

EWI5000 setup for use with the DynaSample XPression or XpressO

If you are using the EWI5000 as a MIDI controller for the XPression or XpressO you will need to change a number of parameters on the EWI5000. The EWI5000's default settings will not work well (out of the box or after a reset) with the XPression.

(Most of this is true for any other external sound generator as well.)

BEFORE STARTING EXECUTE A RESET TO THE FACTORY DEFAULTS *(p. 37 of the EWI5000 User Guide)*

- 1) Turn off High Resolution for breath.

High Resolution is not only superfluous it also uses too much MIDI bandwidth and can therefore have a negative impact on the MIDI timing in general.

The XPression might give you some extremely loud noise in case you have CC7 on high resolution.

(This won't happen if you have CC39 filtered in [Utility] "Global MIDI CC Remapping")

Most of the unnecessary and problematic CCs should be filtered if you have the latest software version of the XPression (v1.2.06 beta 38 or higher).

For this reason after updating the XPression it is recommended to reset your XPression to the default settings for your wind controller. (New instruments are already set up like this.)

Go to [Utility] / "internal Backup – all Settings and Maps" and restore all settings for your controller.

This will filter all unnecessary or interfering CCs (like bank changes, etc.).

Alternatively you can copy the map "minimal" to your current (by default "all") CC Remapping map.

- 2) The XPression uses only CC2 (breath) as a dynamic controller. All other CCs for breath must be turned off! CC7 (main volume) can cause a bad dynamic response while aftertouch causes pitch issues. CC11 (expression) only wastes bandwidth.

- 3) Using CC1 on the bite controller uses the XPression's own EWI style vibrato which has the advantage that it can also be used for slower vibrato than the EWI's bite vibrato.

It can also be remapped to other functions per preset without changing any settings on the EWI5000.

If the EWI5000 is set up for bite vibrato it cannot be used for anything else and it will interfere with the auto portamento feature of the XPression. Auto portamento needs to be disabled in this case.

- 4) The default calibration of the EWI5000 cannot produce a usable velocity.

However, the XPression needs a reliable velocity for adjusting the attack of the wind and string instruments as well as the synth sounds. Of course all percussive instruments like pianos, mallets, guitars, etc. depend exclusively on velocity for their level - on any sound generator!

While this used to be working perfectly out of the box on all previous EWIs it needs some extra settings that are not corresponding to the EWI5000 default settings.

Here are the most important tweaks that you will have to apply:

- a) Set Ct (Capture Delay) to "5". The default of "3" is too short. (EWI5000 manual page 16)

- b) Breath Sensor Calibration (page 23):

- set the breath sensor rate to "99" (reverb knob)
- the sensitivity (chorus knob) to -10 to -30 below the threshold where the led starts lighting up (I have mine set to 45 with a threshold of 64).

A value that is closer to the threshold will lower the velocity randomly.

- the dynamic range (lfo knob) is up to you - depending on the feel that you want (I have mine set to 86). Make sure to always test the velocity with your personal settings.

Values of 35 (CHORUS) and 86 (LFO) match the EWI-USB best.

Test:

If the calibration is correct you should be able to play a piano sound with a perfect velocity and without any missing notes - no matter whether you play staccato or legato.

If you get dropped notes on a piano you need to continue tweaking your settings.

- 5) Set the EWI key delay not any lower than 7 or 8 to avoid dropped or stuck notes caused by several notes being sent at once on each fingering change.

Once these things are set up correctly your EWI5000 should be working great as a MIDI controller with the XPression/XpressO (or any other sound module / software synth)!

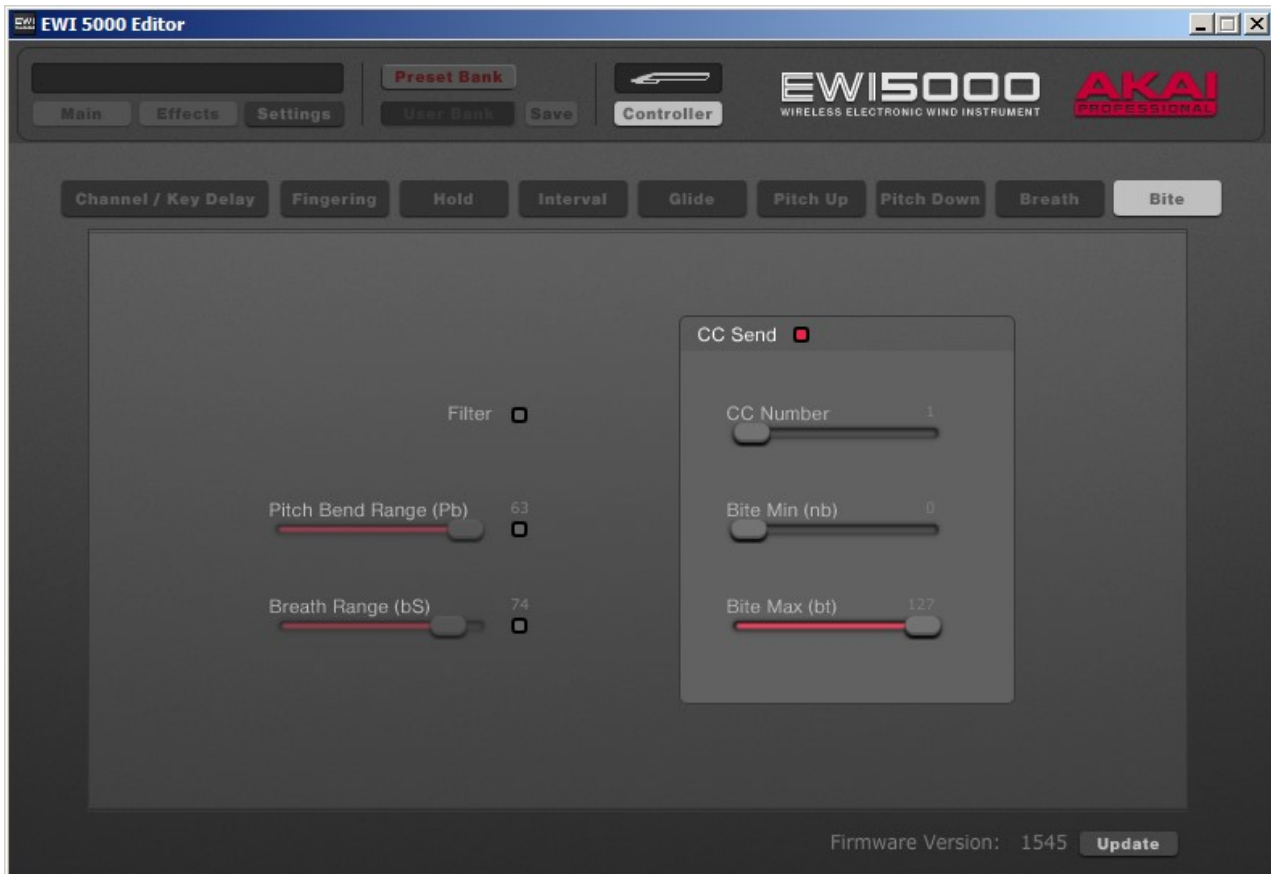
Don't forget to write your calibration settings down while you're doing it as there is currently no way for saving or recalling the values of your settings later ... :-)

EWI5000 setup

Here is a screenshot of how your Breath Setup should look like:



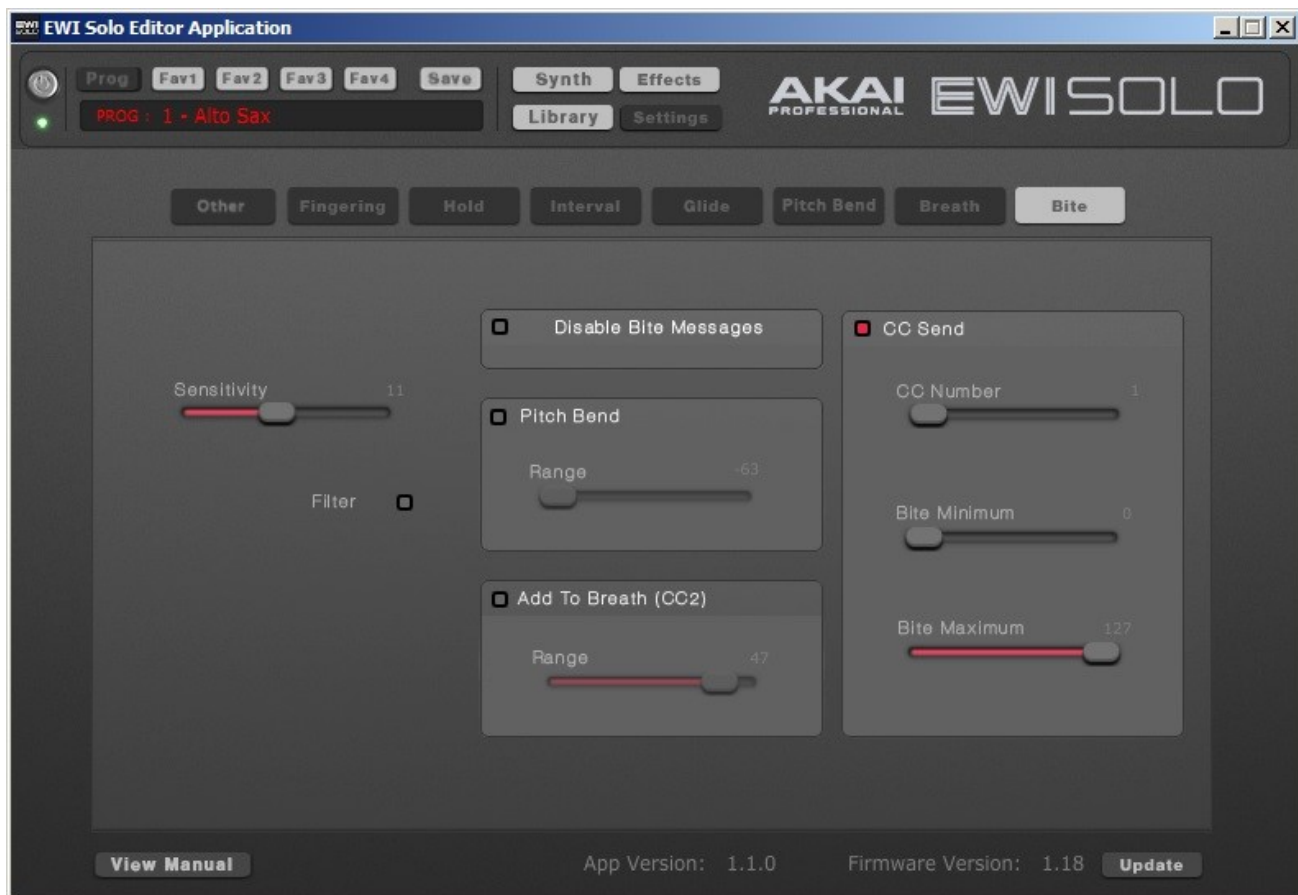
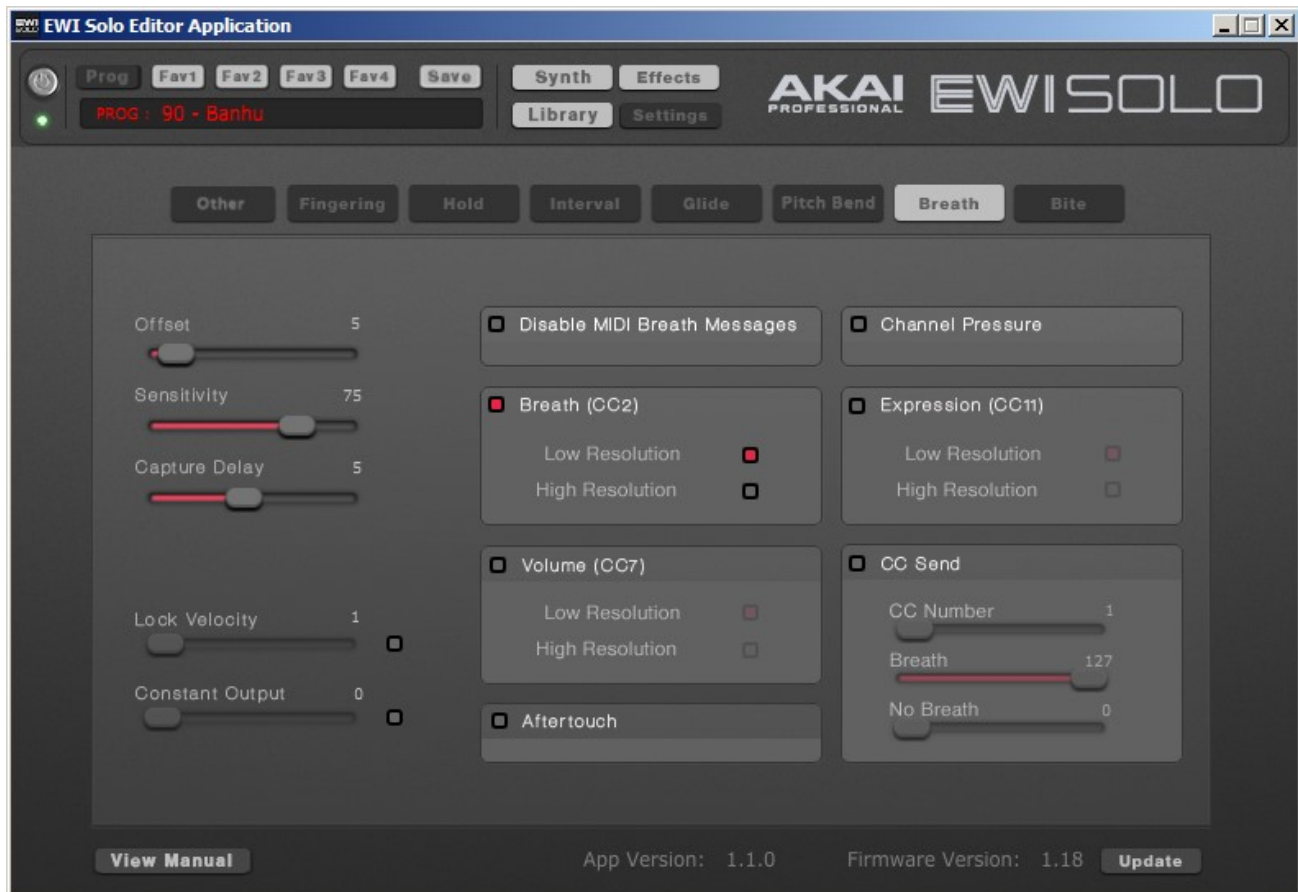
And here's the Bite Controller setup:



In case of a stuck note touch the screw for sending program changes above the pitchbend. This will send "All Notes Off".

EWI SOLO breath and bite setup

This is how the EWI SOLO breath and bite setup should look like:



EWI SOLO Pitchbend Up

For getting both pitchbend up and down on the EWI SOLO I did this to my SOLO:

(This works only with the XpressO or XPression or some other software that can remap CCs to pitchbend)

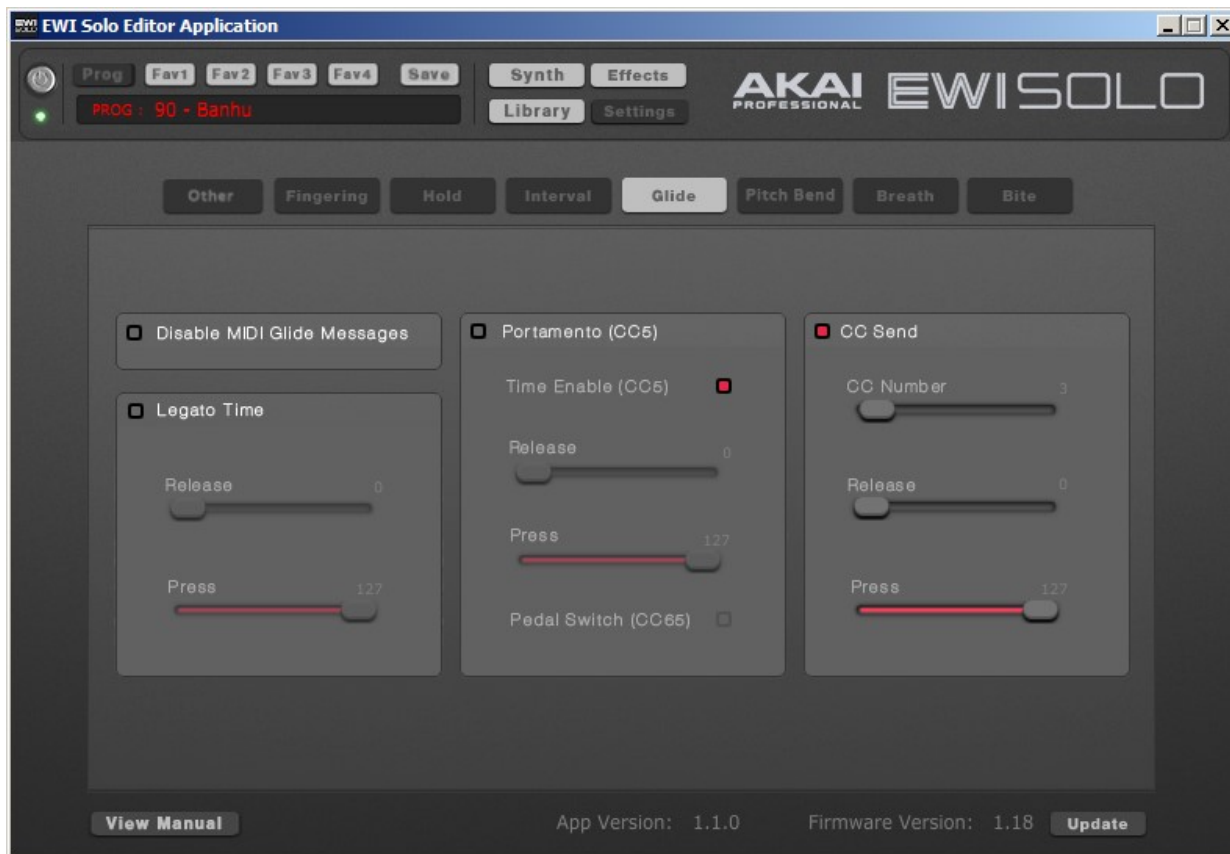


In order to play the pitchbend up from where it should be engaged I wired the glide strip to the thumb rest by using a wire and 2 pieces of copper tape.

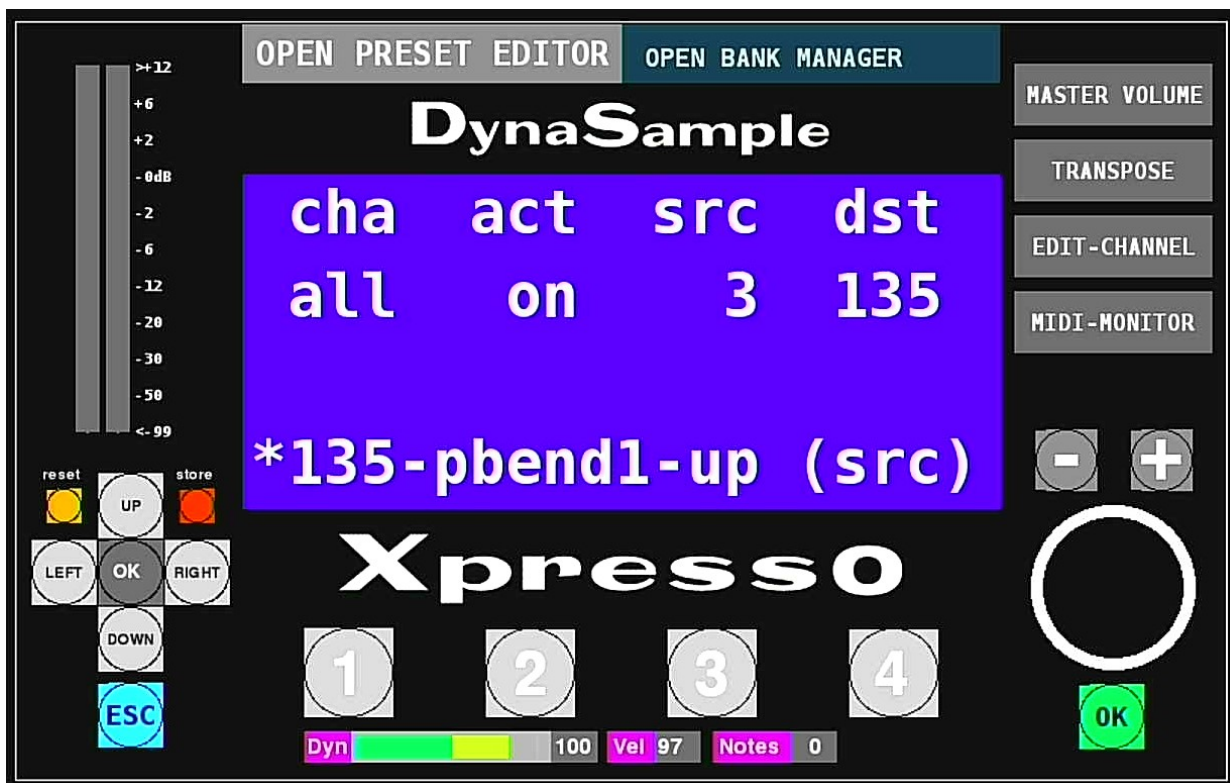
Make sure not to touch the glide strip while playing by mistake. I used several layers of tape on top of the glide strip for insulation.

You will also have to insulate the thumb rest with tape before putting the copper tape on to avoid shorting it to ground.

From the EWI solo I'm sending CC3 (unused) instead of the standard CC5 (portamento) with the glide strip.



CC3 will then be globally remapped to CC 135 (pitchbend up) inside of the XpressO ([Utility] / "Set MIDI Control Remap").



EWI4000s Setup

The EWI4000s works fine with the XpressO and XO-mini.

For use with the XO-mini you can connect it with a class compliant USB-MIDI interface on the USB port. If you happen to have a XO-view you can also connect a 5-pin MIDI cable directly to the **MIDI IN**.



Make sure that your breath sensitivity gain on the EWI4000s is all the way up.

(S: Breath Sensitivity - right knob)

Then adjust the threshold to get the desired range from minimum to maximum.

(A: Breath Sensor Adjustment - left knob)

Do not set the threshold so close that it starts playing immediately when you just exhale lightly! Think of how much you have to blow on a sax or trumpet before the sound starts.

You should set your global breath curve on the **XpressO / XO-mini** to about -30 for a well working dynamic feel. Go to [**Global**] "Dynamic Control InA Selection" and set the 2nd parameter "crv" (curve) to -30.

Take the EWI-USB (if you have one) as a reference for the feel when setting up your EWI4000s breath sensitivity.

(You can connect both at the same time and switch back and forth playing one or the other.

There's a chance that you cannot get the EWI4000s quite as sensitive as the EWI-USB.

Just play with the settings until it feels good and you get the full dynamic range from 0 - 127!

Check the HDMI screen [bottom/left] for your dynamics. Your regular level should be yellow with some red peaks. Make sure that you do not have to apply any force for getting the maximum level.)

Since the EWI4000s is kind of picky not all MIDI interfaces might work well, though.

I'm not up to date with what works and what doesn't. Mine actually all work except for one very old CME interface.

Make sure that it is class compliant and does not require drivers !!!

EWI4000s Troubleshooting

- The touch sensitivity and the bend plate calibration are unstable need frequent checking.
(Use the MIDI-Monitor for pitchbend calibration and watch the pitchbend on line 2 of the display.)

When you finger a note with touching all note sensors plus pitchbend and the glide strip no number on the display should be seen. If you do please decrease the touch sensitivity.

- Low batteries cause stuck notes.
If you get stuck notes change the batteries immediately.
- Do not switch off the EWI4000s with the MIDI cable connected. This can cause a stuck note.
- In case that you do get a stuck note:
Press the SETUP BUTTON. This will send an "All Notes Off" message, which will stop any sound output from the EWI4000s.

NuRAD & NuEVI Setup

1) Go to ADJUST and press ENTER



2) Set the Breath Threshold to 1450 and the MAX to 2350



3) Go to SETUP BREATH



4) Select CURVE and press ENTER



5) Set the curve to -2 and confirm with ENTER to store



With this NuEVI / NuRAD setup the NuEVI / NuRAD and the XpressO work perfectly together and give you the best dynamics and articulations.

(The default values will give you rather poor articulation control !!!)

<https://dynasample.com>