J74 Volca Control - Instructions and FAQ

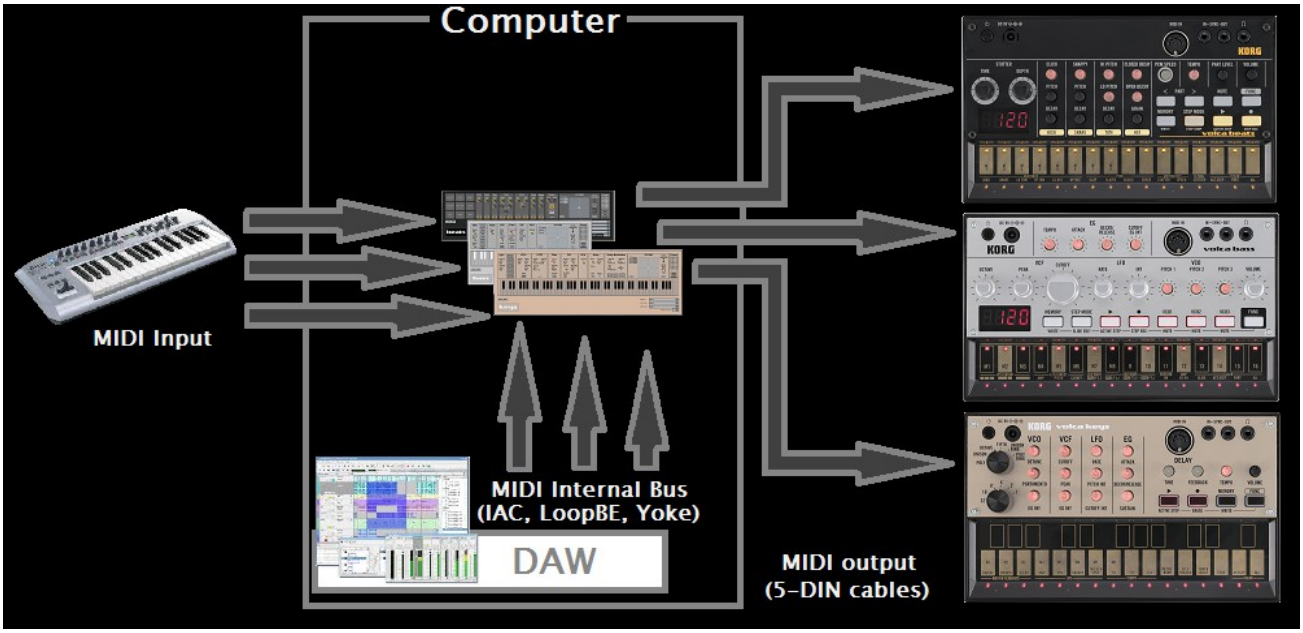
http://www.fabriziopoce.com/VC_FAQ.html

[1] - What do I need to make use of the VolcaControl devices (VKeys, VBeats, VBass)?
You need the Volca unit or units, a computer to run the Volca-Control programs (both MAC and PC supported) and at least a MIDI output interface (from your computer to the Volca hardware). MIDI input to the VolcaControl software is optional, but it is needed if you like to play, sequence or control the units via the software for full functionality. Remember: MIDI output must reach the Volca's, which have a 5-DIN traditional MIDI interfaces. So your computer MUST have a MIDI interface/port which comes out as a 5-DIN cable, as required by the Volca units.

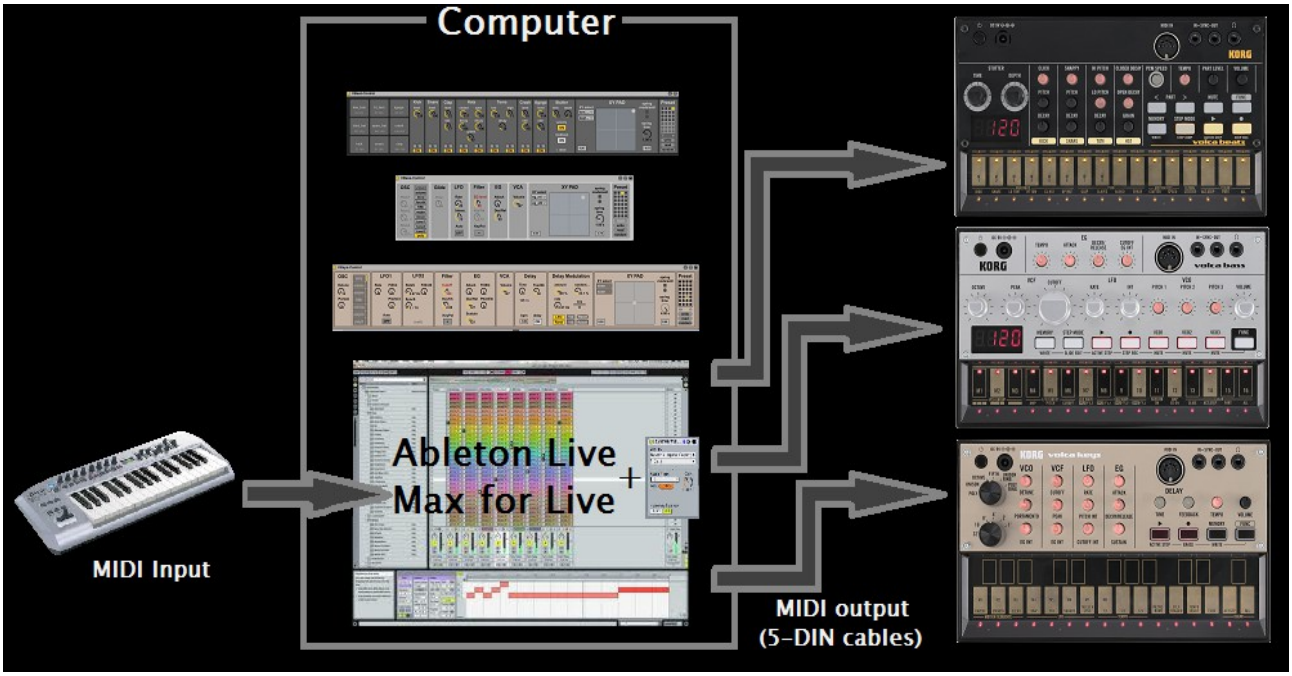
[2] - Do I need all three Volca's to use the VolcaControl software?
You can use the software even if you have just one or two of them. The unit(s) you have will be controlled. If you later add a new unit to your set, you can immediately use the corresponding surface with no change to the installation.

[3] - How do I install the software?
You will get an overall zip package, with all the versions, all surfaces and user guides. The standalone application comes it two flavours: Mac and Windows. In the MAC case look for a zip file called "Volca-Control.zip" in the "J74 Volcas - Standalone MAC OS" folder. Unzip this and copy it to your drive. Once you have done that the standalone application is ready to use: just launch it and set up MIDI. In the Windows case look in the folder "J74 Volcas - Standalone Windows OS": there you have another folder called "Volca-Control". Copy this folder as is to your drive. Once you have done that just launch the "Volca-Control.exe" executable you will find inside of it (and set up MIDI). For the Max for Live case things are even simpler. Look in the folder "J74 Volcas - Max for Live plugin for Ableton Live": here you can find the three MIDI devices (one for each Volca device type), all with file extention ".amxd". Just drag and drop the chosen device in a Live track and your are ready to go (you need to add the Live Instrument and setup MIDI/Audio I/O though). Finally you can check some presets I have prepared: you can find them in folder "J74 Volcas - Preset Banks".

[4] - How can I integrate the VolcaControl software with my Volca's and my software (e.g. my DAW)?
You can choose between running the Standalone application (using MIDI for communication) or using the Max for Live versions (if you have Max for Live and Ableton Live). In both cases you need MIDI output as specified above. MIDI input depends on the version you use and on your setup. In the standalone case MIDI input could be a MIDI keyboard or any similar physical device which generates MIDI. Set this as input on the VolcaControl devices (VKeys, VBass, VBeats) using the MIDI IN menu (and optionally as control device for GUI parameters using the CTRL IN menu). On the standalone MIDI input can also be MIDI coming from other software, like a DAW (Cubase, FL Studio, Ableton Live, whatever sends MIDI). In this latter case you need to use an internal MIDI bus on your computer, like the IAC bus on MAC OS or for Windows users add-on's like MIDI Yoke, LoopBE or similar. They all behave like virtual MIDI cables between applications.



In the Max for Live / Ableton Live case you can just use the VolcaControl MIDI devices in Live, with no MIDI input setup required. Anyway you need to set up MIDI output, as this has to reach the Volca's in order for things to work. To do this use of Live's External Instrument: drop the External Instrument behind the Volca Max for Live device (in the same track) and configure on the External Instrument the MIDI port for output (and its channel) so that this reaches the Volca. Also select the Audio port/channel you would like to use to receive the audio from the Volca back into Ableton Live. Note: the Volca received MIDI channel has to match the selected output MIDI channel. By default Volca Keys and Volca Bass listen to channel 1. The Volca Beats instead listens to channel 10. These settings can be changed on the Volca units (for more info look into the Volca user manual from Korg).



[4] - Is there a manual of the functionality for the Volca-Control devices?

Yes, it is included in the download package. Here also direct links on the web:

- VKeys User Guide.
- VBass User Guide.
- VBeats User Guide.

[6] - How can I save/recall/export/import presets on the VolcaControl devices?

In the Preset section you have a square with little colored buttons. These are preset slots. Here how it works:

- You can save a preset by doing SHIFT+CLICK on the slot you like to use.
- You can load a preset (if present) by doing CLICK on the slot you like to select.
- You can export a preset bank by using the "write" button: give the preset a name and save this somewhere.
- You can import a preset bank by using the "read" button: select the file (normally .maxpresets type) and the bank will be imported.

[7] - How can I change preset slot on the VolcaControl devices?

This is possible in three ways. One way is by clicking on the preset slot (the little circles) of the software GUI in the Preset section. Another way is by using the [preset number selector] in combination with the [activator button]. The [preset number selector] is a small number located below all the slots in the Preset section, on the left side, the [activator button] is just next to it, on the right side. The [preset number selector] defines which preset will be recalled if you press the [activator button]. Both are MIDI mappable elements when used in Ableton Live / M4L version. Finally it is possible to use program change messages via MIDI (to be sent through the MIDI input to the Volca-Control device).

[8] - Why no LFO2 on the VBass?

On the Volca Bass there is no control via MIDI for the Cutoff (because not provided by Korg), so a software LFO2 would only be thinkable on the EG level. This is in practice useless, as the envelope needs to be triggered by new notes all the time. As the produced effects were not interesting, no LFO2 has been added to the VBass.

[9] - Why no MIDI velocity when sequencing the Volca Beats internally, even if the VBeats is open, connected and the Velocity toggle is ON?

MIDI velocity can only be achieved if MIDI notes pass through the VBeats. This is not the case if you sequnce the unit from the internal sequencer. For the sake of clarity the VBeats emulates velocity by changing the part levels to values corresponding to the received MIDI velocity in real time.

[10] - Why high values of the Glide Time on the VBass change so little the behaviour of the Volca Bass?

The Glide Time has two main type of values: 0 and all other values. For value 0 the VBass software avoids any legato effect, always generating a "note off" if you play a legato as input. For all other values (anything greater than 0) the Glide Time matches exactly what the Slide time is on the Volca Bass hardware unit. Indeed the difference of all values above 0 is subtle sometimes even almost negligible. You can hear it if you first press a low key (like C1) and then, without releasing the low key, by pressing another, much high note (like C5). That's how Korg made the hardware unit.

[11] - Why can't I hear changes using the Octave and Gate Time parameters on the VBass?

The GateTime on the VBass does only effect the internal Volca Bass sequencer gate time for steps sequenced directly on the unit. It does not affect any sequencing or playing done via MIDI. The Octave on the VBass does only effect the ribbon keyboard transpose on the VolcaBass hardware, not MIDI playing or sequencing.

[12] - Why sometimes, if I set a knob on the Volca hardware unit (with VBass and/or VKeys in use), I get unexpected changes of values on the hardware which I did not make myself? This effect depends on the fact that some VKeys or VBass modulation is in use. This is the case for instance of KeyTracking. This follows the note pitch received in (MIDI) input and in real time modifies the Cutoff value accordingly (sending each time a new MIDI value to the unit). Let's say you set on the VKeys the Cutoff = 64 and KeyTracking = 1. Each time a new MIDI note is sent, the Cutoff is re-calculated with the appropriate modulation and a MIDI update for the Cutoff is automatically sent. KeyTracking uses a reference note of C3: so notes lower than C3 will lower the cutoff, notes higher than C3 will increase it (unless you invert polarity on the GUI). So if start with a C1 (a low note) the Cutoff value is sent via MIDI to about 64-24=40. Then if you send a C2 a new Cutoff is sent with value 64-12=56, if you send C3 (the reference note) you will have Cutoff 64-0=64 and if you send a C4 you will get Cutoff 64+12=76. So with KeyTracking enabled (any value > 0) every note refreshes the Cutoff from the software to the Volca hardware. Even if you set the hardware knob to another value, the next MIDI note will refresh the setting. Can you avoid this? Yes you can. But to do this means you need to turn off VKeys modulation features (same for the VBass). The only setting combination which allow you to set values on the hardware and not get an override from the VKeys (or VBass) are the following:

On VKeys: Set KeyTracking to 0 (disabled) Set LFO1 set Auto OFF (disabled) Set LFO2 FiltIntS to 0 (disabled) Delay Modulations LFO and Rand toggles off (disabled)
On VBass: Set KeyTracking to 0 (disabled) Set LFO1 set Auto OFF (disabled)
On VBeats: There should be no issue of this kind.

[13] - Why on VBass poly mode some note mutes some other notes?
The VBass poly is an emulation of polyphony which uses the MIDI input received by tuning in real-time the pitch of the three oscillators. The first not will set the note been played (passed through to the unit). But if you add a second note in legato the MIDI pitch will be used for modulating the oscilaltor 2 pitch (the MIDI note will not reach the Volca Bass, the pitch value setting will). In the same fashion a third note will modulate the pitch of oscillator 3. Because pitch modulation on the hardware is limited to two octaves (from the note played first and assigned to oscillator 1) some notes cannot be played because too distant from the first note. This is due to the limits in the pitch relative values on the Korg unit.

[14] - What does Poly2 actually do on VKeys?
Poly2 avoids drops in volume and some unnatural retrigger when playing chords on the Volca Keys (notes in legato). This effect can be heard using the Poly mode, which uses the standard Korg implementation on the Volca Keys. The concept is that, if you play chords quickly, you may incidentally play a note with very low velocity together with others being louder. In Korg's factory Poly mode (the first option in the mode selector) that velocity will override the entire chord, making the entire sound drop suddenly. This is because the unit has only one envelope and retriggers it each time a new note comes in. Poly2 does some trick on the velocity and on the note off messages to make things more natural. It takes the velocity from all active notes in a chord/legato and calculates the MAXIMUM, using this for all notes in the played chord/legato. Most often this will be set by the first note, but in fact is not always that. So if you play (C1;100) + (E1,80) + (G1;40) in chord/legato (all still active notes), you will get (C1;100) + (E1,100) + (G1;100) INDEPENDENTLY from which note played first, as long as they remain active. Moreover if you keep notes played and remove others Poly2 avoids some envelope retriggering as well (delaying some note off message). The result of Poly2 should be a bit more natural than the original Poly mode from Korg. At least this is the intention of the feature.

[15] - How do I map a GUI parameter to a MIDI controller with knobs?

First of all you need to select the MIDI controller in the CTRL IN menu. Your controller is supposed to be sending standard MIDI CC messages (any number is good).
Then do this:

1) Turn the "Learn" toggle ON
2) MOVE the target parameter on the GUI (touching it is not enough)
3) Move the knob on the controller.

The result should be to have "Learn" to go off and the parameter being assigned. If you save this in the Preset, the mapping will be saved as well.

To Un-Learn a mapping (and free up the knob/encoder on your MIDI controller) do the following:
1) Move the GUI parameter to be un-learned
2) Press the "UnLearn" button

[16] - Why is the effect of the KeyTracking on the VBass sometimes very subtle or almost negligible?

KeyTracking on the VBass works by modulating the EG level, not the Cutoff as instead it happens on the VKeys. This is because the Cutoff has not been implemented by Korg via MIDI. So there is only a subset of the situation when the KeyTracking actually works well on the VBass: to hear it as its best set the EG level to a centered value (64 or similar) and set the EG attack be low (0 or similar). This gives "space" for the modulation to be audible. And of course as it is the envelope amount being modulated, there must be an envelope trigger (which happens by a new note).

[17] - Why the LFO on the VBass jumps suddenly at value 97 to a much quicker rate?

This has to do with the hardware LFO implementation on the Volca Bass as made by Korg. At value=0 rate is actually not really zero. The rate then increases slowly up to MIDI value=96 to about 111bpm, but at value=97 it suddenly jumps to 184bpm. This is something related to the hardware unit and cannot be changed via software.

[18] - Where is the pad for triggering the Claves on the VBeats?

The VBeats can trigger nine pads manually (or by MIDI mapping). Pad nr.9 (top/right corner) though has a dual functionality. It can map to either the Agogo (default) and the Claves. To assign the required sound to pad nr.9 use the little "pad9" toggle in the Claves column. By default (dark) it maps the Agogo. When activated (light) swaps this mapping to the Claves.

[19] - Why when I map the pads on the VBeats do I need to push the mapped physical pad twice to hear the sound? Is only toggle behaviour supported? Can this be changed?

The VBeats pad trigger system assumes by default that your controller's pads behave as toggles, sending either note ON / note OFF events or a CC high / low values. You can change this behaviour to become momentary. To swap between toggle and momentary mapping behaviour use the little "T/M" toggle in the Claves column. When T is selected (default) the mapping are used as toggles. When set to M the mappings are used as momentary.