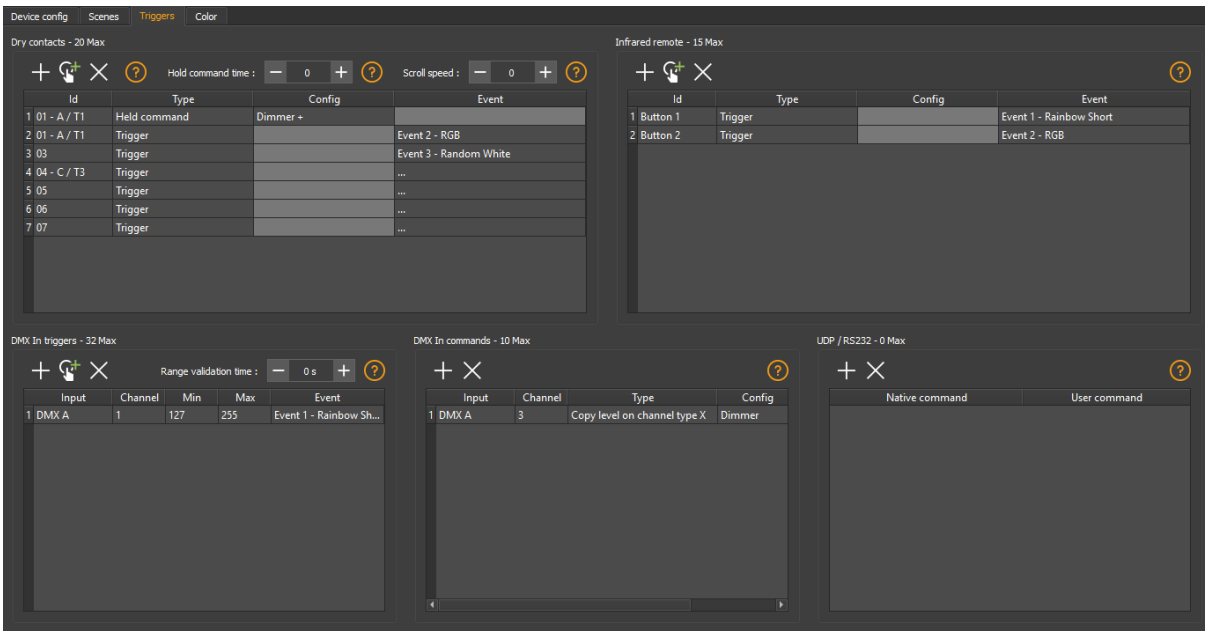
Click the **Triggers** tab. It contains one table per trigger source:

Table	Source	Maximum number
Dry contacts	TRIG A, TRIG B, TRIG C inputs	20 rows
Infrared remote	Remote control keys	15 rows
DMX In triggers	Value ranges sent by a DMX console	32 rows
DMX In commands	Continuous adjustments from a DMX console	10 rows

The title of each table shows its maximum, for example **Dry contacts - 20 Max**. The **UDP / RS232** table is not used with the CLUB SPI interface.

Each table has its own buttons (icons):

- **Add**: adds a row;
- **Add a new trigger for each event**: creates a row for each event;
- **Remove**: deletes the selected row.



Triggers tab and its tables

> **Note:** a red cell indicates a problem (event not written, missing scene…). Hover the pointer over the cell to read the explanation.

Program the contacts

1. In the **Dry contacts** table, click **Add**.
2. In the **Id** column, choose the contact:
    - **01 - A / T1** for **TRIG A**;
    - **02 - B / T2** for **TRIG B**;
    - **04 - C / T3** for **TRIG C**.
3. In the **Type** column, choose what the contact does (table below).
4. Depending on the type, set the **Config** column (a command or a scene) and the **Event** column.

Type	Effect	Column to set
Trigger	Starts the event when pressed.	**Event**
Held autorelease	Starts the event when pressed. When released, stops the scenes in **On / Off** mode (a "press-and-hold" button).	**Event**
Trigger if X plays	Starts the event only if the chosen scene is playing.	**Config** (scene), **Event**
Trigger if X doesn't play	Starts the event only if the chosen scene is not playing.	**Config** (scene), **Event**
Short command	Short press: runs a command, on release.	**Config** (command)
Held command	Held press: runs a command for as long as the contact is held.	**Config** (command)

> **Note:** the same contact can have several rows, for example a **Short command** and a **Held command**: a short press and a long press then do two different things.

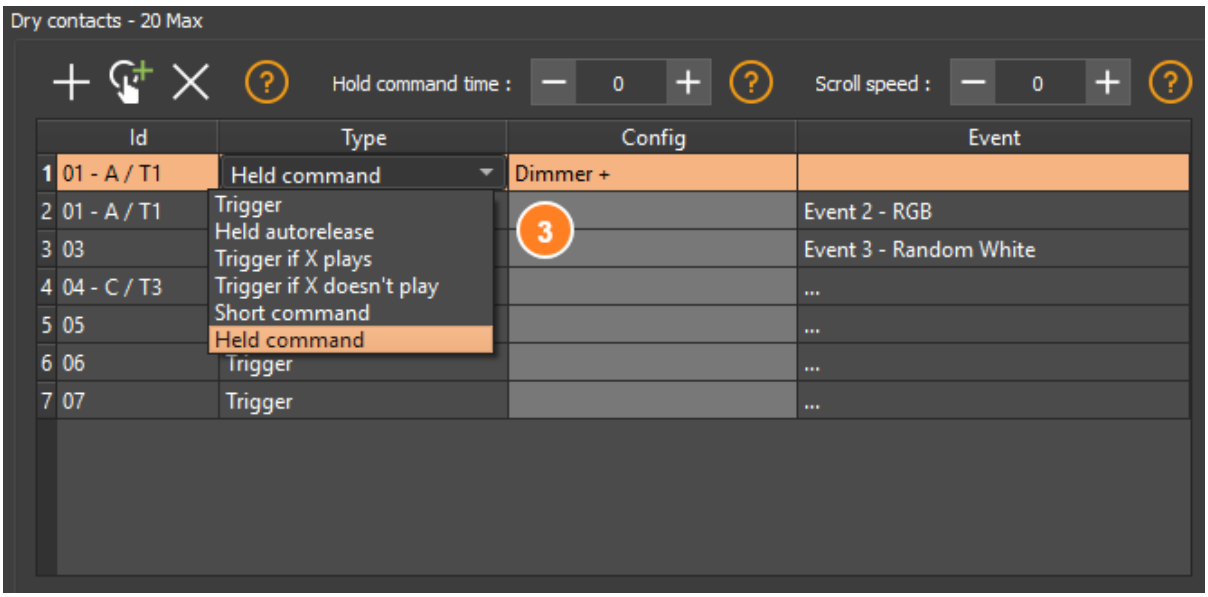
The commands (Config column)

Command	Effect
Dimmer + / **Dimmer -**	Increases / decreases the brightness.
Speed + / **Speed -**	Speeds up / slows down the scene.
Color + / **Color -**	Cycles through the colours in one direction or the other.
CCT + / **CCT -**	Changes the white temperature, in one direction or the other.
Dimmer +-, **Speed +-**, **Color +-**, **CCT +-**	Held press only: goes up, then down at the next press.
Scene Next / **Scene Previous**	Moves to the next / previous scene.
Play / Pause	Pauses the scene; pressing again resumes it.
Stop all	Stops all scenes.
Blackout	Switches off the output; the show continues in the background. Pressing again switches it back on.
Disable Color Mode	Returns to the scene's colours.
Change Color Mode	Switches from colour to white (CCT), and back.

> **Note:** a short press (**Short command**) changes the value by one step. The **Zone Next**, **Zone Previous** and **Select Zone** commands have no effect on the CLUB SPI interface, which has only one zone.

Settings below the table

- **Hold command time :** leave the value shown. A press is treated as held after 1 s.
- **Scroll speed :** speed of change during a held press (**Held command**), from 0 to 5: the higher the value, the faster the change.

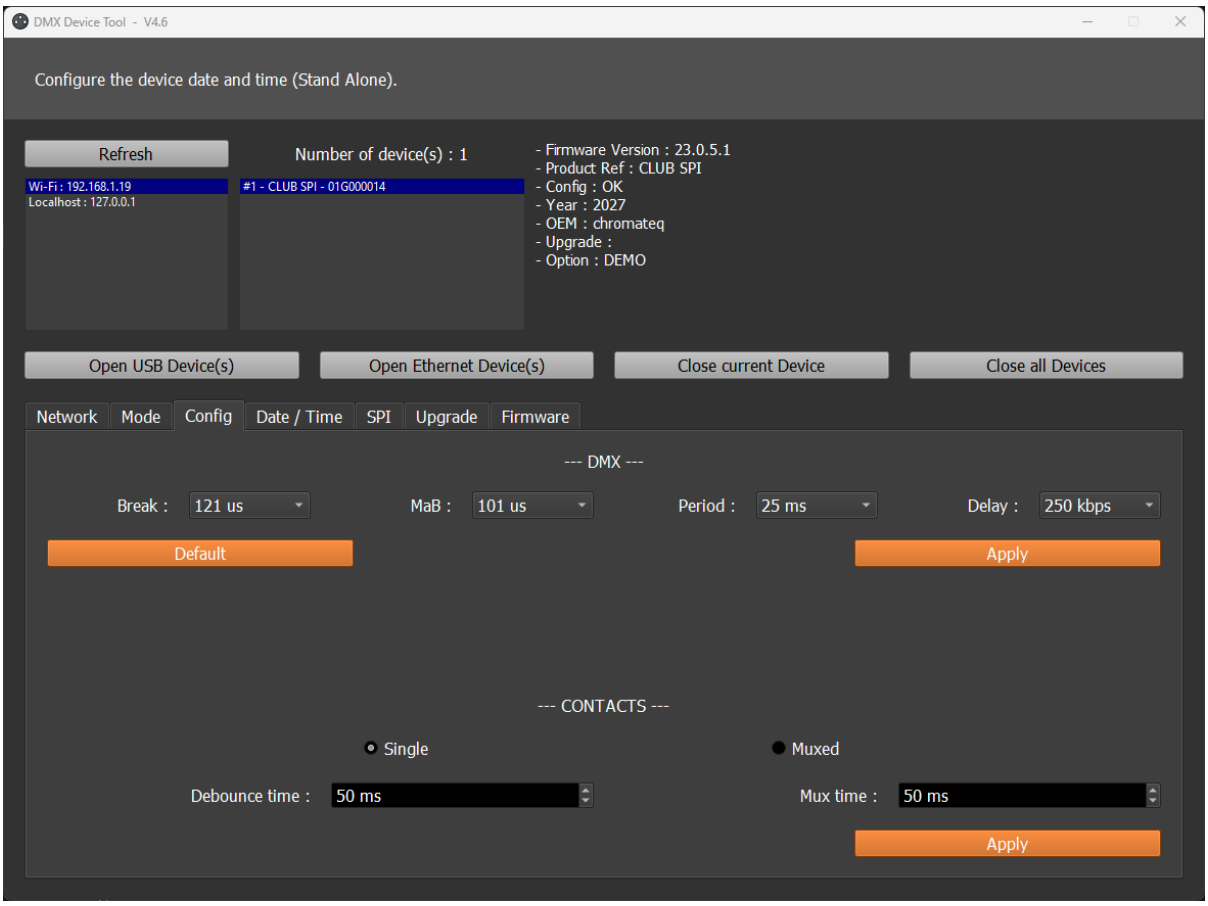


Dry contacts table: choosing the type

Use combinations of contacts (optional)

With the factory setting, each input has its own number (01, 02, 04). To also use contacts closed together, switch the contacts to **Muxed** mode with the **DMX Device Tool** software:

1. Close PRO DMX 2: only one program can communicate with the interface at a time.
2. Start **DMX Device Tool**.
3. Click **Open USB Device(s)**.
4. Select the interface in the list, for example "#1 - CLUB SPI - <serial number>".
5. Click the **Config** tab.
6. In the **--- CONTACTS ---** frame, choose **Muxed**.
7. Click the **Apply** button in the **--- CONTACTS ---** frame.
8. Click **Close current Device**.
9. Close DMX Device Tool. You can reopen PRO DMX 2.



DMX Device Tool, Config tab: contact mode (version numbers shown are examples)

The following numbers then become available in the **Id** column:

Number	Contacts closed together
03	TRIG A + TRIG B
05	TRIG A + TRIG C
06	TRIG B + TRIG C
07	TRIG A + TRIG B + TRIG C

> **Note:** leave **Debounce time** and **Mux time** at their factory values.

To check **Muxed** mode: program a trigger on **03**, write the show (chapter 11), then close TRIG A and TRIG B together. The expected event should start.

Program the remote control



Infrared remote control of the CLUB SPI interface

1. In the **Infrared remote** table, click **Add**.
2. In the **Id** column, choose a key from **Button 1** to **Button 15**. Keys 10 to 15 also carry the markings **A** to **E** and **[ ]** on the remote control.
3. In the **Type** column, choose **Trigger**, **Trigger if X plays** or **Trigger if X doesn't play** (see the contacts table).
4. In the **Event** column, choose the event to start.

> **Note:** only keys 1 to 15 can start an event. The other keys have a fixed function (chapter 13), even if the **Id** list offers them (**Plus**, **Minus**, **Pause**, **Power**, **Speed**, **Dimmer**, **No Color**, **Color**, **Scene**…).
>
> **Note:** after pressing **Speed**, **Dimmer** or **Color**, keys 1 to 9 set a value and no longer start an event. Keys 10 to 15 do not respond either. Press **Scene** to return to the events.

Program a DMX console

Before you start: set the **DMX A** line to **IN** in the **Device config** tab (chapter 6). The DMX line is then no longer used as an output.

Start an event according to a DMX value

1. In the **DMX In triggers** table, click **Add**.
2. In the **Input** column, choose **DMX A**.
3. In the **Channel** column, choose the DMX channel to monitor.
4. In the **Min** and **Max** columns, enter the range of values (from 0 to 255).
5. In the **Event** column, choose the event to start when the channel value enters the range.

The event is started once, when the channel value **enters** the range. To start it again, the value must first leave the range, for at least the **Range validation time**, then come back into it.

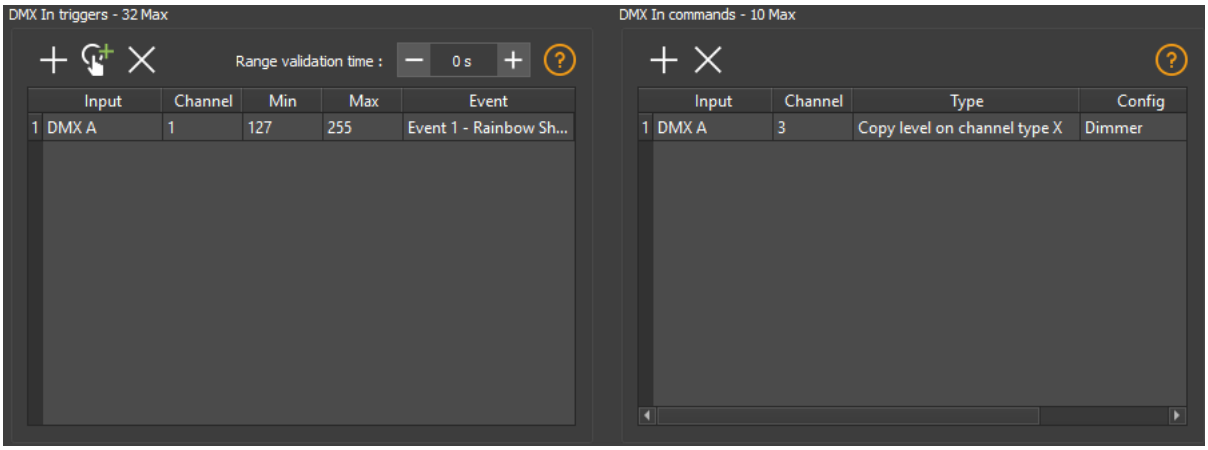
The **Range validation time :** setting (from 0 to 10 s) sets how long the value must stay in the range before the event is started.

Make continuous adjustments from the console

1. In the **DMX In commands** table, click **Add**.
2. Choose the **Input** (**DMX A**) and the **Channel**.
3. In the **Type** column, choose the action:
    - **Copy level on channel type X**: the channel value is copied to all channels of the chosen type;
    - **Multiplicative type X**: the channel value modulates the level of the channels of the chosen type;
    - **Speed zone X**: the channel value sets the speed of the scenes;
    - **Dimmer zone X**: the channel value sets the overall brightness.
4. In the **Config** column, choose the channel type (**Red**, **Green**, **Blue**…) or, for speed and brightness, **Zone G**.

Note: the commands work only while the console is sending its signal. If the console stops, the show gets its own colours back; speed and brightness keep the last value received.

Note: the **DMX In** box of the **Disabled triggers while playing** window (chapter 7) blocks only the **DMX In triggers**. The **DMX In commands** remain active.



DMX In triggers and DMX In commands tables

Check

- Click an event (list on the left): under **Triggers**, the summary shows the contacts and keys that start it.
- No cell is red in the tables.
- If you use a DMX console, the **DMX A** line is set to **IN** in the **Device config** tab.

10. Check the configuration before writing

PRO DMX 2 lets you set everything freely. Before writing the show to the interface, take two minutes to check the points below: one oversight can result in a show that does not respond.

Before you start:

- The show is ready: scenes, events and triggers (chapters 7 to 9).
- The **Stand Alone** window is open.

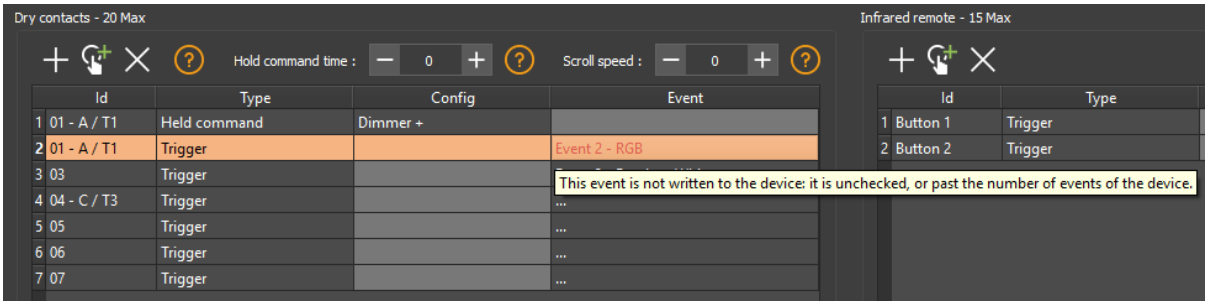
Checklist

✓	Point to check	Where	Chapter
☐	The interface firmware is up to date.	Interface icon > **Device** page, **Firmware** column	16
☐	The LED strip is set up (chip type, colour order, number of pixels).	Interface icon > **SPI** section	5
☐	The **DMX A** line is set to **OUT** if it controls fixtures, to **IN** if it receives signals from a DMX console.	**Device config** tab	6
☐	Each event contains the right scene, and the events to write are ticked.	List of events	8
☐	The **Default start event** is chosen (otherwise, the interface waits for a trigger).	**Scenes** tab	8
☐	**Multi scenes overflow** is set to **Release first**.	**Scenes** tab	8
☐	The contacts use the numbers **01**, **02** and **04** (03, 05, 06 and 07 in **Muxed** mode).	**Triggers** tab, **Dry contacts** table	9
☐	The remote control uses only **Button 1** to **Button 15**.	**Infrared remote** table	9
☐	The DMX triggers target **DMX A**, and **DMX A** is set to **IN**.	**DMX In triggers** and **DMX In commands** tables, **Device config** tab	6 and 9
☐	No cell is red (see below).	**Triggers** tab	9

Fix red cells

In the **Triggers** tab, a red cell indicates a setting that will not work in the interface. Hover the pointer over the cell to read the explanation:

Message	What to do
"This scene is not written to the device: no checked event plays it." (**Config** column of a **Trigger if X plays** or **Trigger if X doesn't play** trigger)	The chosen scene is not in any ticked event. Place it in an event, and tick that event (chapter 8).
"This event is not written to the device: it is unchecked, or past the number of events of the device." (**Event** column)	Tick the event in the list of events (chapter 8).
Whole row red in a trigger table	The table exceeds its maximum (shown in its title). Delete the extra rows.



Example of a red cell and its explanation

Check

- All the points in the checklist are ticked.
- No cell is red.

You can now write the show to the interface (chapter 11).

11. Write the show to the CLUB SPI memory

Writing sends the show to the interface memory. After that, the interface can work on its own.

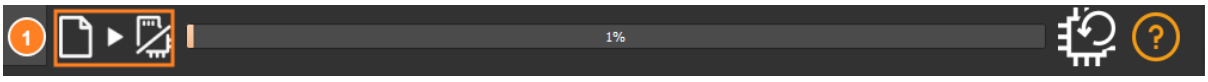
Before you start:

- The interface is connected by USB and recognised (chapter 4).
- The configuration is checked (chapter 10).
- The LED strip is set up (chapter 5).

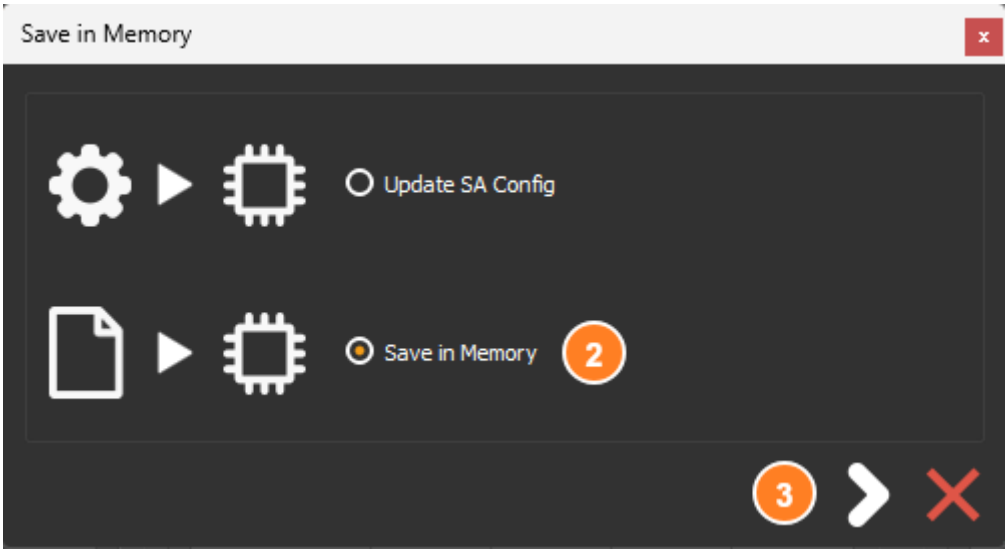
> **Note:** update the interface firmware before the first write (chapter 16). Firmware that is too old cannot read shows written by the current version of PRO DMX 2: the interface would play nothing.

Write the show

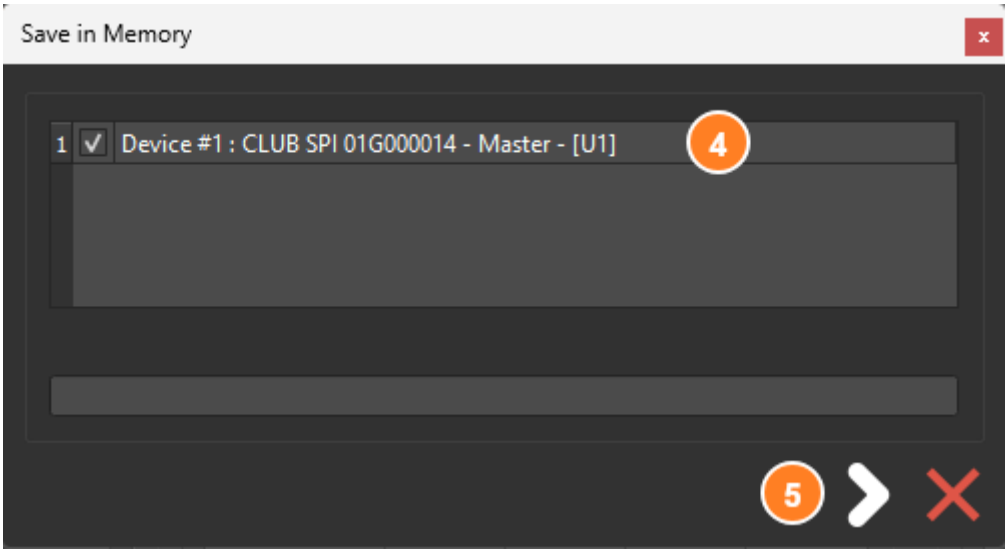
1. In the **Stand Alone** window, click the **Save in Memory** button (icon at the bottom of the window, to the left of the memory gauge). The **Save in Memory** window opens.
2. Check that the **Save in Memory** option is selected (this is the default option).
3. Click the **›** arrow, at the bottom right. The list of interfaces is displayed.
4. Check that the tick box for the interface is ticked (for example "Device #1 : CLUB SPI…").
5. Click the **›** arrow again. Writing starts. Two messages appear in turn:
   - "Erasing device #1 memory...";
   - "Writing device #1 show...".
6. Wait for the message "Stand Alone memory written successfully".
7. Click the **Ok** button (green tick) to close the window.



Save in Memory button, at the bottom of the Stand Alone window



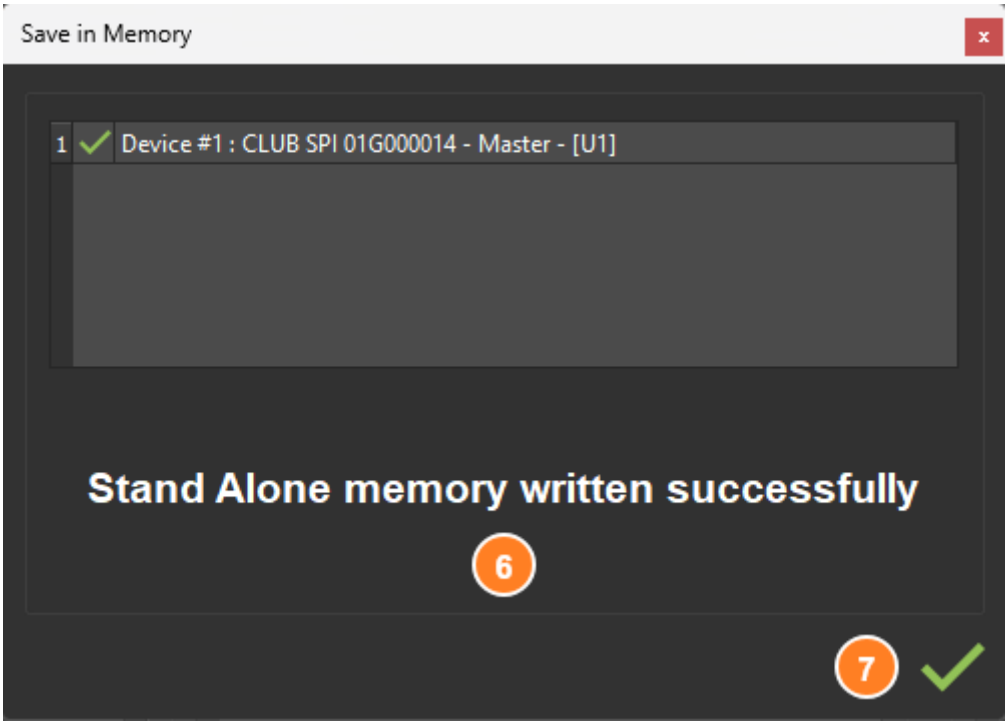
Save in Memory window: choosing how to write



Save in Memory window: list of interfaces

> **Caution:** do not disconnect the interface while writing. If writing is interrupted, the interface does not play the incomplete show: write it again.

After writing, the interface switches to stand-alone mode by itself and plays the start event. If no start event is chosen, it waits for a trigger.



Message confirming that the show was written successfully

Write the configuration only (optional)

The **Update SA Config** option writes only the interface configuration, without the show. Use it if you have changed only interface settings.

If a message blocks writing

Message	What to do
"Not enough place to write the show into device's memory."	The show is too large. Remove scenes or events, then try again.
"No output channels selected."	No output is set. Check the **Device config** tab (chapter 6).

If writing fails

The message "Stand Alone memory writing failed" is displayed in red.

1. Check the USB-C cable.
2. Choose **Restart Stand Alone memory writing**, then click **Ok**.
3. If it fails again, choose **Restart SECURE Stand Alone memory writing (slow process)**, then click **Ok**.

Check

- The message "Stand Alone memory written successfully" was displayed.
- The interface plays the start event. The LED is green and flashes slowly.
- The full check of stand-alone operation is explained in chapter 12.

12. Check stand-alone operation

This chapter helps you check that the interface plays the show on its own, and that each trigger works.

Before you start:

- The show is written to the interface (chapter 11).
- The LED strip, the buttons and, if needed, the DMX console are connected (chapter 3).

Test start-up

1. Close PRO DMX 2 or unplug the USB cable from the computer.
2. Switch off the interface power, then switch it back on.
3. Wait about 4 seconds. The interface plays the start event.
4. Look at the status LED:
    - green, slow flashing: the interface is working on its own and contains a show;
    - steady green: the interface is not playing a show. Write the show again (chapter 11). If the problem persists, update the firmware (chapter 16), then rewrite the show.

> **Note:** if no start event is chosen, the strip stays off and the interface waits for a trigger. This is normal.

Test each trigger

1. Contacts: press each button wired to **TRIG A**, **TRIG B** and **TRIG C**. Check that the expected event starts.

2. Remote control: first press the **Scene** key, then each programmed key (1 to 15). Check that the expected event starts.
3. DMX console (if you use one): send the expected values on the programmed channels. Check that the expected event or adjustment takes place.

Test recovery after a power cut (if you use it)

1. Start a scene set to **ON** in the **Recovery** column.
2. Switch off the interface power, then switch it back on.
3. Check that after about 4 seconds, this scene starts again from the beginning.

If something does not work

Problem	Possible cause	Solution
Nothing starts at start-up	No start event chosen	Choose a **Default start event** (chapter 8), then rewrite the show.
Nothing starts although writing was successful	Interface firmware too old for the written show	Update the firmware (chapter 16), then rewrite the show.
A trigger does not change the scene	**Multi scenes overflow** is set to **Block last**	Choose **Release first** (chapter 8), then rewrite the show.
A trigger does not respond during a scene	The scene disables this trigger	Check the **Disabled triggers** column (chapter 7).
A contact does not respond	Wrong contact number	Use **01**, **02** or **04**. Numbers 03, 05, 06 and 07 require **Muxed** mode (chapter 9).
A remote control key does not respond	The remote control is in Speed, Dimmer or Color mode	Press **Scene**, then try again.
The DMX console has no effect	**DMX A** is not set to **IN**	Set **DMX A** to **IN** (chapter 6), then rewrite the show.
The strip stays off or shows the wrong colours	Incorrect strip setting	Check the **Protocol** and the **Color mapping** (chapter 5).

Other solutions are given in chapter 18.

Take back control with the computer

To change the show, reconnect the interface to the computer and open PRO DMX 2. While PRO DMX 2 controls the interface, the stand-alone show stops. It resumes as soon as the software releases the interface (**Stand Alone** window open, software closed or cable unplugged).

Check

- At start-up, the interface starts the expected event.
- Each trigger starts the expected event.

13. Everyday use

Once the show is written, the CLUB SPI interface works without a computer. This chapter explains how to control it with the remote control, and how to read its LED.

Before you start: the show is written to the interface (chapter 11).

Use the remote control

Point the remote control at the front panel of the interface (**IR** marking).



Remote control of the CLUB SPI interface

Start the programmed events

At power-up, the remote control is in **Scene** mode (key with a film strip):

- keys **1** to **15** start the programmed events (chapter 9);
- the **+** and **−** keys (orange) move to the next or previous scene.

Adjust the speed, brightness or colour

1. Press the key for the required setting:
    - **Speed** (speedometer): the speed;
    - **Dimmer** (sun): the brightness;
    - **Color** (colour wheel): the colour. A second press on **Color** switches to white, from warmest to coldest.
2. Set the value:
    - with **+** and **−** (hold the key down to scroll);
    - or with a preset, keys **1** to **9** (table below).
3. Press **Scene** to return to the events.

Key	Speed	Dimmer	Color	White (2nd press on Color)
1	Slowest	Almost off	White	Warmest
2 to **4**	…	…	Red, orange, yellow	…
5	Normal speed	…	Green	Neutral
6 to **8**	…	…	Cyan, blue, violet	…
9	Fastest	Full brightness	Magenta	Coldest

Note: during an adjustment (Speed, Dimmer or Color), keys 1 to 9 no longer start events. Keys 10 to 15 do not respond either. Press **Scene** to get them back.

Other keys

Key	Effect
No Color (crossed-out wheel)	Returns to the scene's colours.
Pause (blue)	Pauses the scene. Pressing again restarts it.
Power (red)	Stops all scenes.

Note: adjustments made with the remote control are not saved in the show. After a power cut, only the brightness (**Dimmer**) is kept.

Read the status LED

The LED is on the rear panel, next to the USB-C socket.

LED	Meaning
Off	The interface is not powered.
Steady green	The interface is powered and its memory contains no show.
Green, slow flashing	The interface is working on its own and playing the show in memory.
Green, fast flashing	PRO DMX 2 is communicating with the interface over USB.
Green, 3 flashes	Preparing the firmware update.
Alternating green and red	Firmware update in progress.
Red, fast flashing	LED Driver mode (chapter 14a).
Green and red, fast flashing	Contact Chromateq support.

At power-up and after a power cut

- At power-up, the interface waits about 4 seconds, then plays the start event (chapter 8).
- If a scene set to **ON** in **Recovery** was playing when the power was cut, that scene starts again, from the beginning (chapter 7).

- If no start event is chosen, the interface waits for a trigger.

When the computer is connected

When PRO DMX 2 controls the interface live, the stand-alone show stops. It resumes as soon as the software releases the interface, for example when you close the software or unplug the USB cable.

Check

- Keys **1** to **15** on the remote control start the expected events.
- After **Speed**, **Dimmer** or **Color**, the strip changes speed, brightness or colour.
- The LED is green and flashes slowly: the interface is working on its own.

14. Control the strip from a DMX console (optional)

A DMX console connected to the interface can control the LED strip directly, in addition to the show or instead of it.

Before you start:

- The DMX console is connected to the **DMX-**, **DMX GND** and **DMX+** pins (chapter 3).
- The **Stand Alone** window is open (chapter 4).

> **Note:** the interface has only one DMX line. When it is used as an input for a console, it can no longer control DMX fixtures.

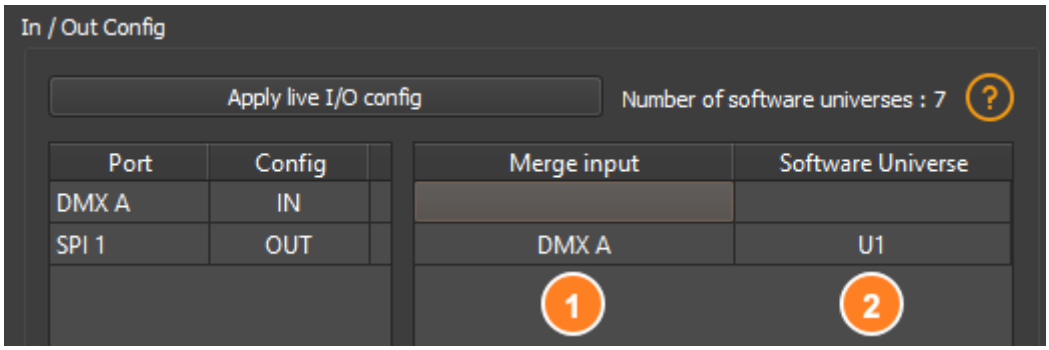
Set the DMX line as an input

1. Click the **Device config** tab.
2. In the **In / Out Config** table, set the **Config** column of the **DMX A** line to **IN**. A second table, the merge table, appears.

Send the console to the strip

The merge table has two columns, **Merge input** and **Software Universe**, and two rows at most.

1. In the **Merge input** column, choose **DMX A**.
2. In the **Software Universe** column, choose the strip universe that should receive the console signal (for example **U1**).
3. If needed, use the second row for another strip universe.



DMX A line set to IN and merge table

> **Note:** to cancel a merge, choose the blank entry at the top of the list.

Understand how the show and the console are mixed

For each channel, the interface keeps whichever value is higher: the show's or the console's.

- For the console to control the strip on its own, no scene must be playing: for example, do not choose a start event (chapter 8).
- For the console to add to the show, let the show play: the console can only make the light brighter.

Write the show

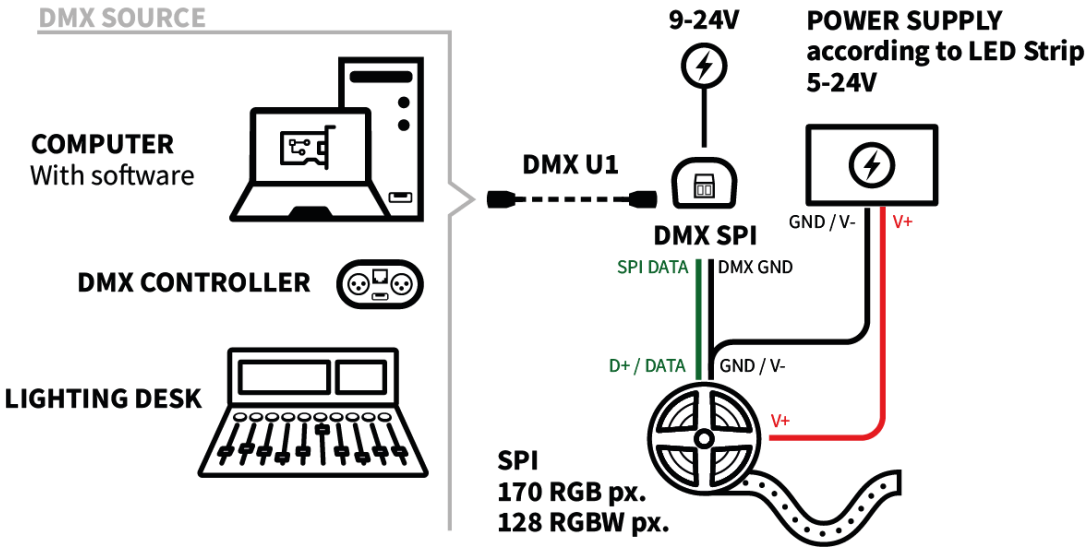
1. Write the show to the interface (chapter 11).
2. Send values from the console.

Check

- The strip responds to the values sent by the console.
- No cell is red in the merge table. A red cell indicates:
  - "No output of the device sends this universe.": choose a universe sent to the strip (see the **Range** column of **SPI 1**);
  - a whole row in red: there are more merges than the interface accepts (2 at most). Cancel the extra merge.

14a. Use the CLUB SPI in LED Driver mode (optional)

In LED Driver mode, the interface becomes a simple converter: the DMX console controls the LED strip directly. No show plays in this mode.



LED Driver mode: a DMX source controls the strip directly

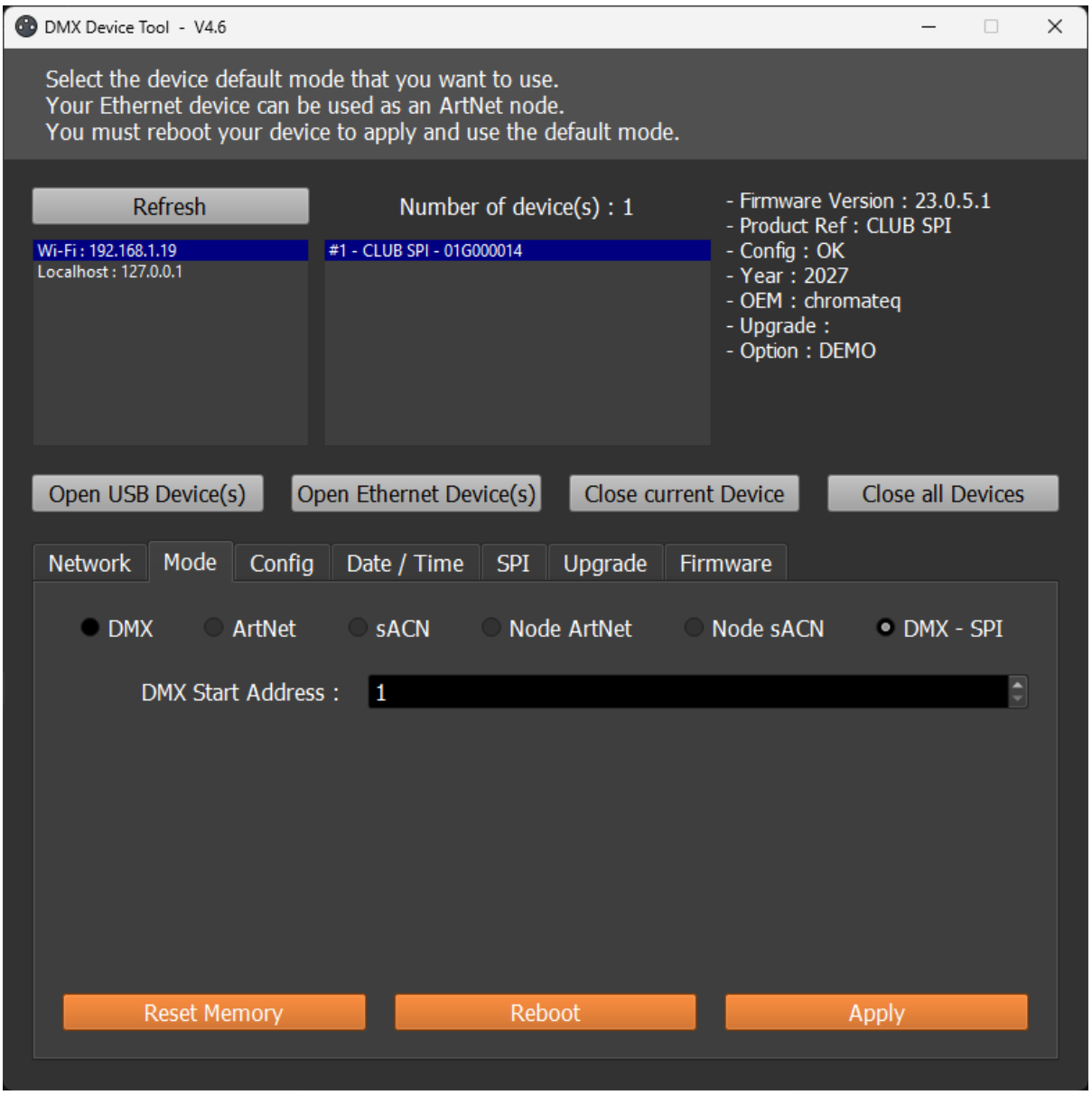
	Chapter 14 (console + show)	LED Driver mode
The stand-alone show plays	Yes	No
The console controls the strip	Yes, mixed with the show	Yes, on its own
Setting	In PRO DMX 2	In DMX Device Tool

Before you start:

- The DMX console is connected to the **DMX-**, **DMX GND** and **DMX+** pins (chapter 3).
- The LED strip is set up (chapter 5): these settings are also used in LED Driver mode.
- Close PRO DMX 2: only one program can communicate with the interface at a time.

Switch to LED Driver mode

1. Start **DMX Device Tool**.
2. Click **Open USB Device(s)**.
3. Select the interface in the list, for example "#1 - CLUB SPI - <serial number>".
4. Click the **Mode** tab.
5. Choose **DMX - SPI**.
6. In **DMX Start Address :**, enter the first DMX channel that controls the strip (from 1 to 512).
7. Click **Apply**.
8. Click **Reboot**. The interface restarts in the new mode.
9. Click **Close current Device**.
10. Close DMX Device Tool.



DMX Device Tool, Mode tab: DMX - SPI option and DMX Start Address (version numbers shown are examples)

> **Note:** the console sends a single DMX universe. The strip receives at most 170 RGB pixels or 128 RGBW pixels, starting from the channel entered in **DMX Start Address :**.

Light a longer strip: grouping and repetitions

The console controls at most 170 RGB pixels (128 RGBW pixels). To light a longer strip, use two strip settings (chapter 5):

- **Grouping :** each pixel sent by the console lights several neighbouring LEDs, which take the same colour. For example, with a grouping of 3, the 170 pixels from the console light 510 pixels of the strip.
- **Number of repetitions :** the sequence of pixels sent by the console is repeated along the strip. For example, 50 pixels repeated 4 times light 200 pixels of the strip, with the same pattern 4 times.

Also set **Number of pixels :** to the number of pixels sent by the console, before grouping and repetitions.

> **Note:** in total, the strip can have at most 1,024 RGB pixels or 768 RGBW pixels. Beyond that, the end of the strip is not controlled.

Return to stand-alone mode

1. Close PRO DMX 2.
2. Start **DMX Device Tool**.
3. Click **Open USB Device(s)**.
4. Select the interface in the list.
5. Click the **Mode** tab.
6. Choose **DMX**.
7. Click **Apply**.
8. Click **Reboot**.
9. Click **Close current Device**.
10. Close DMX Device Tool.

The interface works in stand-alone mode again with the show written in its memory.

Check

- In LED Driver mode, the LED flashes red quickly, and the strip follows the values sent by the console.
- After returning to stand-alone mode, the LED is green and the interface plays its show.

15. Retrieve or erase the show

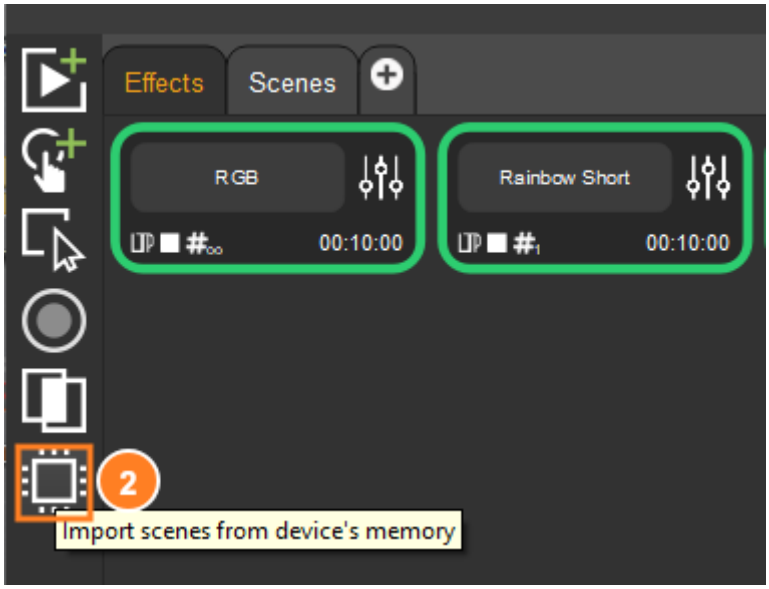
Retrieve the show from an interface

You can read back into PRO DMX 2 the show already written to a CLUB SPI interface, for example to change it if you no longer have the original project.

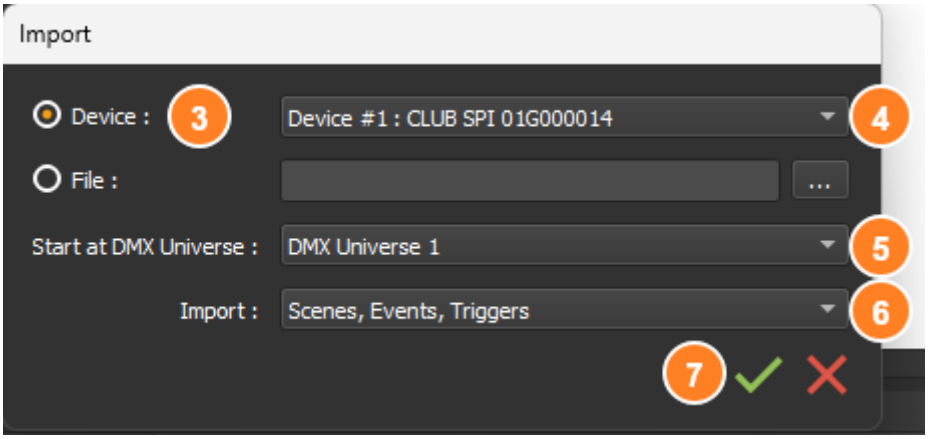
Before you start:

- The interface is connected by USB.
- Ideally, create a new, empty project in PRO DMX 2 first: the retrieved show is added to the open project rather than replacing it.

1. Click the **EDIT PANEL** tab.
2. Open the import command. How you do this depends on the PRO DMX 2 mode:The **Import** window opens. To find out which mode you are in, open the **Tools** menu: it offers **Switch to PLAYER** in Pro mode, and **Switch to PRO** in Player mode.
    - Pro mode: click the **Import scenes from device's memory** icon, in the icon bar on the left;
    - Player mode: right-click in the list of scenes, then click **Import scenes from device's memory**.
3. Choose **Device :**.
4. Choose the interface in the list.
5. Leave **Start at DMX Universe :** at the value offered.
6. In **Import :**, choose what you want to retrieve:
    - **Scenes**: the scenes only;
    - **Scenes, Events, Triggers**: the whole show.
7. Confirm. The message "Reading Memory..." is displayed during reading.



Import scenes from device's memory icon (Pro mode)



Import window

Note: if the interface contains no show, the message "Empty Memory" is displayed.

Check

- The retrieved scenes appear in the list of scenes.
- If you chose **Scenes, Events, Triggers**, the events and triggers appear in the **Stand Alone** window.

Erase the interface memory

Erasing deletes the show from the interface. The LED strip settings (chapter 5) are kept.

Caution: an erased show cannot be recovered. If you want to keep it, first retrieve it into PRO DMX 2 (see above).

Before you start: the interface is connected by USB and the **Stand Alone** window is open.

1. Click the **Reset memory** button (icon at the bottom right of the **Stand Alone** window).
2. The message "Erase the memory of the stand-alone devices? All the scenes stored in the devices will be lost." is displayed. Confirm.
3. Wait for the message "The memory has been erased.".



Reset memory button, at the bottom right of the Stand Alone window

Check

- The message "The memory has been erased." was displayed.
- At the next power-up, the interface plays nothing and its LED is steady green.

Note: if the message "The memory could not be erased. Check the connection of the device." is displayed, check the USB cable, then try again.

16. Update the firmware

The firmware is the internal program of the interface. A new version can bring improvements. The update file is supplied with PRO DMX 2: install the latest version of the software to get the latest firmware (chapter 2).

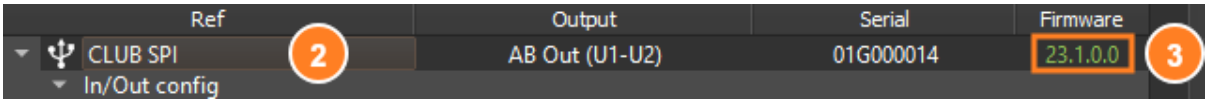
> **Note:** update the firmware before writing your first show with a new version of PRO DMX 2. Firmware that is too old cannot read shows written by the current version of the software.

Before you start:

- The latest version of PRO DMX 2 is installed.
- The interface is connected by USB. The update can only be done over USB.
- Keep a copy of your PRO DMX 2 project. Depending on the update, the show already written to the interface may no longer be readable by the new firmware: you will then need to rewrite it (chapter 11).

Start the update

1. Open the **Options** window at the **Device** page:
    - from the **Stand Alone** window: click the interface icon, at the top right;
    - otherwise: **Tools** > **Options** menu, then the **Device** page.
2. Find the CLUB SPI interface row. The **Firmware** column shows the current version. If an update is available, the version number is displayed in colour.
3. Click the coloured version number.
4. The message "Update Firmware" is displayed. Confirm.
5. Wait for the update to finish. A progress bar is displayed. The interface LED flashes green 3 times, then alternates between green and red. The update runs automatically in two stages.
6. The message "Reconnect the updated Device and restart the software to use the new firmware." is displayed.
7. Unplug and then reconnect the interface USB cable.
8. Restart PRO DMX 2.



Firmware column in the list of interfaces

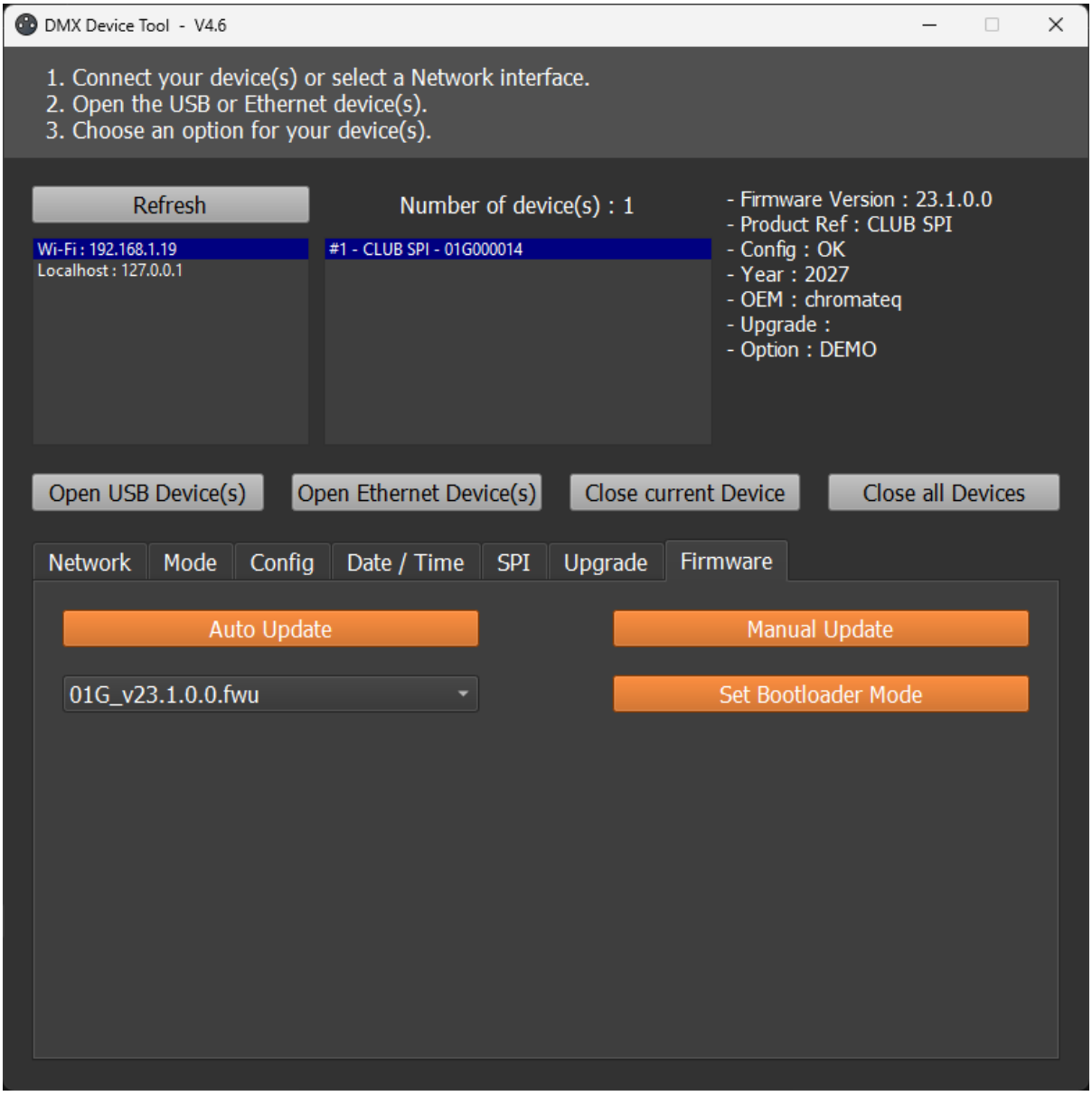
> **Caution:** do not disconnect the interface during the update.
>
> **Note:** when PRO DMX 2 starts, the wizard may display "A new device's Firmware is available". If your installation works well and you do not need the new features, the update is not compulsory. However, it is required before writing a show with a new version of PRO DMX 2.

Alternative method: with DMX Device Tool

You can also update the firmware with the **DMX Device Tool** software.

1. Close PRO DMX 2: only one program can communicate with the interface at a time.
2. Start **DMX Device Tool**.
3. Click **Open USB Device(s)**.
4. Select the interface in the list, for example "#1 - CLUB SPI - <serial number>".

5. Click the **Firmware** tab.
6. Check the file offered in the list, for example **01G_v23.1.0.0.fwu**: the name contains the firmware version.
7. Click **Auto Update**. The file chosen in the list is installed. (The **Manual Update** button lets you browse the computer for a firmware file; it is only useful if Chromateq support asks you to use it.)
8. Wait for the message **Successfully downloaded to device**.
9. Check the new version in **Firmware Version**, at the top right of the window.
10. Click **Close current Device**.
11. Close DMX Device Tool.



DMX Device Tool, Firmware tab

Caution: do not use the **Set Bootloader Mode** button: it is reserved for troubleshooting.

If the interface shows "Bootloader"

If an update was interrupted, the list of interfaces in the **Options** window, **Device** page, shows **Device 1 : Bootloader**, and the **Firmware** column shows **Update**.

1. Click **Update** in the **Firmware** column.

2. Confirm, then follow steps 5 to 8 of "Start the update".

Check

1. Reopen the **Options** window, **Device** page.
2. The **Firmware** column shows the new version, no longer highlighted in colour.
3. Close PRO DMX 2 or unplug the USB cable, then check that the interface plays its show (chapter 12). If nothing starts, rewrite the show (chapter 11).

Note: the PRO DMX 2 help also contains a **How to update firmware** guide.

17. Specifications

Stand-alone operation

Specification	Value
Outputs	1 DMX line (output, or input for a console) + 1 SPI output for LED strip
DMX universes controlled	up to 7: 1 on the DMX line + 6 on the SPI output
Pixels on the strip	up to 1,024 RGB pixels or 768 RGBW pixels
Strip chips	WS2811, WS2812, WS2813, WS2815, SK6812, WS2801, LPD8806, LPD6803, APA102. Full list of compatible chips: https://www.chromateq.com/club-spi/
Scenes	one scene played at a time; one scene per event
Events	up to 1,394
Contacts	3 inputs (TRIG A, TRIG B, TRIG C), up to 20 triggers
Infrared remote control	supplied; 15 programmable keys
DMX console	up to 32 trigger ranges and 10 commands
Show memory	32 MB
Recovery after a power cut	yes (scenes set with **Recovery**)
Not available	clock and calendar, network, SD card

Hardware

Specification	Value
Connection to the computer	USB-C
Power supply	through USB-C (5 V, 0.3 A) or through the terminal block (9 to 24 V DC); power supply not included
Dimensions	103 × 50 × 37.5 mm
Weight	0.10 kg
Housing	aluminium, IP40
Mounting	free-standing or screw-mounted; DIN-rail mounting with the optional bracket
Operating temperature	from −45 °C to +85 °C
Certifications	CE, FCC, RoHS, UKCA
Warranty	3 years

Software

Specification	Value
Programming software	PRO DMX 2, version 2.5.0 or later
Firmware described in this manual	23.1.0.0

18. Troubleshooting

Look for your problem in the tables below. If the suggested solution is not enough, contact Chromateq support.

Connection to PRO DMX 2

Problem	Possible cause	Solution
The interface does not appear in the list	USB cable not connected properly	Check the USB-C cable, then click **Tools** > **Open Devices** (chapter 4).
The interface does not appear in the list	DMX Device Tool is open	Close DMX Device Tool: only one program can communicate with the interface at a time.
The list shows **Disconnected** (greyed-out row)	The interface is detected but not recognised	Unplug and then reconnect the USB cable, then click **Tools** > **Open Devices**.
The list shows **Bootloader** (greyed-out row)	A firmware update was interrupted	Finish the update (chapter 16, "If the interface shows Bootloader").
The **Options** command does not appear in the **Tools** menu	The **Stand Alone** window is open	Click the interface icon, at the top right (chapter 5).

Writing to memory

Problem	Possible cause	Solution
"Not enough place to write the show into device's memory."	The show is too large	Remove scenes or events, then try again (chapter 11).
"No output channels selected."	No output is set	Check the **Device config** tab (chapter 6).
"Stand Alone memory writing failed"	USB connection interrupted	Check the cable, then restart writing, in secure mode if necessary (chapter 11).
A cell is red in the **Triggers** tab	Scene or event that will not be written	Hover the pointer over the cell and follow the explanation (chapter 10).

Stand-alone operation

Problem	Possible cause	Solution
Nothing starts at power-up	No start event chosen	Choose a **Default start event** (chapter 8), then rewrite the show.
Nothing starts although writing was successful	Firmware too old for the written show	Update the firmware (chapter 16), then rewrite the show.
A trigger does not change the scene	**Multi scenes overflow** is set to **Block last**	Choose **Release first** (chapter 8), then rewrite the show.
A trigger does not respond during a scene	The scene disables this trigger	Check the **Disabled triggers** column (chapter 7).
A contact does not respond	Wrong contact number	Use **01**, **02** or **04**. Numbers 03, 05, 06 and 07 require **Muxed** mode (chapter 9).
A remote control key does not respond	The remote control is in **Speed**, **Dimmer** or **Color** mode	Press **Scene**, then try again (chapter 13).
A named key (**Power**, **Pause**…) does not start the programmed event	These keys have a fixed function	Program keys **1** to **15** only (chapter 9).
The remote control does not respond at all	Infrared receiver out of range	Point the remote control at the front panel (**IR** marking).
The DMX console has no effect	**DMX A** is not set to **IN**	Set **DMX A** to **IN** (chapter 6), then rewrite the show.
The DMX console cannot dim the strip	The show is playing at the same time: the higher value wins	For the console to have sole control, no scene must be playing (chapter 14).

LED strip

Problem	Possible cause	Solution
The strip stays off or shows the wrong colours	Incorrect strip setting	Check **Protocol** and **Color mapping** (chapter 5).
The strip stays off or behaves incorrectly	Incomplete wiring	Check **SPI Data**, **SPI CLK** for the chips that need it, and the strip ground connected to **DMX GND** (chapter 3).
The new strip settings are not taken into account	One value is out of range: the whole section is rejected	Check each value, then click **Apply** again (chapter 5).
The end of the strip stays off	Too many pixels	At most 1,024 RGB pixels or 768 RGBW pixels (chapter 5).

Problem	Possible cause	Solution
WS2811_SLOW strip not working properly	**Period** too short	Set **Period** to 64 ms or more (chapter 5).

Status LED

LED	Meaning	Solution
Steady green	The interface contains no valid show	Write the show (chapter 11).
Red, fast flashing	The interface is in LED Driver mode	Return to stand-alone mode if needed (chapter 14a).
Green and red, fast flashing	—	Contact Chromateq support.
Off	The interface is not powered	Check the power supply (chapter 3).