



User Manual OsiMIDI 1.5

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1 Introduction

What's OsiMIDI?

OsiMIDI is software that allows the use of an economical USB MIDI controller directly connected to a USB port of your PC, in order to control the Avolites Titan One software.

Avolites Titan is a software leader in the lighting sector, developed by the company Avolites. Titan One is the most economical hardware for use with the Avolites PC Titan Suite. It is a USB dongle that provides a DMX port to your PC. The user must control the software using mouse, keyboard or touch screen. Avolites offers other hardware options that are more advanced and at a higher price. These more advanced controllers, which are used to operate the Avolites software, provide several DMX ports rather than just one as with the Titan One. OsiMIDI was created to complement the Titan One hardware, to allow control of the Avolites software using an economical USB MIDI controller.

Thus, OsiMIDI makes possible a cheap lighting control solution, composed of the following elements:

- OsiMIDI software.
- Titan One DMX USB dongle and Avolites Titan PC Suite software.
- A cheap USB MIDI controller. For example: Korg NanoKontrol, Behringer BCF2000, Elation Midicon, or similar. It is possible to use any USB MIDI controller that works with messages of type Control Change for sliders, messages of type Control Change or Note On / Off for buttons, and messages of type Control Change or Note On for wheels (encoders). Mackie Control compatible controllers can be used with OsiMIDI, too.

OsiMIDI does not supply Avolites Titan PC Suite software or Titan One hardware. You must purchase this hardware and software from an official Avolites distributor. OsiMIDI neither supplies the USB MIDI controller; you must purchase your own.

Avolites Titan and Titan One are registered trademarks of the company Avolites. NanoKontrol is a registered trademark of Korg. BCF2000 is a registered trademark of Behringer. Midicon is a registered trademark of Elation Professional.

Could OsiMIDI functionality be achieved with Avolites Titan MIDI Triggers?

No. Without the help of OsiMIDI, Avolites software cannot be managed by a USB MIDI controller connected directly to a PC:

- In the case of Titan One, Avolites software does not provide MIDI triggers.
- In the case of other Avolites hardware (Mobile etc...), it makes no sense to use an economic controller, as the Avolites hardware allows excellent control of the software. Furthermore, MIDI Triggers only works with devices connected to the MIDI port of Avolites hardware, not with USB MIDI controllers directly connected to a USB port of the PC.

How does it work?

OsiMIDI listens for messages from your MIDI controller, and sends commands to your Avolites Titan One software in order to act on certain controls.

Of course, OsiMIDI does not modify any of the files of Avolites Titan One software. OsiMIDI runs side by side with Avolites Titan One and uses the Microsoft Windows Foundation technology to change the values of controls.

Configurable

OsiMIDI is completely configurable, and allows you to assign the buttons and sliders on Avolites Titan One to correspond with buttons and sliders on your USB MIDI controller.

The following controls on Avolites Titan One are configurable:

- The 10 sliders.
- The 10 swop and flash buttons.
- Back page, go to page, and next page buttons.
- Other buttons: Record, Go, Clear, Exit..., nearly all buttons on the Titan One's interface are available.
- Keyboard shortcuts. OsiMIDI can send keystrokes to Titan One to control functions that cannot be handled with buttons.
- The 3 attribute wheels.
- Buttons in these workspace windows: Playbacks, positions, colours, Groups, and Gobo and Beams.

Configuration is made simple thanks to configurator application. There's no need to enter the values manually, simply select a control on the configurator application, and then move the equivalent control on the controller, the configurator then automatically performs the mapping for you.

If you have multiple controllers, OsiMIDI allows you to store different configurations, and select which one you want to use.

Localization

The language of the application and help can be changed from the configurator application. The application and help are available in English and Spanish.

What controllers can I use?

Any small USB MIDI controller that works sending messages of type Control Change for sliders, and messages of type Control Change or Note On / Off for buttons and attribute wheels. For example: Korg controllers such as the NanoKontrol or NanoKontrol2 work perfectly.

About attribute wheels, there are two cases:

- If your controller has encoders, you can use them to control the wheels. The encoders should operate in relative mode (i.e., send a message repeatedly when rotates, a different message when turning left or right) and send messages of type Control Change or Note On. For example Behringer BCF 2000 (Control Change) and Elation Midicon (Note On) are compatible controllers.
- If your controller does not have encoders, such as the Korg NanoKontrol, you can use a fader or rotary knob to control the wheels, with the help of an additional button that would allow us to recover the position of the fader or knob without moving the wheel.

Mackie Control compatible controllers can be user with OsiMIDI, too.

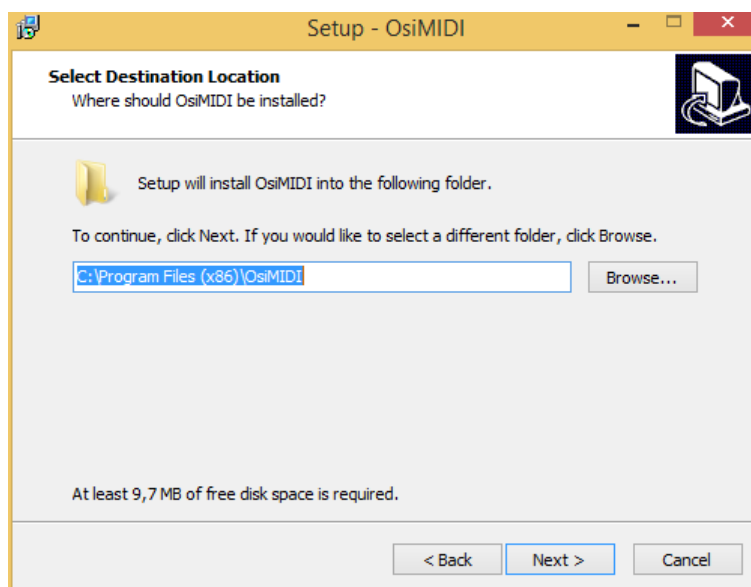
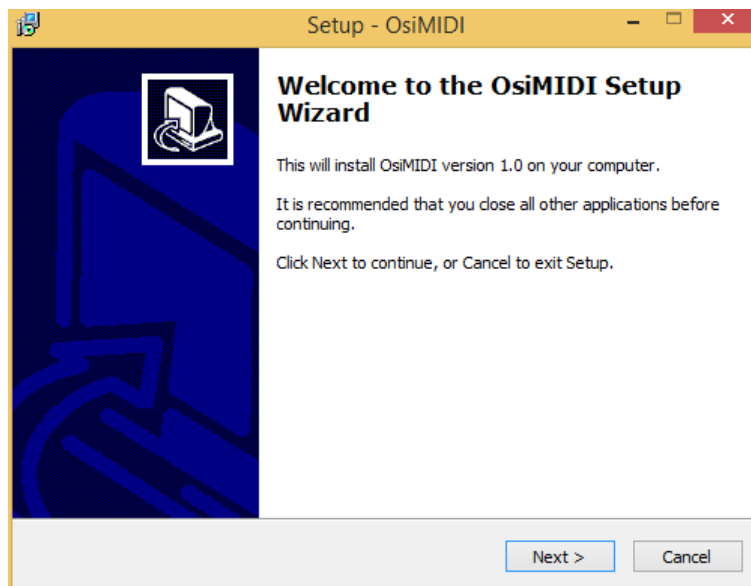
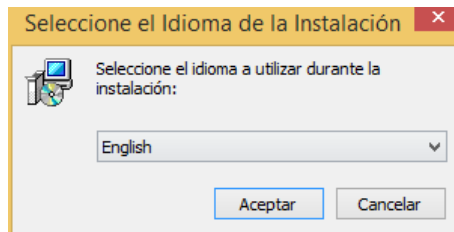
What Avolites versions are supported?

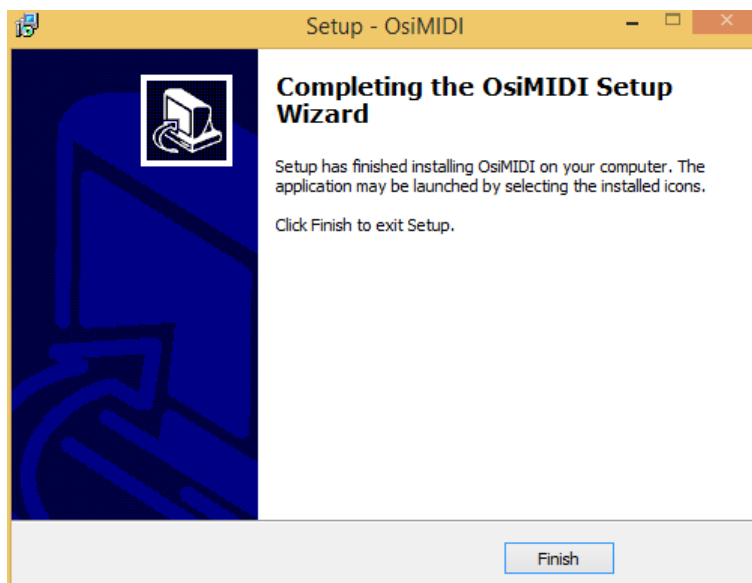
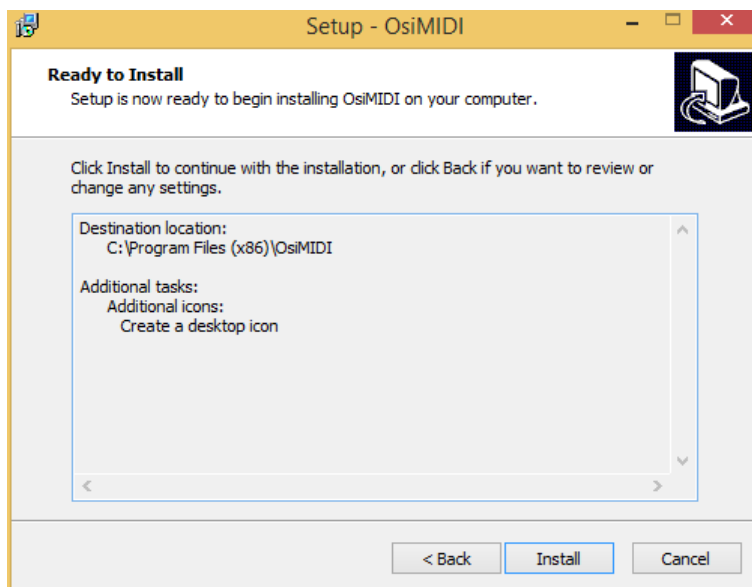
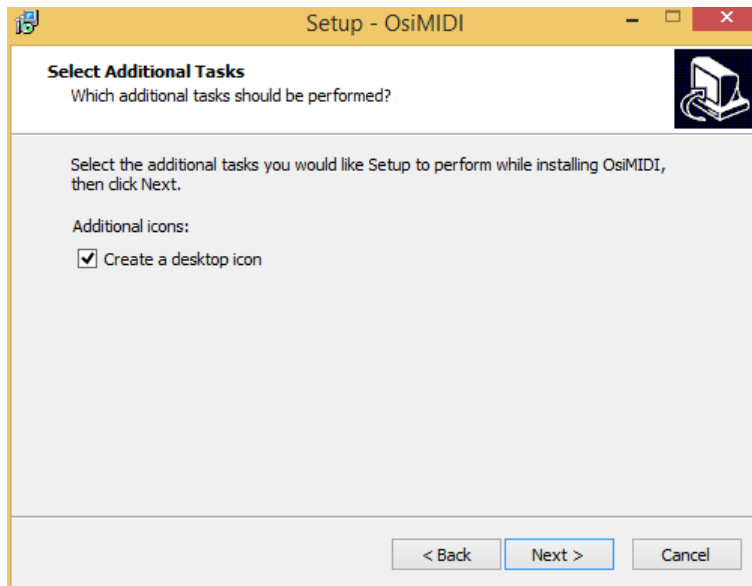
OsiMIDI currently supports the following versions of Avolites Titan One: 9.1 and 10.0.

2 Setup

To install MIDI OsiMIDI download the setup file from <http://www.osimidi.com>.

Then execute the downloaded setup file, select the language of the installation, and confirm all the wizard dialogs:





The setup creates two shortcuts, one for the Configurator application and one for the main OsiMIDI application:



3 Configurator

Before using OsiMIDI, you must configure the application in order to link the sliders and buttons on your MIDI controller with the sliders and controls on Avolites Titan One software.

OsiMIDI listens for MIDI messages of type Control Change for sliders, and Control Change or Note On / Off for buttons. Before using the application you must set the data that your controller sends when you press a button or move a slider. In case of Control Change messages, you must set the address and On / Off values, in case of Note On / Off messages, the note.

The setup application allows you to make these adjustments, by entering the values manually, or through the capture mode, selecting controls on the setup application and acting on the corresponding control on your MIDI controller. The setup application will detect the message data, and will assign it to the selected control on the application.

About configuration, shortcuts behave exactly like the buttons. The only difference is that when executing OsiMIDI the shortcuts send keystrokes instead of clicking the buttons. Therefore everything stated in this document on the buttons, also applies to shortcuts.

The following sections describe in detail the configurator application.

3.1 Application start

Start the application by using the shortcut created during setup:

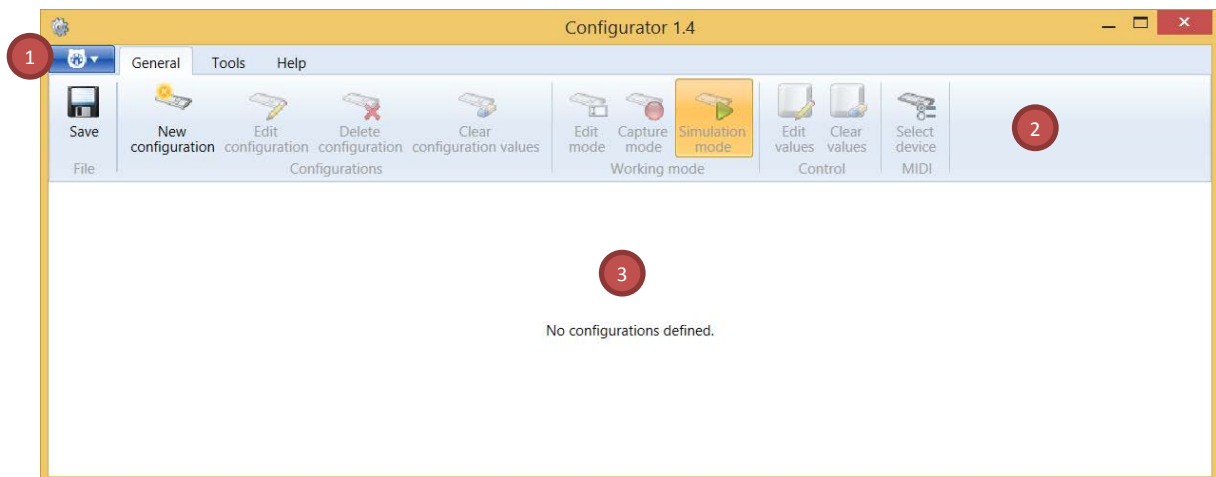


When started, the application displays the following start window, indicating that it is detecting the MIDI devices connected to the computer. It is important to connect the MIDI controller before starting the configurator application, because the detection is done only during the start-up of the configurator.



3.2 Main window

After MIDI devices detection, the main application window is displayed:



The main application window consists of 3 parts:

1. Application menu.
2. Ribbon, with 3 tabs: General, Tools and Help.
3. Main area, displays the current configuration with the values for each of the buttons and sliders.

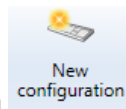
3.3 Creating and editing configurations

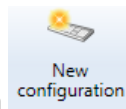
The first time you open the configurator application, it will inform you in the main area that there are no configurations available.

You can create as many configurations as you want, depending on the number of MIDI controllers you have for using with OsimIDI.

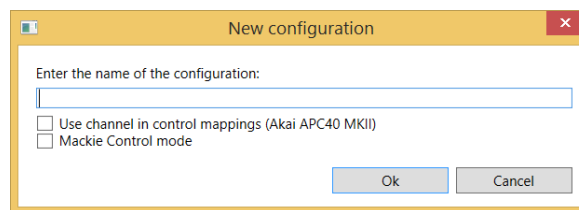
Creating and editing configurations is done via the buttons available on the General tab of the ribbon.

3.3.1 New configuration



To create a new configuration, click the button .

The following dialog will be shown, enter the name for the new configuration:

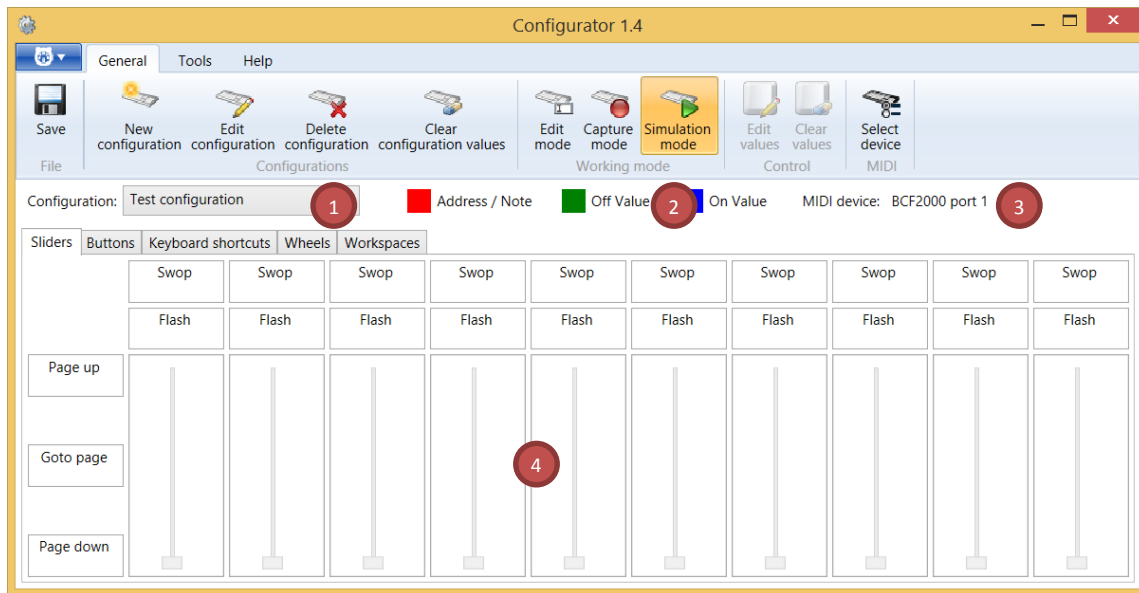


Configurations names must be unique, two configurations with the same name are not allowed.

The option "Use channel in control mappings" allows taking into account the channel in control mappings, in addition to the address or note and the type of message. Check this option only in controllers as the Akai APC40 MKII, where there are controls with the same address and message type, but in different channels. For example in this controller all faders have the same address and the same message type, but each fader uses a different channel.

"Mackie Control mode" option allows to use Mackie Control compatible controllers.

After accepting the dialogue, the main area displays an empty configuration, as shown in the following figure:




There are 4 zones in the main area:

1. Drop down for configuration selection. When you have more than one configuration, this allows you to select the configuration you want to work with.
2. Legend. Colour code of the control values. Red for address, green for Off value (value that disables the button or value of the minimum position of the slider) and blue for the On value (value that activates the button or value of the maximum position of the slide).
3. Displays the name of the active MIDI controller when you are working in capture mode.
4. Area of controls. Contains controls of the configuration, to link with the controls of your MIDI controller. Controls are grouped in 5 tabs: Sliders, buttons, keyboard shortcuts, wheels and workspaces. In workspace tab, is possible to configure until 100 buttons of these windows: playbacks, positions, colours, groups and gobos and beams.

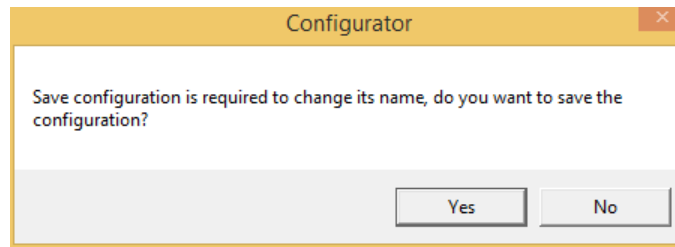
3.3.2 Edit configuration

The name of the configuration, and the "Use channel in control mappings" option, can be changed at any

time with the button  .

The same dialogue as when creating the configuration will be show, which will allow you to enter a new name.

To change the configuration name you must not have pending changes to be saved. If you have pending changes you will be notified with the next dialog:



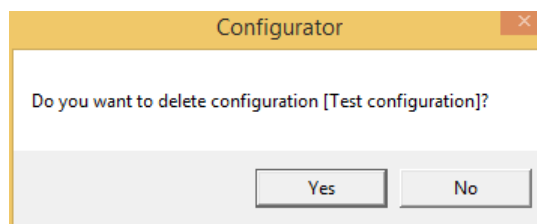
Changing the "Use channel in control mappings" option deletes all configuration values.

3.3.3 Delete configuration

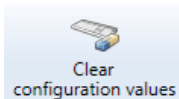


Click the button to remove an existing configuration.

Once you have clicked on the delete button, a confirmation message will be displayed before performing the operation:

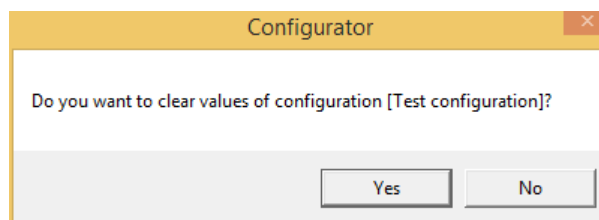


3.3.4 Clear configuration values



The button will remove all configuration data, leaving a blank configuration.

You will be prompted to confirm the operation:



3.3.5 Configurator working modes

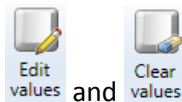
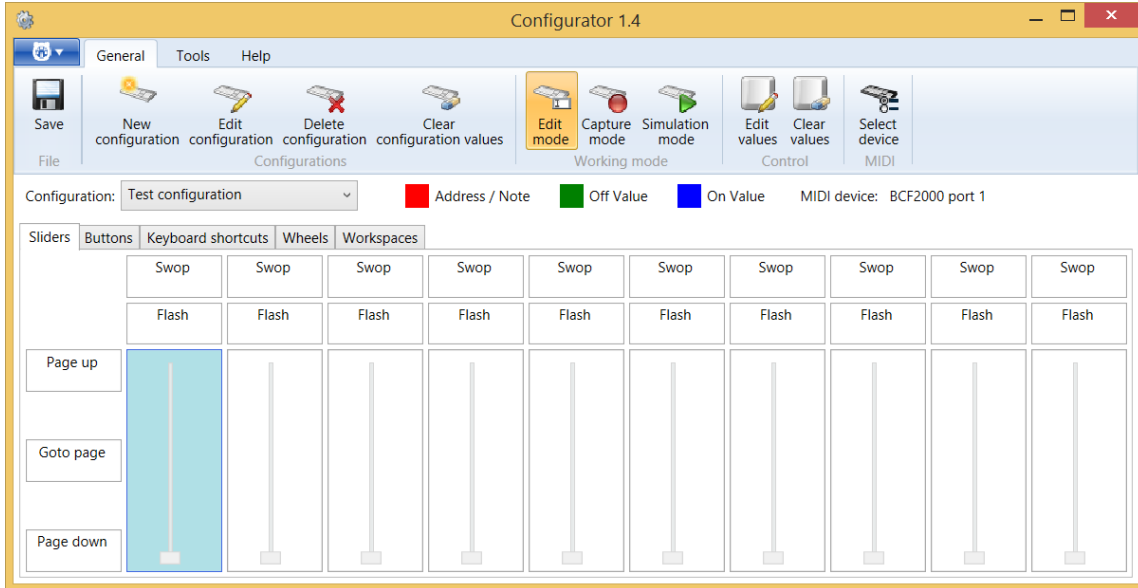
The configurator has 3 working modes; you can switch to a particular mode by clicking the appropriate button:

3.3.5.1 Edit mode



To enter edit mode press the **Edit mode** button. It is a manual edit mode.

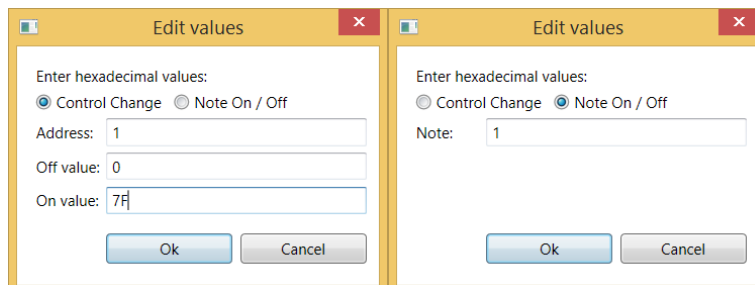
In edit mode you can select the sliders and buttons you have in the main area by clicking on them. Once you have selected a control, you will see it highlighted in blue, as shown in the following figure:



When you select a control, **Edit values** and **Clear values** will be enabled, which allows you to edit and delete the values of the selected control, respectively.



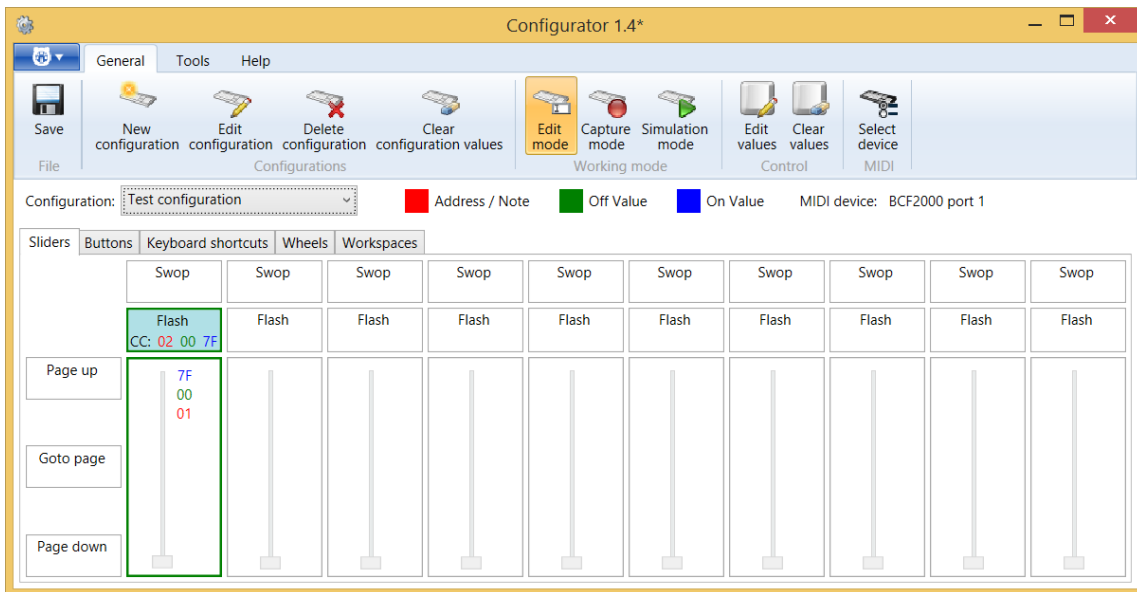
Clicking on the **Edit values** button, the following dialog will appear, allowing you to enter the type of the MIDI message and its data, corresponding to the selected control. For messages of type Control Change, we must enter the address, the minimum value and the maximum value, for Note On / Off messages we must enter the note:



Sliders only allow messages of type Control Change (in this case radio buttons for select message type will be disabled), buttons allow both Control Change and Note On / Off messages.

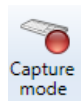
All values are entered in hexadecimal.

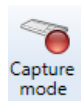
After entering the control values, they are displayed in the main area next to the corresponding control:



In buttons message type is shown as CC (Control Change) or NOO (Note On / Off).

3.3.5.2 Capture mode




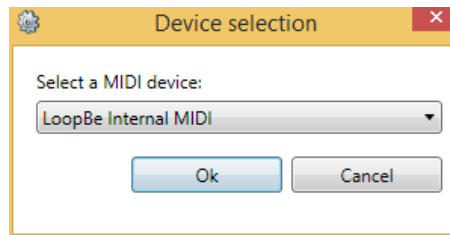
Capture mode is activated by pressing the  button. It is the preferred mode to set the values of your configuration, capturing them from your MIDI controller.

In capture mode it is not necessary to enter the values manually. Simply select a control on the work area, and activate the corresponding control on your MIDI controller. In the case of a button, press it, in the case of a slider move it to the minimum position and then to the maximum position. The configurator will capture the address and Off and On values automatically.

In the working area the active MIDI controller that will be captured is shown. If you have more than one MIDI controller connected to the PC, you can select which one to use for the capture of the configuration

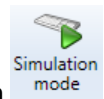


data. To select the MIDI controller click the  command. The following dialogue will be shown, you can then select the device to capture the values:



3.3.5.3 Simulation mode

The simulation mode is the default mode when you load the application, or when you change the current configuration with the dropdown of configurations.



When you are working in another mode, you can return to simulation mode by clicking the button

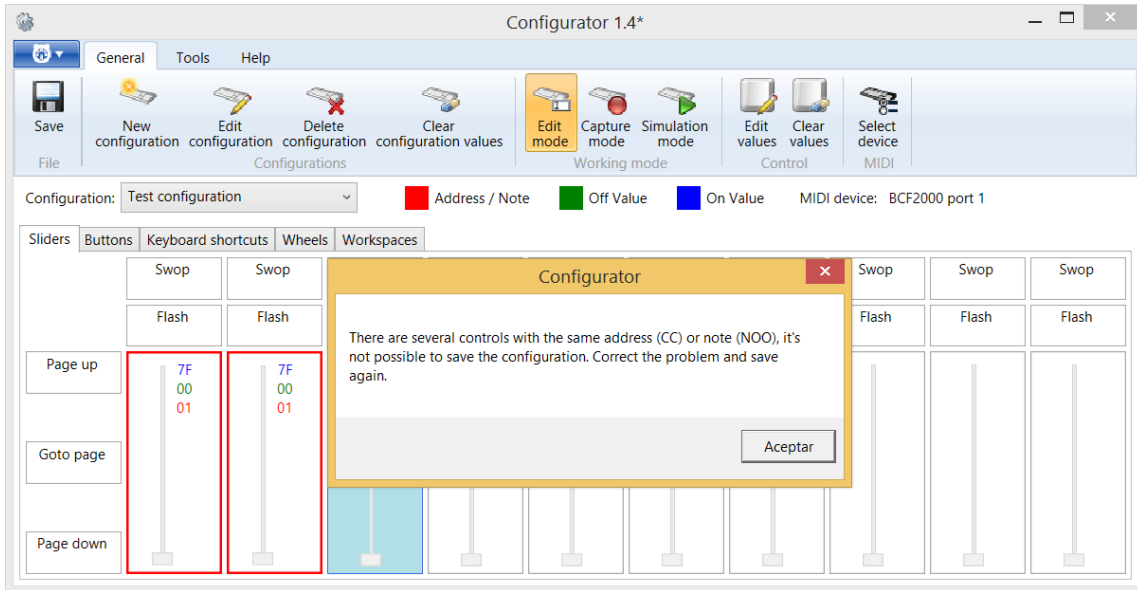
In simulation mode you cannot edit the configuration values. This mode is for checking that the entered values are correct. In simulation mode if you press a button on your MIDI controller the corresponding button is highlighted in the configurator. Similarly, if you move a slider on your MIDI controller, it will move the corresponding slider in the configurator application. The tab that contains the button or fader will be selected automatically.

3.3.6 Save



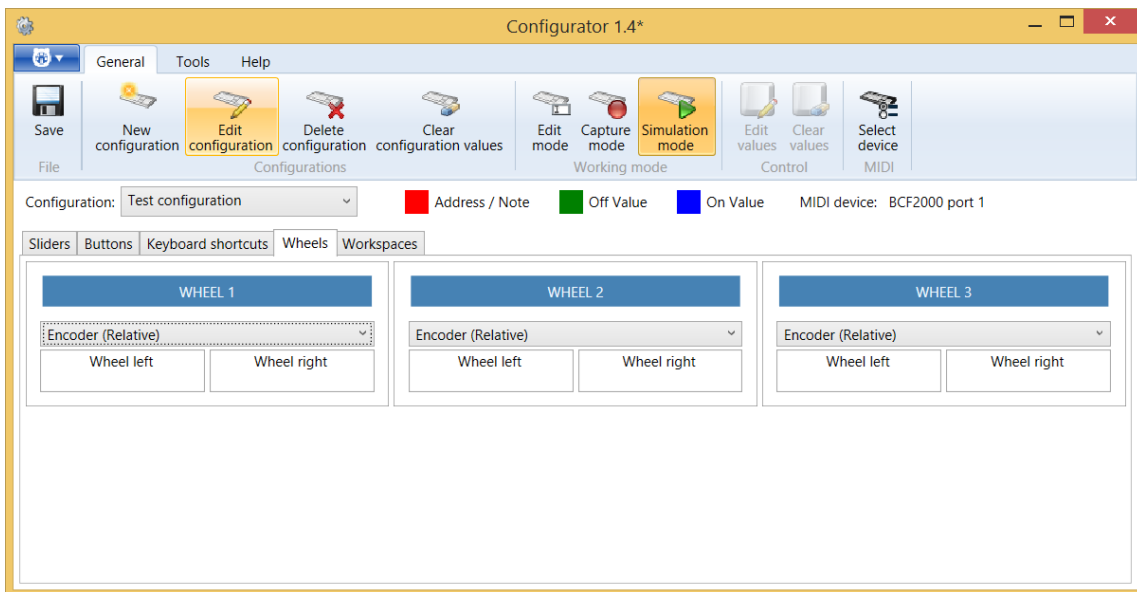
At any time you can store the modifications using the **Save** button. When you've made changes and these have not been saved, an * will be displayed in the title bar.

At the time of saving, OsiMIDI's configurator will verify if there are any controls that have the same address. If several controls with the same address are found a message indicating that you cannot save the configuration is displayed. You must correct the configuration to ensure that every control has a unique address. Controls with the same addresses are highlighted in red.

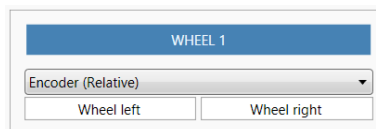


3.3.7 Attribute wheels configuration

OsiMIDI allows to control the 3 attribute wheels. Wheels are configured from “Wheels” tab.



In the "Wheels" tab you have 3 control groups, a group of controls to configure each of the wheels.



In each group of controls you have a combo box that lets you select the operating mode of each wheel, from between the two available:

- Encoder (Relative). You will use this mode if you have a USB MIDI controller with encoders.
- Fader / Knob (Absolute). You will use this mode if your USB MIDI controller has no encoders. In this case OsiMIDI allows you to control the wheels with a fader or rotary knob, with the help of a button that will allow you to regain the position when you arrive to the end position of the fader or rotary knob, without moving the wheel.

3.3.7.1 Encoder mode (Relative)

You use this mode if your controller has endless rotary controls (encoders) that operate in relative mode.

Encoders operating in relative mode send a MIDI message repeatedly when rotated, the message changes depending on whether you turn the encoder left or right. OsiMIDI supports Control Change and Note On type messages for encoders. For example, if you have a Behringer BCF 2000 controller you should configure it to send messages of Control Change type in “Relative 1” mode. Elation Midicon controller sends Note On messages, which are also compatible with OsiMIDI.

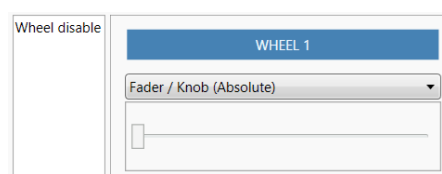
Each group of controls has two buttons: “Wheel left” and “Wheel right”. These buttons do not actually exist on your MIDI controller, it is a model that allows us to represent the encoder and set the MIDI message sent by your controller when the encoder turns left or right. Like any other control, you can configure these messages manually, or with the help of capture mode.

To configure an encoder in capture mode, click on the “Wheel left” control of the corresponding wheel, and then turn the encoder to the left on the MIDI controller. The message sent by the encoder while rotating to the left is captured. Then click on the “Wheel right” control and turn the encoder to the right on the MIDI controller. The message sent by the encoder while rotating to the right is captured. You must proceed in the same way to configure the other wheels.

3.3.7.2 Fader / Knob mode (Absolute)

What happens if your controller does not have encoders, can’t you control the wheels? Yes, OsiMIDI allows you to control the wheels in this case using a fader or a rotary knob, with the help of an additional button.

Why do you need the help of an additional button? Suppose you use a fader to move one of the wheels. You move the fader until you reach the end of its path, but you want to continue turning the wheel in Avolites. With the help of the “disable Wheel” button, while you’re pressing it, the wheel does not rotate when you move the fader back to its start position. Now release the button and move the fader again so that the wheel continues to turn in the desired direction.



To set the wheel in “Fader / Knob (Absolute)” mode, you set the button and slider the same way as you do with a conventional button and a fader or rotary knob, in fact this is what you will map onto your MIDI controller.

3.3.7.3 Sensitivity wheel adjustment

OsiMIDI does not have a sensitivity wheel adjustment, as it is possible to set the sensitivity of the wheels from the own Titan One software (Avo \ User Settings \ Wheels sensitivity).



Don't forget to release the Avo button, as if it remains pressed wheels work always with very high sensitivity.

3.4 Language selection

You can change the language of the application from the Tools tab of the ribbon, pressing the button to select the desired language:



Available languages are Spanish and English.

After selecting a language, it changes both the language of the OsiMIDI main application and the language of the configurator application.

3.5 Preferences

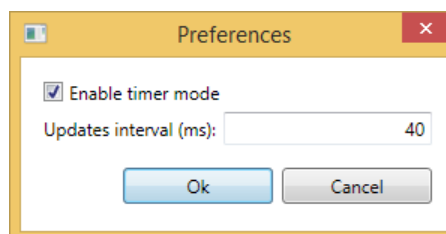
There are two modes of working in OsiMIDI, affecting the frequency with which the controls of Avolites Titan One are updated:

- Instant mode. OsiMIDI updates the interface of Avolites Titan One with each MIDI message received from the controller. This is the mode that updates Avolites Titan One faster, however, if the computer is not powerful enough, there could be delays from the action on a control of the MIDI controller until the corresponding control in Avolites Titan One is updated. The solution in this case would be to use the timer mode.
- Timer mode. MIDI messages are analysed and their values are stored without sending an update to the controls of Avolites Titan One immediately. At regular intervals, and as long as the user has performed an action on the MIDI controller, the stored values are then sent to the interface of Avolites Titan One.

Through the preferences dialog, you can choose the operating mode between the above two, and choose the update interval for timer mode.



To modify OsiMIDI preferences use the Preferences button. Clicking on the button displays the following dialog:



When the check box is checked, OsiMIDI runs in timer mode. Otherwise, OsiMIDI works in instant mode.


In timer mode, the text box with the updates interval is enabled. You must enter a value in milliseconds, not less than 10ms.

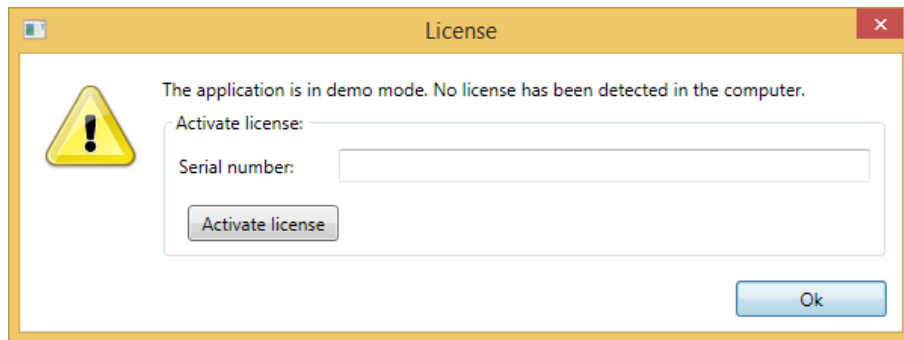
By default OsiMIDI works in timer mode with an update interval of 40ms (the interface of Avolites Titan One refreshes a maximum of 25 times per second). In case of delays, increase the update interval. To achieve higher refresh rate, reduce the interval (provided you have sufficiently powerful hardware).

3.6 License

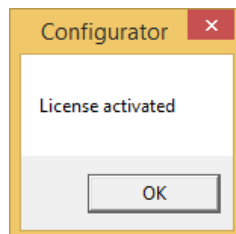
After installation, the application runs in demo mode until is registered with a serial number. In demo mode the text "DEMO MODE" is displayed in the title of the window.

3.6.1 Registration process

OsiMIDI can be registered with the configuration application, the  button in the tab menu shows the license management dialog:



To register OsiMIDI, enter the serial number in the text box and click on the button "Activate License".

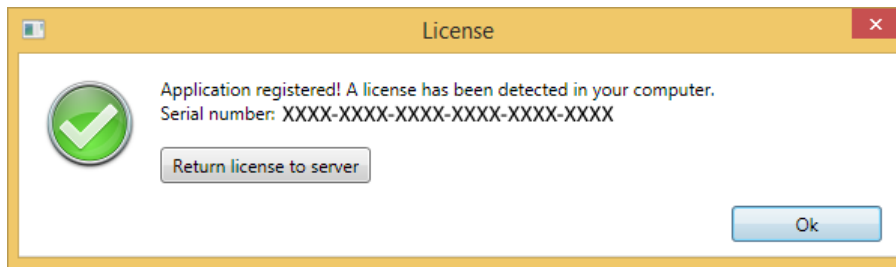


3.6.2 Return license to server

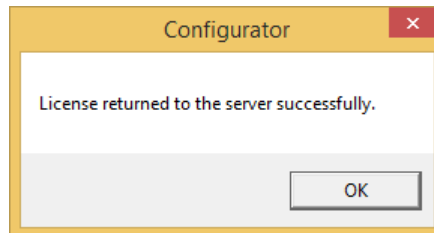
OsiMIDI only can be installed on one computer at a time. Once registered on a computer with a serial number, you cannot register OsiMIDI on another computer using the same serial number.

However, it is possible to move the license from one computer to another. You can remove the license on a computer returning it to the server and then register OsiMIDI on another computer using that serial number.

To do this, open the registration dialog. A message informs us that the application is registered, and displays the serial number:

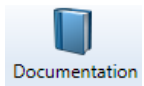


To return the license, click on the button “Return license to server”.



Once the license is sent back to the server, it is possible to install OSIMID on another computer.

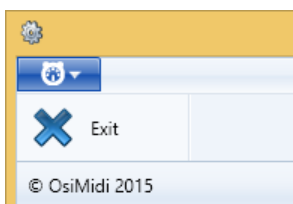
3.7 Documentation



button in the Help tab opens this user manual.

3.8 Quit the application

Opening the application menu, you have access to the “Exit” button, which allows you to close the application.



4 OsiMIDI

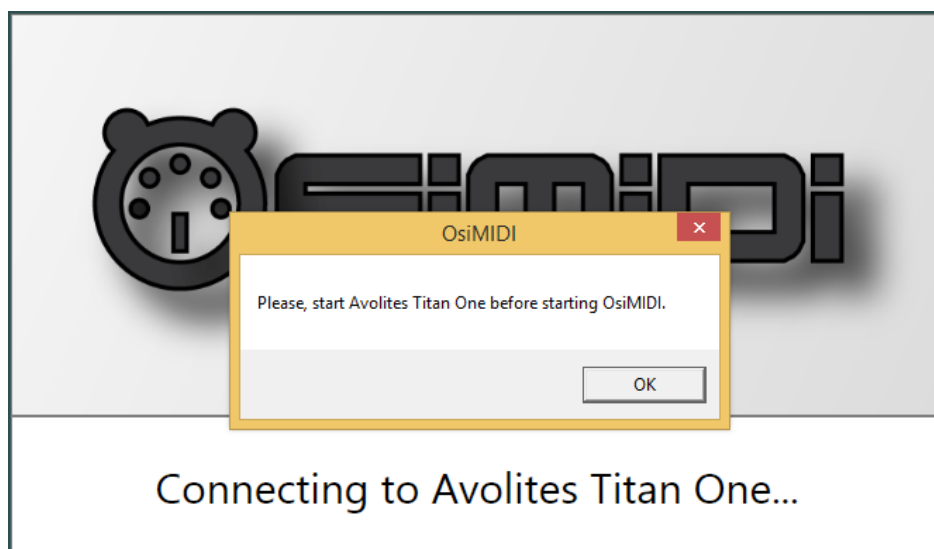
Use the shortcut created by the installation to open the main OsiMIDI application:



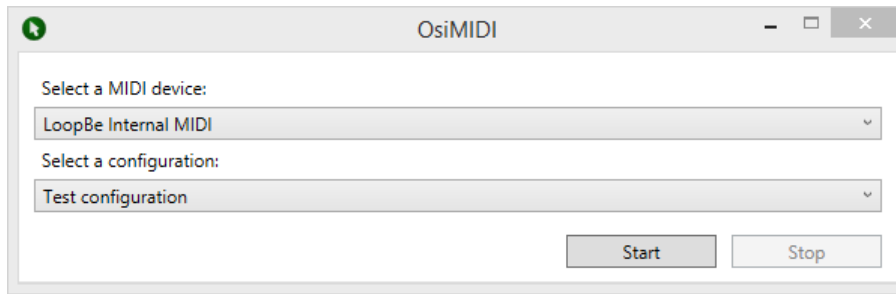
At the start, OsiMIDI connects to Avolites Titan One, and detects MIDI controllers, so it is necessary to have them connected to the PC before starting the application.



That is why you must fully initiate Avolites Titan One before starting OsiMIDI. Otherwise a warning message is displayed:



Once started, the application's main window is shown:

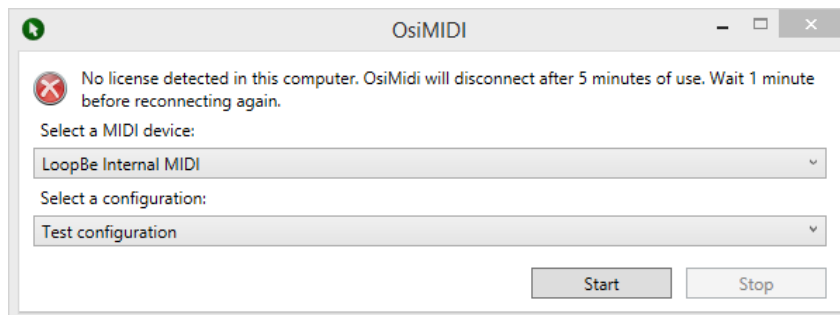


In the main window you can select the MIDI controller, if you have multiple controllers connected to the computer. Then select the configuration corresponding to your controller.

Once the controller and the configuration are selected, you can start listening to the MIDI controller messages with the "Start" button. OsiMIDI begin to listen to your MIDI controller and update your Avolites Titan One's controls.

You can stop listening to the MIDI controller using the "Stop" button.

If you have not registered OsiMIDI, the application window will display a warning message telling you that OsiMIDI is running in demo mode. When running in demo mode OsiMIDI will stop working after 5 minutes of operation. In addition, you must wait 1 minute before you can start it again.



5 Requirements

OsiMIDI supports the following versions of Windows operating system: 8.1 and 10.

OsiMIDI supports the following Avolites Titan One versions: 9.1 and 10.0.