

# sound*force*

## SFC-OB User Manual

24 April 2025

# 1. Intro

Thank you for purchasing the SFC-OB MIDI controller. A considerable amount of effort and passion has been put into this product to make it the best it can be. It is built to last and withstand intense usage on tour and in the studio. SoundForce has an excellent track record for its controller line, with many units built and very little registered issues and repairs. I hope you will have a great experience using this device and that it will inject some fun in your music. Many thanks for your support. I am interested to get your feedback and requests: [nicolas@sound-force.nl](mailto:nicolas@sound-force.nl)

## 2. Installation and start-up:

The SFC-OB is a class-compliant USB-MIDI device which means that no drivers are necessary. The controller should directly be recognized by your computer when plugged-in. USB devices should preferably be connected directly to the computer USB ports. Please make sure that your USB ports/hubs are providing enough power to every single device in your configuration.

To use the controller with your DAW and plugins you need to make sure that the controller is set-up in your DAW. In some DAWs, Logic for example, it's automatic when you plug it in and you don't need to do anything. In others, you might need to turn on an option in the preferences. Please refer to your DAW manual for details.

The controller is sending by default MIDI CC messages and can be mapped to plugins using their MIDI mapping functions. To specify which instance of a plugin you want to control, simply route the MIDI to the right track. This is usually down by scrolling (or clicking) from one track to another and thus putting a specific track in "record-arm". In some DAW, you can specify which MIDI devices are used on a specific track, so you can filter per device and sometimes also per channel. Please refer to your DAW user manual for specific details.

## 3. USB-MIDI Troubleshooting on MAC:

If the device turns on (red LEDs are on and you can change the switches positions) but it is not recognized by the computer, [please go through this guide completely](#). Please also try another USB cable, USB port and if possible another computer or OS. Before getting in touch for support, please confirm that the device is sending out MIDI correctly (or not) using a MIDI monitor (in google Chrome you can use [the control panel app](#)). If it does send MIDI messages as expected then the problem should be in the DAW and plugin configuration, make sure the controller is setup in your DAW and that the plugin is mapped.

## 4. USB-MIDI Troubleshooting on Windows:

If the device turns on (red LEDs are on and you can change the switches positions) but it is not recognized by the computer there is most likely an configuration or OS related issue. Please try another USB cable, USB port and if possible another computer or OS. Before getting in touch for support, please confirm that the device is sending out MIDI correctly (or not) using a MIDI monitor (in google Chrome you can use [the control panel app](#)). If it does send MIDI messages as expected then the problem should be in the DAW and plugin configuration, make sure the controller is setup in your DAW and that the plugin is mapped. ***Remember that Windows allows only 1 connection at the time between a USB-MIDI device and a software.*** Make sure all other MIDI applications are closed before you are trying to connect the controller to your DAW.

## 5. Using the controller with plugins

Before you get started, always make sure that you have the latest version of the software you want to use with the SFC-OB.

The SFC-OB sends CC MIDI messages to take control of the synth parameters. Therefore the plugin needs the right MIDI mapping and MIDI needs to be routed to the plugin's track. There is no magic connection between the controller and plugins, the MIDI needs to be routed like a USB-MIDI keyboard for example.

Every plugin has a specific MIDI mapping system, so please refer to your plugin's manual to start assigning MIDI CCs.

## 6. Plugin modes

The controller front panel layout was designed to fit as many OB-styled plugins as possible. As there are differences between different plugin interfaces (specifically the amount of positions in certain switches), plugin modes are needed to make the controller compatible with each plugin.

The original 1.0 factory firmware supports 4 modes:12

- Arturia OP-Xa (default out of the box)
- GForce OB-X
- Sonic Projects OP-X PRO-II/DiscoDSP OB-Xd
- Synapse Obsession

To change the plugin mode, see the control panel section 12.

## 7. Arturia OP-Xa 2-way communication

Thanks to Arturia's ingenious XML controller mapping system, a greatly improved integration with the latest Arturia OP-Xa (Vcollection 9 and above) plugin can be accessed thanks to a simple and easy copy file(s). The controller can receive sysex data from the plugin when presets or instances are changed in the DAW. On the controller side, the data is loaded to the interface and the controller can update the front panel. It can also request the sysex interface data on demand if needed, this is necessary when a DAW will not trigger certain events correctly. This integration works thanks to Arturia's XML system that was implemented for their own line of MIDI controllers. This functionality won't be available for other plugins unless developers program special functions to implement this. Special thanks to Marie from Arturia for taking the time to explain me how it works.

### Set-up:

First make sure that the SFC-OB is in the Arturia plugin mode (see section 6).

To start using this integration, [download, unzip the support file](#). Check which version you are using in the Arturia ASC and choose the right folder. Follow the instructions in the README file. There are 2 versions released in 2024 that caused problems and cannot be supported. Only the versions specified in the README files are supported.

After copying the XML file(s), restart the plugin if it was open and then in the plugin interface click on the cogwheel, then in the MIDI tab choose the SFC-OB in the MIDI controller dropdown. This will auto-map the plugin to the SFC-OB default CC map and turn on automatically the 2-way integration.



### **Behaviour to expect:**

The controller will synchronise to the plugin in the following situations:

- when a new plugin instance is created
- when the standalone version is opened (if the SFC-OB is checked on in the Audio MIDI Settings)
- when changing presets
- when switching tracks/instances
- when requesting it using the SYNC switch on the controller

The plugin will also send a single sysex message when a plugin control is moved or touched using the mouse as well.

When the sysex interface data is sent to the controller, the firmware will ingest it and the LEDs will be changed to mirror the plugin status. The pot data is also ingested and they are 3 behaviors possible, see below in the MODES switch options.

### **DAW specifics:**

Switching instances happens differently in every DAW so please refer to your DAW's manual and documentation to do this. Usually, it involves selecting another track, making sure that the arm record function goes with it and also insuring that the new plugin GUI opens. Please note that switching tracks (using the Arm Recording switch) to open a new instance in Ableton is problematic. The previously opened GUI is not properly closed and thus the functions in the plugin framework are not triggered correctly when a new instance is opened. This is not a problem related to Arturia software or SoundForce controllers. The easy workaround for this is to firstly switch tracks, then to manually request the sysex data transfer from the plugin to the controller with the SYNC switch.

### **Remote control switches:**

From the controller, you can change the presets with the DOWN and UP arrow switches.

You can also manually request the sysex synchronization from the plugin to the controller with the SYNC switch. This is especially handy if you notice that the sysex transfer is not triggering when switching tracks/instances, for example in Ableton as mentioned above.

The DUMP switch allows you to synchronize in the other direction, from the controller to the plugin. The controller will dump its full interface data into one packet sent to the plugin.

The MODES switch will define the behavior in case of discrepancies between a plugin pot-position and a controller pot-position with the goal of avoiding juming values.

### **MODES switch options:**

When the received pot data from the plugin differs from the actual pot positions on the controller, discontinuities can appear if this is not dealt with. Similar to Ableton take over modes, they are 3 options that can be set with the MODES switch:

- **Jump:** the controller will send instantly its new physical pot value and the pot in the plugin will do a jump
- **Pick-up:** the controller will only send new pot values after the controller-pot has reached the plugin-pot position. The LEDs on top of the DOWN and UP arrow switches will blink to let you if you need to go down (DOWN arrow blinks) or up (UP arrow blinks)
- **Scaling:** the controller will rescale the values sent to the plugin elastically so that a move on the controller matches the range of a move on the plugin control. Only smooth transitions are created. As soon as the control reaches one extremities (0 or 127), the scale is back to the normal 1:1 proportion.

This preference is saved in the controller and loaded when the device is plugged in.

## 8. DiscoDSP OB-Xd mapping preset

The DiscoDSP team has included an XML mapping preset in the plugin menu to get instant mapping with just one mouse click. Press the red MENU switch -> MIDI -> SFC-OB. The OB-Xd is an amazing plugin with a free non-commercial license option. Most of the classic OB-style parameters are available and those will be automatically mapped when using the preset.



## 9. DUMP switch

When the plugin window and the state of the controller are different, it is sometimes preferable to "push" the state of the controller to the plugin interface. That way nothing is jumping around when you start moving the controls and it helps getting the controller and plugin synced up when you get starting. The DUMP switch is reading every control and sending a pack of CC messages to the plugin.

## 10. SHIFT switch

The SHIFT switch is unlocking an alternative MIDI channel for the pots. Simply hold down the SHIFT switch and turn your desired control. Please note that SHIFT is not latching, which means you need to hold it down.

## 11. LEDs brightness

Holding down the SHIFT button, you can change the LEDs brightness turning the PORTAMENTO TIME pot. This preference is saved in the controller and loaded when the device is plugged in.

## 12. Users pots and switches

Please note that there are extra USER pots and switches that you can map to whatever you want. For example, an external reverb plugin wet/dry or an FX return fader level in your DAW.

## 13. Control panel

The Control Panel is a Google-Chrome app that allows you to save CC maps and select the plugin mode.

As firmware v1.0, the SFC-OB has 4 modes:

- Arturia OP-Xa
- GForce OB-X
- Sonic Projects OP-X PRO-II/DiscoDSP OB-Xd
- Synapse Obsession

Each mode has a different interface behavior that will fit the destination plugin or hardware as much as possible.

You can click on each control and change the CC message number. In some situations, certain CCs are hijacked by DAWs and hard routed to specific functions, so some edits are necessary.

## SFC-OB Control Panel

**Selected control :**

Pot 0:  
MASTER - TUNE

CC number:

**Available devices :**

USB MIDI Device

**Connection status :**

Please plug in your SFC-OB

**Firmware version:**

**Data transfer status:**

**Send messages:**



POTS:	SWITCHED:	MIDI channel:
Pot 0 - MASTER - TUNE	SW 0 - MASTER - CHORD	<input type="text" value="1"/>
Pot 1 - MASTER - CHORD VEL	SW 1 - MASTER - HOLD	<input type="text" value="64"/>
Pot 2 - MASTER - VOLUME	SW 2 - VOICES - PAN	<input type="text" value="41"/>
Pot 3 - VOICES - SPREAD	SW 3 - VOICES - STEREO	<input type="text" value="42"/>
Pot 4 - VOICES - UNISON DETUNE	SW 4 - VOICES - UNISON	<input type="text" value="43"/>
Pot 5 - MODULATION - LFO RATE	SW 5 - MODULATION - SH	<input type="text" value="44"/>
Pot 6 - MODULATION - MOD DEPTH 1	SW 6 - MODULATION - SAW	<input type="text" value="45"/>
Pot 7 - BEND - AMOUNT	SW 7 - MODULATION - SINE	<input type="text" value="46"/>
Pot 8 - MODULATION - MOD DEPTH 2	SW 8 - MODULATION - SRNC	<input type="text" value="47"/>
Pot 9 - OSCILLATOR 1 - FREQ	SW 9 - MODULATION - SH S	<input type="text" value="48"/>
Pot 10 - PORTAMENTO - TIME	SW 10 - MODULATION - SQUARE	<input type="text" value="49"/>
Pot 11 - ARPEGGIATOR - RATE	SW 11 - MODULATION - TRIANGLE	<input type="text" value="50"/>
Pot 12 - OSCILLATOR 1 - PW	SW 12 - MODULATION - TRIG	<input type="text" value="51"/>
Pot 13 - OSCILLATOR 1 - KMOD	SW 13 - MODULATION - FILTER FREQ	<input type="text" value="52"/>
Pot 14 - ARPEGGIATOR - PATTERN	SW 14 - MODULATION - OSC 2 FREQ	<input type="text" value="53"/>
Pot 15 - OSCILLATOR 2 - DETUNE	SW 15 - MODULATION - OSC 1 FREQ	<input type="text" value="54"/>
Pot 16 - OSCILLATOR 2 - FREQ	SW 16 - MODULATION - VOLUME	<input type="text" value="55"/>
Pot 17 - ARPEGGIATOR - OCTAVE	SW 17 - MODULATION - OSC 2 PWM	<input type="text" value="56"/>
Pot 18 - MIXER - OSC 1	SW 18 - MODULATION - OSC 1 PWM	<input type="text" value="57"/>
Pot 19 - FILTER - FREQ	SW 19 - BEND - OSC 2 Only	<input type="text" value="58"/>
Pot 20 - MIXER - OSC 2	SW 20 - ARPEGGIATOR - ON	<input type="text" value="59"/>
Pot 21 - FILTER - RESO	SW 21 - OSCILLATOR 1 - SAW	<input type="text" value="60"/>
Pot 22 - MIXER - NOISE	SW 22 - ARPEGGIATOR - SYNC	<input type="text" value="61"/>
Pot 23 - FILTER - MOD	SW 23 - OSCILLATOR 1 - SQUARE	<input type="text" value="62"/>
Pot 24 - LENV - ATTACK	SW 24 - PORTAMENTO - QUANTIZE	<input type="text" value="63"/>
Pot 25 - FENV - ATTACK	SW 25 - SHIFT	<input type="text" value="N/A"/>
Pot 26 - USER - 3	SW 26 - SYNC	<input type="text" value="N/A"/>
Pot 27 - VIBRATO - RATE	SW 27 - OSCILLATOR 2 - SAW	<input type="text" value="64"/>
Pot 28 - LENV - DECAY	SW 28 - OSCILLATOR 2 - SQUARE	<input type="text" value="67"/>
Pot 29 - FENV - DECAY	SW 29 - PRESET BACK	<input type="text" value="N/A"/>
Pot 30 - USER - 4	SW 30 - PRESET FORWARD	<input type="text" value="N/A"/>
Pot 31 - VIBRATO - DEPTH	SW 31 - SYNC	<input type="text" value="N/A"/>
Pot 32 - LENV - SUSTAIN	SW 32 - FILTER - 4 POLE	<input type="text" value="71"/>
Pot 33 - FENV - SUSTAIN	SW 33 - DUMP	<input type="text" value="N/A"/>
Pot 34 - USER - 5	SW 34 - MODES	<input type="text" value="N/A"/>
Pot 35 - LENV - RELEASE	SW 35 - FILTER - TRACK	<input type="text" value="78"/>
Pot 36 - FENV - RELEASE	SW 36 - USER - 1	<input type="text" value="79"/>
	SW 37 - VIBRATO - OSC 1	<input type="text" value="76"/>

## How to use the control panel:

- First plug in your SFC-OB
- Then [open the control panel](#) in Google Chrome latest version
- The device should be recognized and the message “Connected to SFC-OB” will be displayed on the left middle container. The firmware version will also be displayed.
- Choose your desired mode in the “plugin mode” dropdown menu and click “Send plugin mode”
- If desired click on a switch/pot/ in the front panel image and change its CC number in the left field. When you are done with your changes, click “Save values”

You can save a MIDI map on your computer:

- click Export as text
- click in the filled text field
- copy and paste that list of comma-separated numbers
- save that on a text file on your computer



Similarly, you can copy a saved text field from a text file and paste it in the control panel text field. Then click “Load text to panel”.

You can go back to the factory CC values with the “Reset to factory values” switch. This will cause the controller to reboot and erase the saved data.

## 14.Default start-up state of the controller

To change the default start-up state of the switches, you can SHIFT press the DUMP switch. After it is saved for the first time, it will be loaded by default at start-up. It's loaded but not sent out at start-up, if you'd like to send it out as a packet use the DUMP switch.