SUPER | VISION
I N T E R N A T I O N A L

SaVi-512 L/H USB-DMX Controller
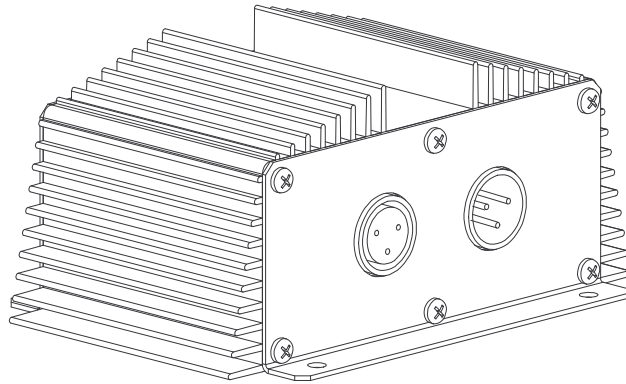
Specifications:

Application:	Dry Location
Dimensions:	6.03"L x 4.48"W x 2.80"H 153.4mm x 113.9mm x 71.0mm
Operating Temperature:	32º F ~ 104º F / 0º C ~ 40Cº
Working Voltage:	9-12VDC
Power Connector:	5mm-2.1mm ((+) Center)
Current Draw:	600mA Max.
DMX Control Channels:	512 Channels (Stand Alone DMX Controller)
Power Selector:	EXT or USB
DMX Output:	3 Pin XLR - 5 Pin XLR (Optional)
Programming Port:	USB-B
Input:	SaVi-Keypad
Weight:	2.0 lbs. / 0.907 Kg.
Warranty:	2 Years

User's Manual

Rev. E 12-12-2006

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1.0 General Information: Model: SaVi512

The software used to control and manage your Lighting System has been designed and created for user's that are seeking complete and easy comprehension and management of their Lighting System and software. This Software has a Stand Alone Mode that will captivate even those who have no knowledge of computers or software use, and would rather not use any type of computers or software. The ease of use, combined with a highly competitive price, will fascinate the user with a wide range of advantages, thus opening a wide array of different applications that will be explained thoroughly, throughout this user's manual.

2.0 Contents / PC Requirements: This package contains:

- ♦ A Step-by-Step Manual
- ♦ CDROM.
- ♦ USB-DMX512 Interface
- ♦ 3ft. USB A-B Interface Cable

PC Requirements:

- ♦ Hi-Speed USB 2.0 type port
- ♦ Laptop or desktop Computer with USB Port and/or RJ45 Port
- ♦ Windows ME, XP or any up-to-date version.
- ♦ 800 x 600 Screen Resolution (1024 x 768 Recommended).
- ♦ 256 MD Ram Memory (512 MD Ram Recommended).
- ♦ Clock frequency: 500 MHz (700-800 MHz Recommended).
- ♦ A Microsoft DirectX 9.0 compatible video card to use Easy View software.
- ♦ **Note: A 3-pin XLR is standard equipment, If needed a 5 pin XLR adapter is available.**

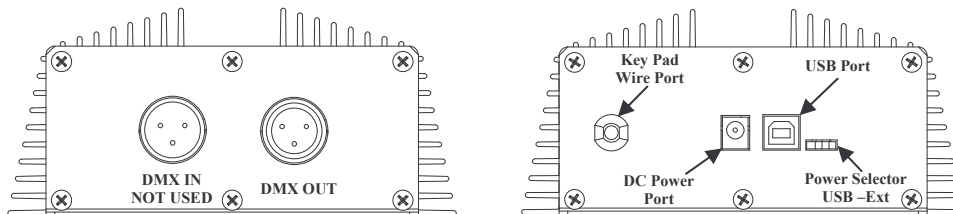### 3.0 Introduction to DMX 512 Controller: Model: SaVi512

The SAVI-512 Stand Alone DMX Controller and USB interface is specifically equipped with memory, which allows it to work in Stand Alone Mode in case of PC-failure or restricted use. In Stand Alone Mode the SAVI-512 Stand Alone DMX Controller is equipped with a connector which allows it to be externally-powered (120VAC to 9.0-15VDC, @ 600mA or 240VAC to 9.0-15VDC @ 600mA). In Stand Alone Mode, the interface can release up to 255 scenes which can be called back in numerical order by pressing **"+" or "-"** buttons. New software develop-ment already in progress will add even more functionality to this feature.

4.0 Introduction to USB Standard Port:

The USB standard, defines a new type of serial-communication as well as a new type of connector. This standard was introduced in 1997 and has been widely used ever since. It offers many advantages in comparison with former standards. For instance, it allows devices to be directly powered via the USB Port as well as the simultaneous use of several devices. It is also possible to use Plug and Play.

The USB-DMX Controller is the world's first innovation that thoroughly respects the USB protocol specification and DMX-512 for output. It is directly powered via the USB Port and controls all 512 potential channels of a DMX line. If the 512 channels is not adequate enough for the user's accommodation, then the software can run up to 10 USB interfaces simultaneously, i.e. 5,120 channels altogether. If simultaneous use of several interfaces are required, a USB hub is a necessary addition and normally obtainable item from any distributor.


DMX IN NOT USED   DMX OUT   Key Pad Wire Port   USB Port
                                        DC Power Port   Power Selector USB –Ext

Note: Power selector switch can be set for USB power or external power.
The selector switch is a pre-set for external power.

## 5.0 Software Installation: Model: SaVi512

Connect the USB DMX Controller to your computer using a USBA-B cable from the USB port to your computer. Now the software can be installed. Starting the software the following window will appear, select the "USB" mode as shown.
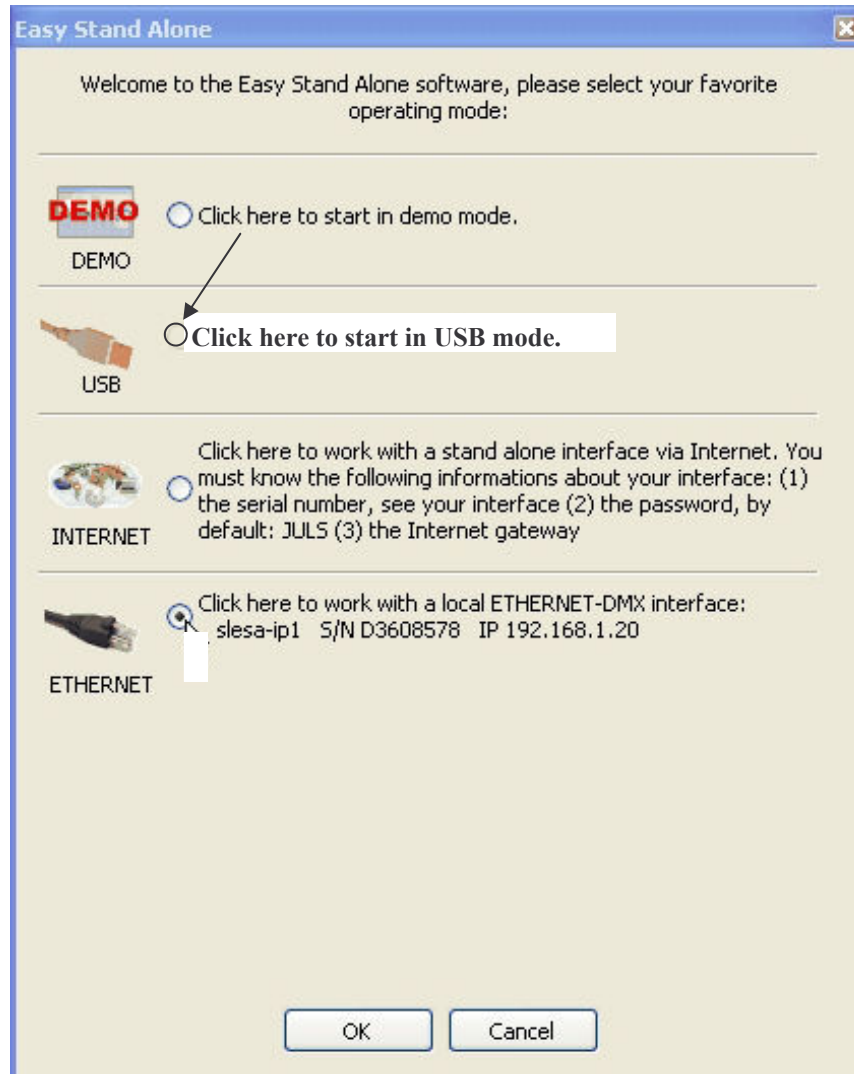
6.0 Setting Channels: **Model: SaVi512**

In the Setup Tab, you can set your traditional lighting channels as well as your scans, heads...The software uses the SaVi Scan Library (A Library of SSL-Type Fixtures) which is currently the best choice you can make and a guarantee of evolution over the next few years. The Scan Library Editor allows you to create your own library in just a matter of minutes.
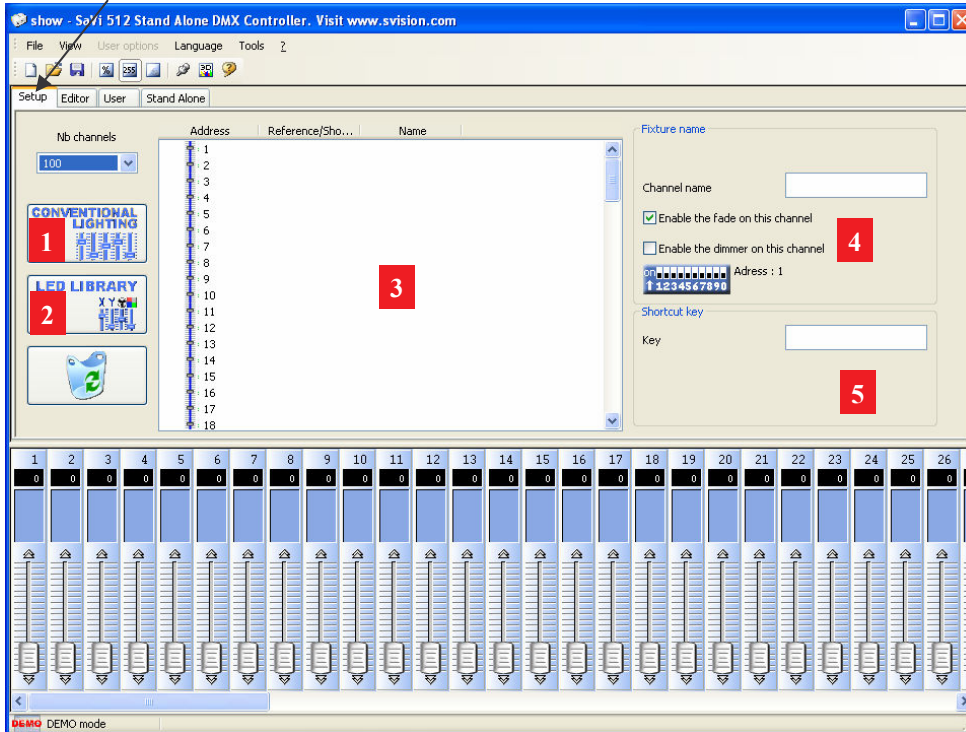
**1. Click here to insert Conventional Lighting.**
   A dialog-box will be displayed.
   Enter :
♦ Start DMX addressing of your conventional lights.
♦ Number of channels.
♦ Name to be assigned to the channel.
♦ Index number, By default, the USB-DMX Interface box is empty, the lights will remain unnumbered. If you enter "1" for instance, you will get Light 1, Light 2, Light 3...

<div align="center">5</div>

2. Click Here to Insert New Intelligent Moving Lights.
(SCAN, HEAD,CHANGER, LED...). After selecting the moving light required from our library, a dialog-box will show up and you will be prompted to enter the following information:

♦ First DMX channel of fixtures.
♦ Number of fixtures.
♦ Keyboard shortcuts used to move lighting (Pan-Tilt). By default, the software offers the keys available in keyboard-order, i.e. Q W E R T Y ....
♦ Index-number. By default, the software prompts "1", which means that the first light will be assigned number 1, the second one number 2, and so forth…
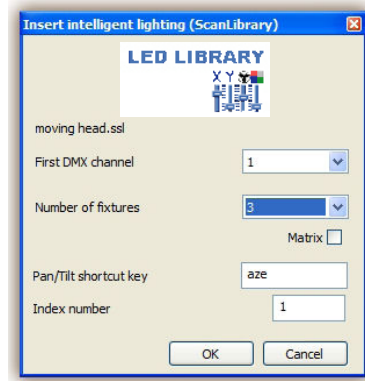
3) List of Channels
This list displays the inserted intelligent fixtures. You can make channels visible or not. Several information's are available:

♦ The DMX address of the fixture.
♦ Its name between "".
♦ The shortcut key, between <>.

4) De-Activating the "Fade" Mode.
Here you can change the name of the fixture on the selected channel .
Enabling the fade mode on a channel:
By default, the software enables fade on every channel. You can disable this feature by selecting the channel from the list and unselect the option.
Enable the dimmer on this channel:
By default, the software enables dimmer on color mixing and dimmer channels. You can disable this feature by selecting the channel from the list and by unselect the option.
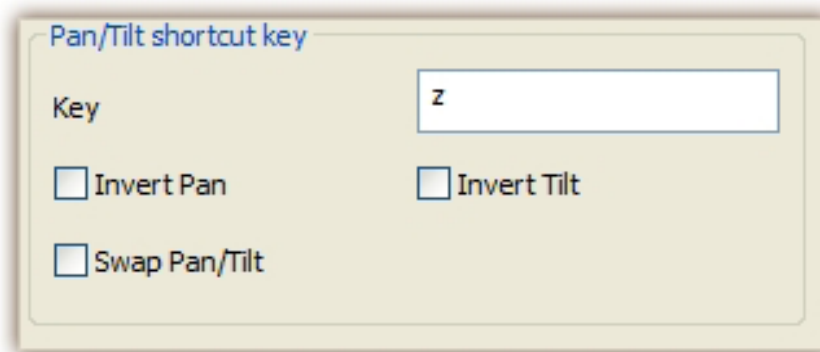
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5) Keyboard Shortcuts and Pan/Tilt Function
You may wish to assign keys to channels to be able to set levels by simultaneously moving the mouse and pressing the key. It is even possible to assign the same one key to several channels or different keys to the same channel. To sum it up, it enables you to set some channels separately, in clusters or as a whole.
Note: You can select several channels simultaneously to affect the same shortcut key.
♦ Hold the **CTRL** key down and select the channels **(Depress the left button of your mouse)**
♦ Selecting a channel, by pressing and holding the **SHIFT** key down and then selecting a second channel. This method will select all the channels between the first and the last channel.
♦ Select a channel, by pressing and holding the **SHIFT** key down and then selecting again the same channel. This will select automatically the same channel on every fixtures coming from the same profile.
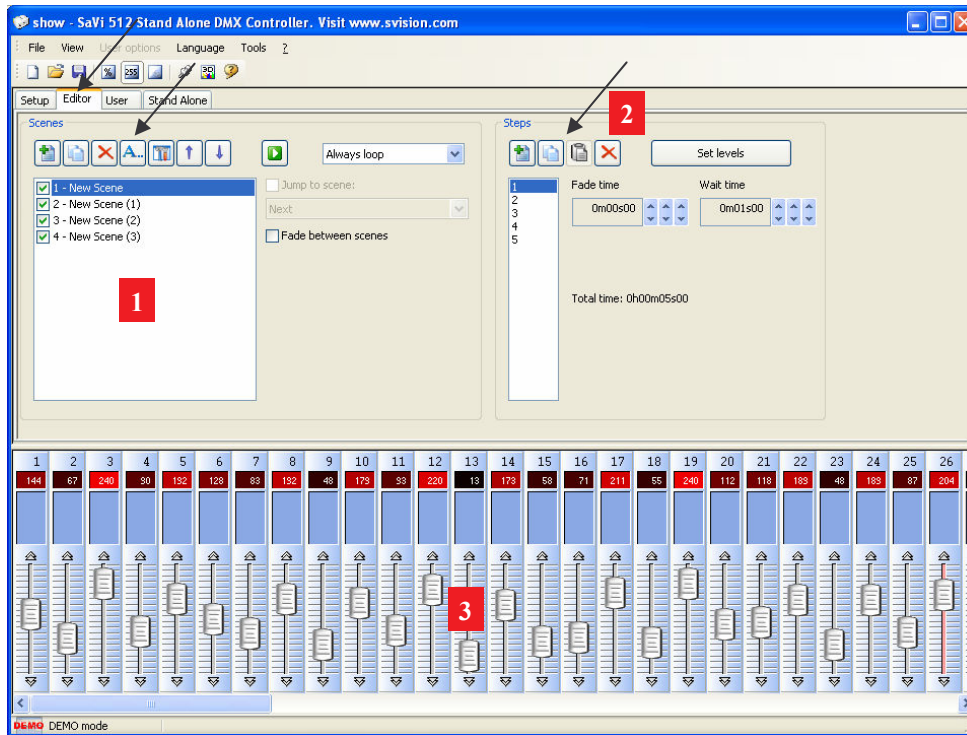
If you notice that a moving light and the mouse are inverted, you may invert the "Pan" channel, add invert the "Tilt" channel or even invert "Pan/Tilt". To do this remember to select the intelligent light required first.

7.0 Introduction to Scenes and Steps: Model: SaVi512

1. Scene-Area:
In the Editor Tab, a complete list displays the scenes you have created.
In the tool bar area, in button order, you can:
- ♦ Create a new scene.
- ♦ Copy a scene.
- ♦ Delete a scene.
- ♦ Rename a scene.
- ♦ Import a scene from 2005 Software.
- ♦ Assign a keyboard or external port to specific scene.
- ♦ Change a scene position.
- ♦ Play a scene in real time.

By default, scenes always loop. You may specify a definite number of loops. In which case you are deciding whether or not to go on to the next scene automatically or not.

8.0 Software in Live Mode: Model: SaVi512
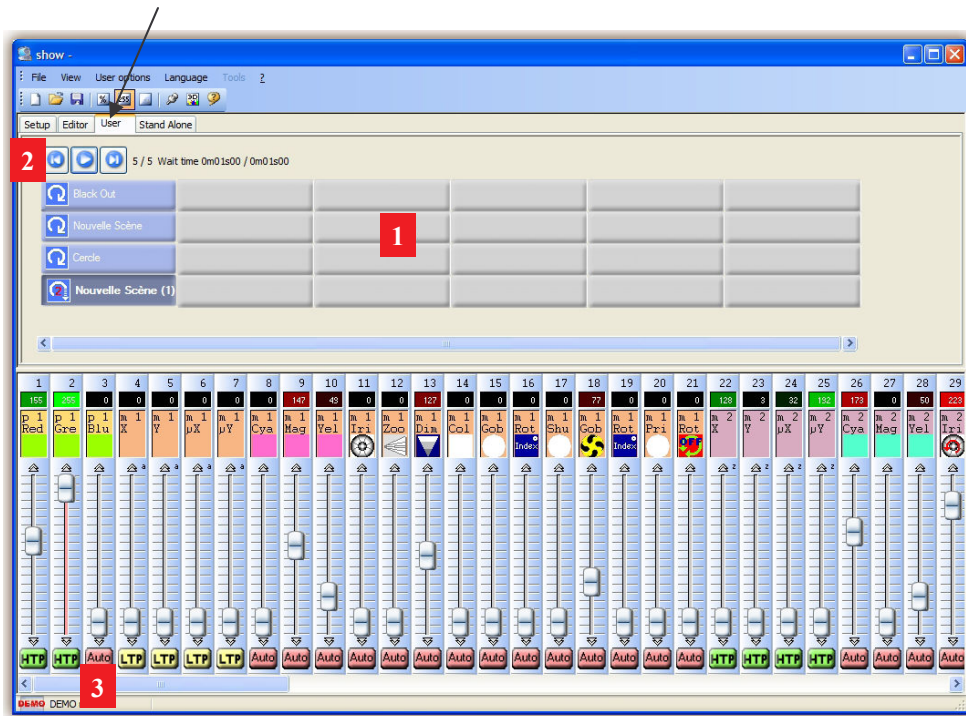
In the Users Tab, using the software in live mode to control your lights through your computer, you can trigger scenes with the mouse or the keyboard while visualizing the channels. At anytime, you may decide to manually control some channels either Highest Takes Priory mode or Last Takes Priory mode(HTP or LTP) or by directly operating the corresponding cursors .

1. Button-area
Each button represents a "Scene" which can be activated with the mouse. If the button is pressed, then the scene is activated. Each button is also used to visualize the number of loops and various triggering (keyboard key or port input).

2."Previous" and "Next" Functions
By clicking here, you can trigger the previous or next scene in accordance with the order made into the editor.

3. "PLAY CYCLE" Function
By clicking here, you can activate "Cycle" mode which enables you to automatically go from a scene to the next one. Of course, this mode can only apply on "go automatically to next scene" scenes.

4. AUTO/LTP/HTP Functions
By clicking here, you may manually control the different channels.
3 modes can be used :

♦ **AUTO :** The channel works automatically on the current scene. The manual cursor is de-activated.

♦ **LTP :** The channel is in "Last Takes Priority" mode, the level is that of the cursor. The current scene has no effect on the channel.

♦ **HTP :** The channel is in "Highest Takes Priority " mode, the level is at its highest between cursor-level and current scene level.

2. Step-Area:

In the Editor Tab, a list displays all the steps available in the scene you have selected. In the tool bar area, in button order, You can:

♦ Create a new step.
♦ Copy a current step.
♦ Paste a new step.
♦ Delete a step.

3. Channel-Area:

Various methods can be used to set channel levels.

♦ Drag a channel fader with the mouse.
♦ If the channel has been assigned a keyboard shortcut, press key and move mouse.
♦ If the channel has a preset (e.g. colors), right click on channel name to make a selection from menu.
♦ Set several channels simultaneously by pressing "Set levels"
♦ If the channel is a color mixing channel (RGB or CMY), the software open the color Manager Window.

9.0 Triggering:
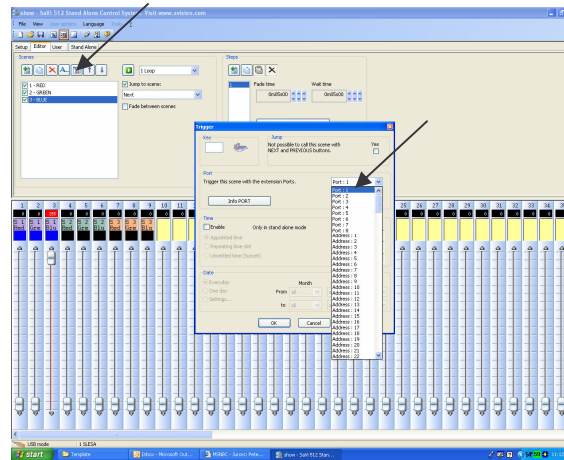
To set up your scenes to be controlled by your Keypad Controller you need to first click the trigger button in the menu bar. A dialog box will appear as shown, For each scene that you created you need to assign it to a **Port**. Port 1 represents Button 1, Port 2 represents Button 2 and so forth on your Keypad Controller. Its as simple as that. There are several other ways to trigger your scenes: By a keyboard shortcuts, By the I/O ports, By time.

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10.0 SaVi 512 Interface Keypad Controller: **Model: SaVi512**

The SaVi Keypad controller provides eight assignable buttons **(1-8)** and the a **Next** and **Previous** keys **(+/-).** This product was developed to allow the end user to have instant access to pre-assigned scenes. Once these scenes are assigned to a key (user selected). The SaVi-512 can store up to 255 scenes, available for playback. These then are accessible through the next and previous buttons, or can be set to run sequentially with accuracy of four hundreds of a second. This product fits into any single gang (US) standard electrical outlet box.

This kit includes;
1) SaVi-10 key PCB with 20 feet of data wire.
1) USB-DMX Interface.

The stand alone memory capacity depends on the number of channels.
More channels you use, less steps are available.
See the following table for the number of steps available.
The "IP version" column shows the memory capacity of the
Ethernet-DMX interface.

	USB Version	**IP Version**
20 Channel	**4919**	**5629**
100 Channel	**1133**	**1297**
248 Channel	**466**	**534**
512 Channel	**226**	**259**

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11.0 Keypad Controller Wiring Application:

Model: SaVi512

Rear View of Terminal Block of the Keypad Controller
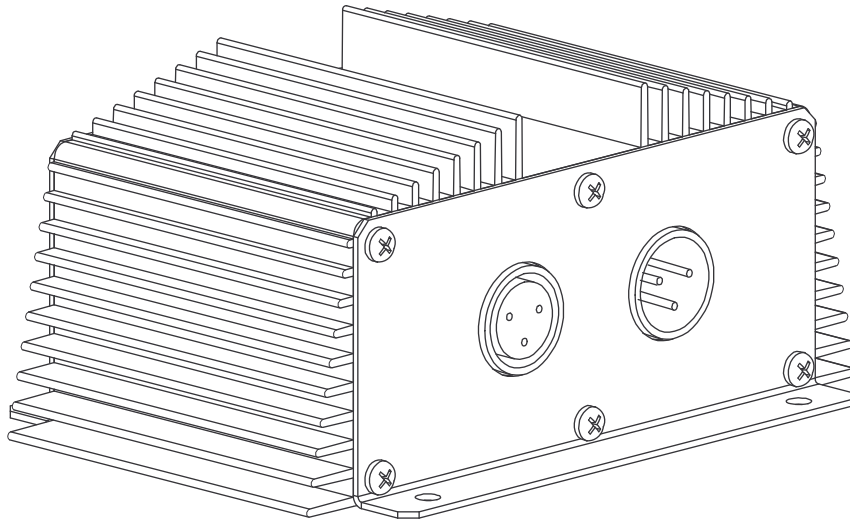
Wire rear of Keypad Interface Controller per the wire color table below.

1 2 3 4 5 6 7 8 9 10 11

JP1

Key Pad Interface Connection Wire

1	Orange/White
2	White/Orange
3	Blue/Red
4	Blue/White
5	Green/White
6	White/Green
7	Brown/White
8	White/Brown
9	White/Gray
10	Gray/White
11	Red/Blue

JP1

1 2 3 4 5 6 7 8 9 10 11

Note: No need to open up the USB-DMX Controller. All wiring is complete internally.

Note: There is an extra wire that is not used (White/Blue). Cut off or terminate.

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## 12.0 Introduction SaVi-512 USB-DMX Controller: Model: SaVi512

Supervision International has a special 12 conductor 22AWG shielded twisted pair wire available for this application. 20 ft. is the standard wire length to be shipped, however the customer may specify lengths up to 50ft, please contact your sales agent. **Wire P/N# 17.6000**

SaVi512 Stand Alone DMX Controller	
Connector	USB
Local Use	Yes
XLR Connector	3-Pin - 5 Pin (Optional)
External Powered	Yes

13.0 Stand Alone Mode: **Model: SaVi512**

In the Stand Alone Tab, if you would rather control your lights without a computer, in a few seconds you will be able to store your scenes into the USB-DMX control box to activate the Stand Alone Mode. Starting scenes can then be carried out in sequential order by using "**Previous**" or "**Next**" buttons on the box or via the internal connector which triggers up to 255 scenes in direct access.
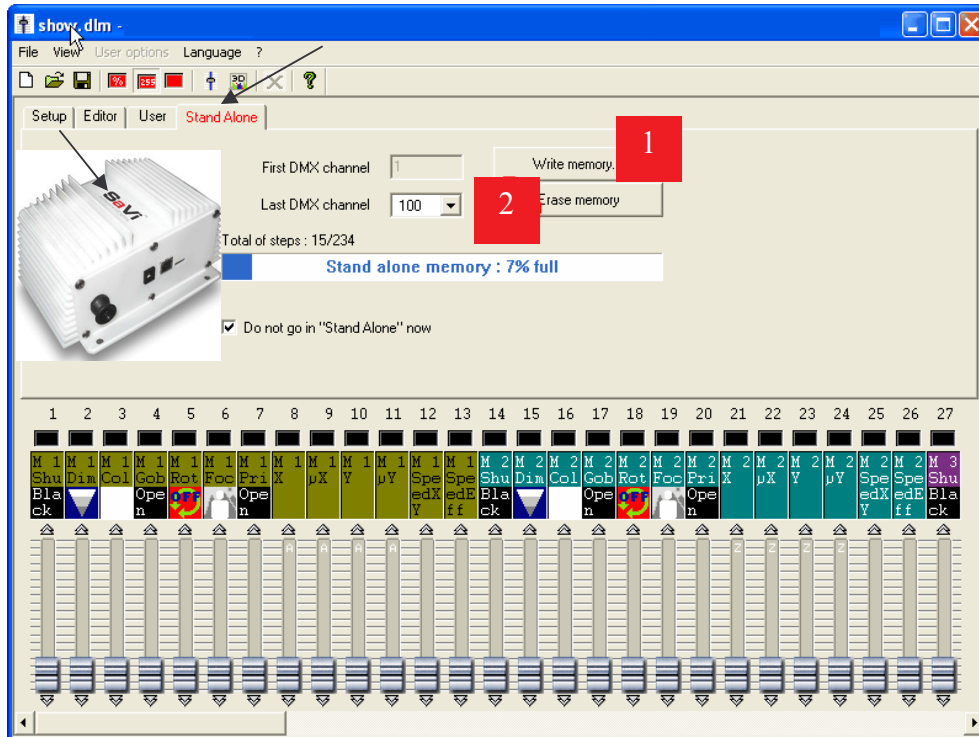

1. By clicking here, it is now possible to write scenes into the memory of the USB-DMX control box. If you wish to test in Stand Alone mode without quitting the software, it is necessary to uncheck the box labelled "Do not go in Stand Alone ". The number of channels available in Stand Alone Mode is 512.

2. By clicking here, you can delete box-memory, Stand Alone Mode will then reset all the channels to **ZERO**. If you wish to de-activate Stand Alone Mode, click the button and press CTRL key simultaneously.

14.0 Color Manager: Model: SaVi512

The "Color Manager" tool is basically a color editor for RGB or CMY fixtures. It allows you to create either static or dynamic color sequences very easily. Imagines you want to load a bitmap or simply write text on your matrix of LED's. The "Color Manager" will help you to make it in a few seconds. To open "Color Manager", you must click with the right mouse button on the color mixing channel in the editor screen. Let see how to use them:
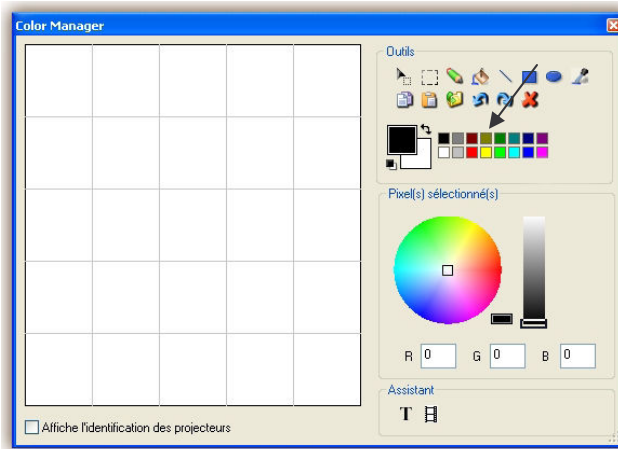
The basic tools are situated in the "Tool's" area of the window. You can find the main functions available in a bitmap designer and select a color for each fixture very quickly. Each fixture is represented by a square on the left side of the screen. You can display the name of each of them by clicking on "Display Fixture Identification". Several tools are available:

♦ **Select Pixel and Select Area:** The first one allows you to select fixtures one by one, the second allows to select several fixtures simultaneously.
♦ **Pen and Paint bucket:** To paint one or several pixels with the selected color.
♦ **Line, Rectangle, Circle:** To draw a line, a rectangle or a circle.
♦ **Pipette:** To pick a color from the fixtures area.
♦ **Copy, Paste:** To copy or paste pixels.

You must use the color picker to change the color of the selected pixel(s). You can also enter the RGB values manually.

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15.0 Text Wizard: **Model: SaVi512**

The text wizard allows to write text easily on your matrix. You can make either static or scrolling text, choose a font, background color. You must click on the "T" button ("Wizard" area) to open the following window.
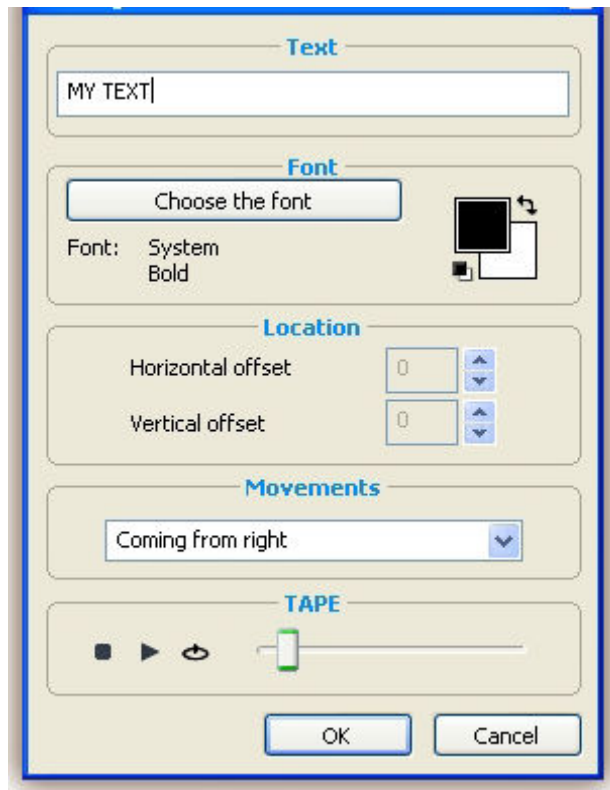
Here you must enter text and then choose a font and a color. You must specify a color, the text and the background. It is also possible to move your text vertically and/or horizontally with the "Horizontal offset" and "Vertical offset" cursors. Then, if you want your text not to be static, you must select the type of movement from the list located in the "Movements" area. The cursor in the "TAPE" area makes it possible to change the speed of the scrolling.

♦ **Software cannot find USB interface:**
   - USB cable is not connected properly.
   - USB port is faulty.
   -" Intelligent USB DMX Interface" is not mentioned in list of devices.
   - Driver is not installed.
   - Interface is off.

♦ **Yellow LED's is ON but RED LED do not flash:**
    - Check cable connection or use another USB port.
      (See section "How to install "USB-DMX 512 interface")
    - Select "USB" position on power supply or connect via an
       external power supply.

♦ **Switch box breakdown:**
    - Contact your retailer.

♦ **DMX fixture does not respond:**
    - Receivers do not detect DMX, yet DMX signal output is
       operational.
    - DMX red led flashes, but DMX signal output is not operational.
    - Check DMX wire and if possible test another DMX receiver.
    - Replace the 8 pin-chip set in the interface box.

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