# Stand Alone SLIM-DMX Interface

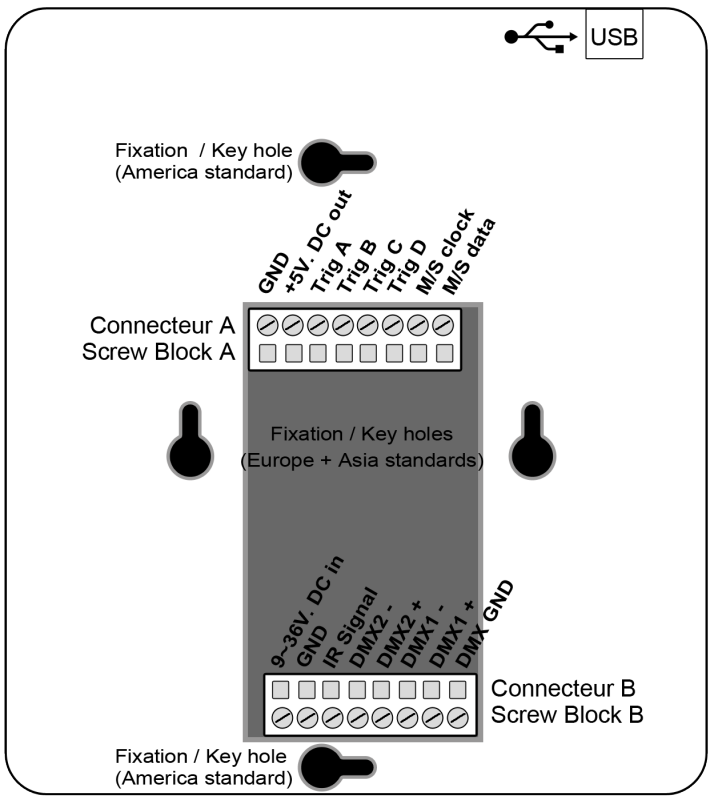
V.1.0.1

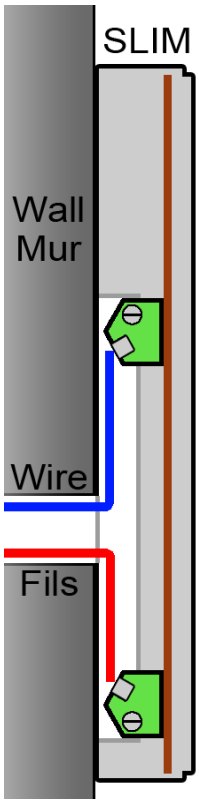
## Summary

## Technical features of the interface

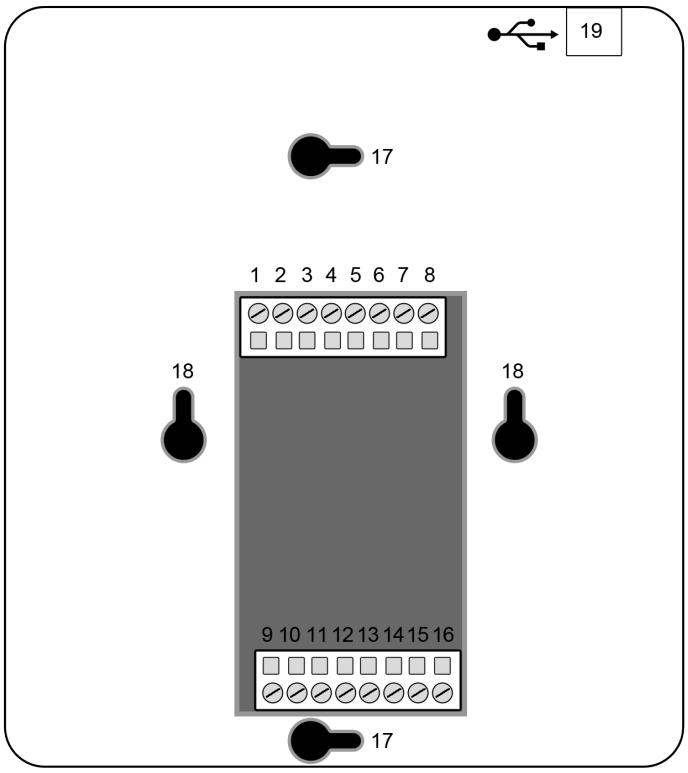
| | |
|---|---|
| Input/Output Connectors: | Screw terminal (4 pins + 5 pins) |
| Number of DMX Outputs: | 512 or 1024 (PC + Stand Alone) |
| External triggers: | x4 contacts (5V.) multiplexed to 15 contacts max |
| Master/Slave connection: | Yes, 3 wires for 16 connected interfaces max |
| Infra Red connection: | Yes via an external IR module and 3 connection wires |
| DMX Speed: | 1 to 45 Hz, MaB, Bk |
| USB Mode: | Yes |
| Stand Alone Mode: | Yes |
| Internal Clock (RTC): | Yes |
| Internal calendar: | Yes |
| Backups of the internal clock: | Yes, 3 weeks without power |
| Internal memory: | Yes (4 MB) |
| Memory Capacity: | 4000 steps with 512 channels, 100 000 steps with 16 channels |
| Display of signal states: | DMX LED + USB LED |
| Data display: | 7 segment LED display |
| Power supply input: | 9-36V or 5V with USB |
| Contact Input Voltage (stand-alone): | 5 V |
| Input Current: | 80 to 200 mA |
| Power: | 2 W |
| CPU's technology: | 32 bits |
| Dimensions: | H : 127 mm, W : 110 mm, D : 19 mm |
| Weight: | 250 g |
| Color: | Black |
| Operating temperatures: | -25 à +70 °C |
| Certificates: | CE, RoHS |

## General pinout and device's connector



## Bottom view of the interface

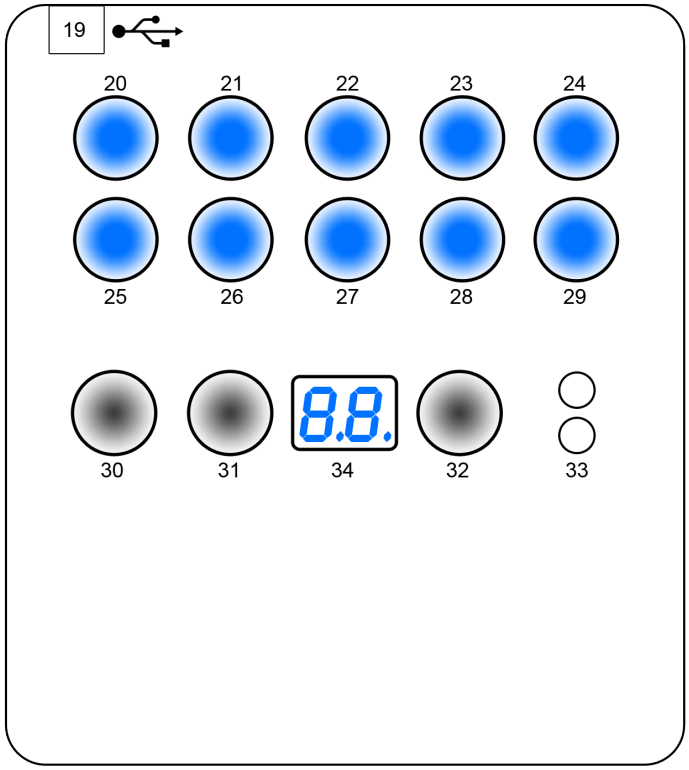



**External connectors**:
1: GND
2: 5V. DC External trigger voltage
3: External trigger A
4: External trigger B
5: External trigger C
6: External trigger D
7:Master/Slave Clock
8: Master/Slave Data
9: External input power 9-36 V (mandatory)
10: GND
11: Infra Red signal
12: DMX2 - data
13: DMX2 + data
14: DMX1 - data
15: DMX1 + data
16: DMX ground

**External wall mounting:**
17: America standards
18: Europe + Asia standards

**PC connection:**
19: USB connector (PC) 5V. DC

## Top view of the interface




**Scene triggering buttons:**
20: Scene 1 On/Off
21: Scene 2 On/Off
22: Scene 3 On/Off
23: Scene 4 On/Off
24: Scene 5 On/Off
25: Scene 6 On/Off
26: Scene 7 On/Off
27: Scene 8 On/Off
28: Scene 9 On/Off
29: Scene 10 On/Off

**Command buttons:**
30: Mode selection (trigger, speed, dimmer)
31: - decrease values
32: + increase values

**Display and LED:**
33: Current mode LED
34: 7-segment LED display

**+ and – buttons operation:**
In trigger mode (2 LED off) + and – buttons allows to choose a different scene.
You have to hold + and – buttons for 2 seconds to validate the selection and play the new scene.

**Mode button and LEDs operation:**
**LED1 + LED2 off:** the interface is in trigger mode via the buttons 1 to 10. + and – buttons allows to choose a different scene.
**LED1 on:** Press 1 time the mode button, the interface is in speed mode, + and – buttons allows to increase or decrease the speed of the current scene.
**LED 2 on:** Presse a 2nd time the mode button, the interface is in general intensity mode (DIMMER), + and – buttons allows to increase or decrease the general light intensity of the scenes.

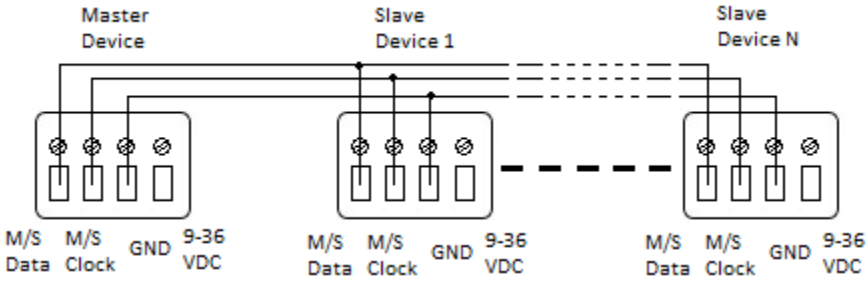
**LED 7-segment display operation:**
In trigger mode, the 7 segment display gives the current scene number. The 00 value indicates that no scene is playing and the SLIM DMX interface send nulls (0x00) on all output DMX channels. In speed mode, the display indicates the speed of the current scene, values are between -9 and 9. In dimmer mode, the display indicates the general intensity, values are between -9 and 9.

**External triggers operation:**
Connect the pins to 5V following these combinations: 01 = A ; 02 = B ; 03 = AB ; 04 = C ; 05 = AC ; 06 = BC ; 07 = ABC ; 08 = D ; 09 = AD ; 10 = BD ; 11 = ABD ; 12 = CD ; 13 = ACD ; 14 = BCD ; 15 = ABCD.
By default, the interface gives 4 external contacts (01, 02, 04, 08). To obtain 15 external contacts, you have to use a de-multiplexing interface in order to go from 4 to 15 possible combinations.

**Infra Red triggers operation:**
An external module with an Infra Red receiver is necessary. It can be connected to the following pins: GND (pin 1 or 10) + 5V. DC out (pin 2) + IR Signal (pin 11).

## Interfaces Master/Slave connection

Master/Slave mode allows to synchronize scenes and trigger actions of several interfaces together.
To use interfaces as Master/Slave, you have to connect the interfaces each others from the screw terminals.
You need to connect together the pins M/S Data, M/S CLK and GND, as following:



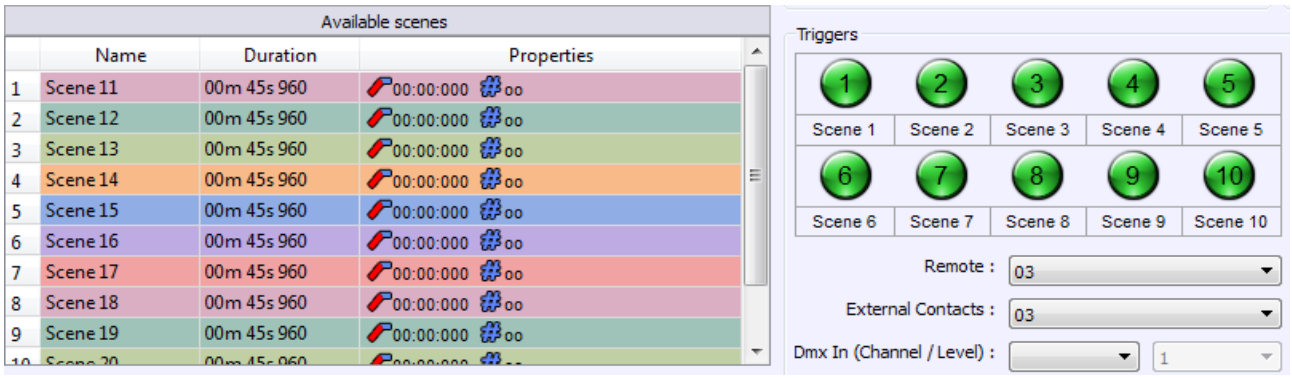

Interfaces configured as slave will strictly follow the clock, triggers and information providing by the master interface. Only one master interface at a time.

## Triggers configuration with the software

The Stand Alone mode of the software enables to configure and personalize all the triggers.
The information will be directly saved in the DMX interface memory with the memory writing function.

## LED Buttons trigger

Stand alone mode offers 10 buttons that represents the interface LED buttons.
From the scene list of the stand alone mode, you need to drag and drop a scene on any button to assign a button number.




It's possible to replace a scene by an other or to remove it by pulling it out of the list.

## Infra Red remote triggers

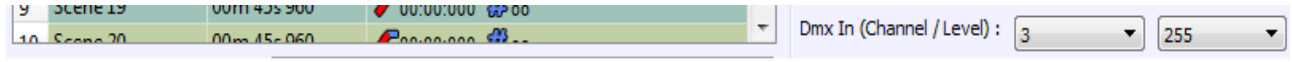
Stand alone mode offers up to 10 triggers with the Infra Red remote.
By selecting a scene in the list, it's possible to choose the remote button number (from 01 to 10) to trigger the scene.
The other IR remote functions will work as well as the SLIM DMX interface. (Speed, dimmer, scene +, scene -, off).


## External contact triggers

The Stand Alone mode offers up to 15 external possible triggers.
By selecting a scene in the list, it's possible to choose the external contact number (from 01 to 15) to trigger the scene.
By default, the interface gives 4 external contacts (01, 02, 04, 08). To obtain 15 external contacts, you have to use a de-multiplexing interface in order to go from 4 to 15 possible combinations.

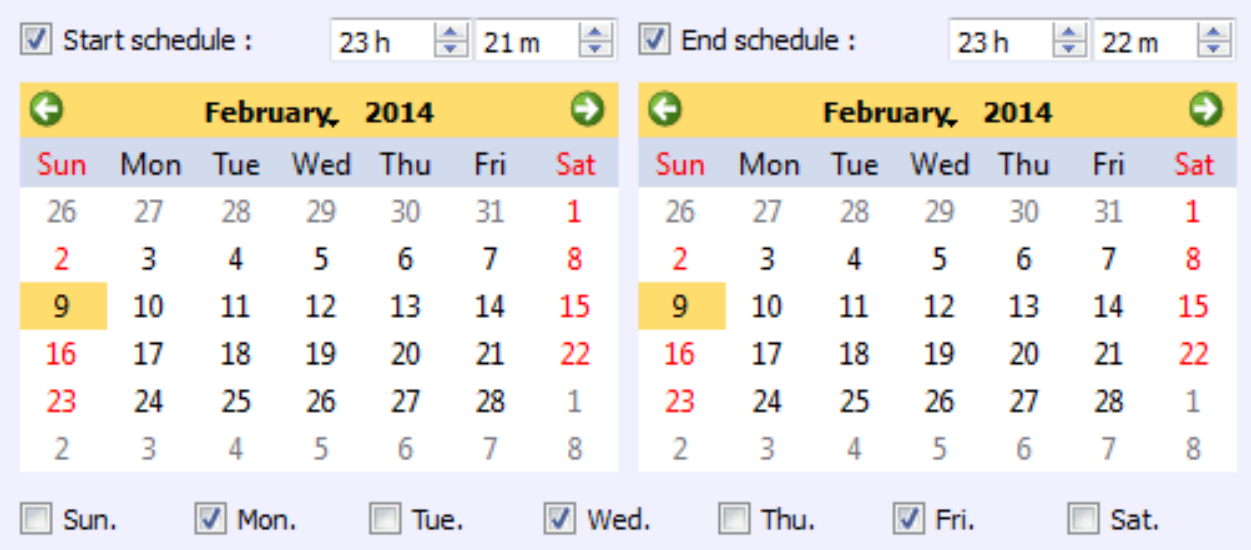

## DMX IN and triggers via another DMX signal

The Stand Alone mode offers up to 512 DMX IN channel triggers and up to 255 DMX trigger values per channel.
By selecting a scene in the list, it's possible to choose the channel number and the DMX value to trigger the scene. The scene will play when the value of the DMX channel is reached or exceeded.



## Time triggers with clock and calendar

The Stand Alone mode has an internal clock and a calendar. It's possible to assign a time trigger on every scene of the list.
By selecting a scene on the list, it's possible to choose the start and end dates and hours and days of the week. You can thus create a lot of scenarios.




**Start schedule:**
Date + hour when trigger is active. Date may be anterior or ulterior at the current date. The scene will be triggered in the case of an ulterior date.

**End schedule:**
Date + hour when triggers is not active anymore. The scene can't be stop at the indicated hour and date. Stop time allows to define an important interval when the trigger stays active, there may be several years between start and stop time.

**Stop a scene at an specific hour:**
In that case, you need to use 2 scenes. The first one to play illuminations on the wished start time. The second one neutral and without DMX levels to stop the current scene at its wished start time. In this simple example, the illumination scene is playing normally and the stop scene will replace it during the stop period.

**Day of the week:**
The scene will trigger at the time of the start schedule for all the selected days of the week during the defined period with start and stop schedules.

**Save and recover the last scene after the power cut off:**
Scenes with a start schedule and a stop schedule are set on a defined time space and can be memorized. The interface save the last scene played before the power cut off and recover it when the power is restored. The scene must obligatory include a start schedule and a stop schedule activate this option.

## Selection of the Master/Slave interfaces

The Stand Alone mode allows to choose 1 interface and to configure this interface like Master when you have several interfaces connected to your computer USB ports. From the interface list, it is possible to choose only one to be the Master, all the other one will be configured as slave by default. The interfaces are always ordered by serial number ascending order.