T.WI

examples

GarageBand (Mac)

GarageBand is pretty limited in how much can be configured, but many of its synth patches respond to aftertouch (channel pressure), so setting up the T.WI to send aftertouch makes it useful here. You can even keep the standard CC#2 active when activating aftertouch by holding the second RH key in combination with the pinkie key held for aftertouch.

Examples of useful synth sounds in GarageBand 10 are Saturn Lead and Soft Saw Lead.

Thor (iPad)

Now, Thor is a synth I can highly recommend. It is very flexible in its controller configuration, great sounding and not too pricey. Also there are lots of ready-made patches for it intended for use with wind controllers. Patchman Music has pro grade patches for it with a bit higher price, but there are other options, like the set by Bernie Kenerson or even free patches for download. The free patches are actually really good, but they lack mod wheel response. The Akai EWI is using MIDI pitch bend to create vibrato, so some patches made for EWI just has no mod wheel action programmed. This can be helped with some alterations to the patches of your own, or by setting the T.WI to send pitch bend vibrato by toggling the MOD setting.

To use the T.WI with these Thor patches, have it set up in its default mode, using CC#2 for the breath data.

Seaboard 5D (iPad and iPhone)

This is a free app from Roli, the makers of the expressive Seaboard controller. The Seaboard 5D app responds very well to aftertouch data, as this represents the ”press” dimension of the 5D concept.

To use it with the T.WI, we need to set up both the app and the T.WI for it. In the app, use the top right menu circle, select MIDI setup and choose Teensy MIDI as MIDI input. Select Single channel and Bend Range 12. (See their support page for more info.) Set the T.WI to send breath data as aftertouch (AT), pitch bend (PB) to 1/12 and modulation (MOD) to send vibrato as pitch bend.

Arturia Minibrute (via USB host adapter)

The Minibrute has a connection in history with the T.WI, as the filter in the Minibrute is designed by Nyle Steiner, the same genius that invented the original EVI and EWI. For that reason, I reckon the Minibrute should be included here. Another reason for it is that the T.WI needs to be set up in a rather special way for this combination to work. First of all, the MB is a bit limited in receiving midi control data. It does receive aftertouch that can be routed to control the filter cutoff, but with no smoothing function in the digital to analog conversion for it, there is quite a bit of audible stepping in the sound as a result. The solution is to use the mod wheel control instead, as it is capable of receiving high resolution MIDI CC. That means that in addition to the seven bits of data sent on CC#1, another group of seven bits are sent on CC#33. That's 14 bits of resolution. In reality, the resolution we get from the Teensy ADC when reading the breath sensor is 12 bits, and 12 bits is what the MB modulation wheel is sending/receiving, but that it still a whole lot more than the standard 7 bits of midi. We get 4096 steps instead of just 128.

The breath setting to use on the T.WI is CC1+33, keys LH1 and LH3 held with PB UP at USB plug-in.

Another limitation in the MB is that pitch bend range when received on MIDI is always 12 semitones up or down. That's way too much for practical use with an EWI, so we need to compensate for that. The T.WI has two modes for pitch bend. The default one sets pitch bend to half range. Sounds great with synths set to two semitones PB range. The other one is 1/12 of the total range. This is what we will use with the MB.

Hold joystick right and RH2 key at USB plug-in to toggle this setting.

To get the breath response you want when controlling the MB, you can also try different curves for it. I'd recommend something in the -4 to -2 range.

The way to set up the MB is to route mod wheel to filter cutoff, open up the envelopes, dial down the cutoff a bit and then just muck about to find the sounds you like.