

# Berglund Instruments NuRAD and NuEVI Information

Update\*\*\*

Thank you deeply for the interest in the NuRAD and NuEVI!

The info sheets with pricing and variations etc. are below on this page, first for the NuRAD, then for the NuEVI.

We have had a huge response lately, and are currently over 2 years out on the wait list. So we are deeply involved in expanding production to a larger scale and will email everyone on the wait-list and update here when we can reduce the wait time.

The wait list is free!

To join the list, message us on FaceBook <https://www.facebook.com/berglundinstruments> or email us at [TheNuEVI@gmail.com](mailto:TheNuEVI@gmail.com) giving us your name, email address and which of the 2 instruments you would like. All on the waitlist from the past still have their place secure, of course. We don't sell or share your information.

Thank you for your patience and support!

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## 1. NuRAD (EWI/Sax etc. fingering instrument)

Dear wind controller enthusiast,

So, it took me some time to develop, but now it is finally ready and I've started building it for people. At this point the firmware is also successfully adapted from the NuEVI, and the features are basically the same except for the fingerings. Some firmware additions are still planned for the future, like additional fingerings, but the most important ones are in there already. Also in the works now is a set of new polyphonic playing features with harmonizers and improved note rotator functionality.

Here is some information on the NuRAD and how to get it, as well as some updates for everyone.

I am just starting producing these new wind controllers, built to order in a small scale fashion. They are made available to interested parties on a first come, first serve basis. As you have contacted me previously, I am confirming that you are on my list of interested persons.

Please note that the NuRAD is handmade by me in small batches. I am making them available through my company – Berglund Instruments. The NuRADs are built on demand for each person that orders them in the order of payment received. Current cost for the standard version NuRAD is \$1195 USD plus shipping/handling (\$35 from Sweden). The version with wireless MIDI (pandaMidi midiBeam built in) is \$1395 USD plus shipping/handling. Sales within the EU will also have VAT (25%) on top of that (unless valid EU VAT number is provided). Payment in advance will be required in order to get into the building queue. Payments are made through PayPal or IBAN bank transfer. Payment details will be in the order invitation email that goes out when I reach your place on the waiting list.

I will be contacting people in the order they contacted me, inviting them to place an order, through a separate "NuRAD order invitation" email, so keep your eye out for that one. At that time, you will have the opportunity to purchase a NuRAD and get into the current production queue. If you are no longer interested in obtaining a NuRAD, please let me know and I will remove you from the email list.

If you have any questions, please feel free to contact me.

Sincerely,

Johan Berglund  
Berglund Instruments

So, what are the specs, etc.? Well, pretty much like the NuEVI. It comes in the same colors, has the same electronics (Teensy 3.2 microcontroller, MPR121 touch sensors) and lots of hardware and firmware in common. It does come standard with a breath CV jack and the pneuBite though, that is only optional in the NuEVI. The pneuBite is based on the bite sensor of the vintage Steiner product the "Masters Touch". Instead of measuring the capacitance of two metal strips being flexed by biting, the pneuBite is a closed air pressure system. It gives a more immediate feeling when biting or bending the mouthpiece. An improvement from the Masters Touch system is the addition of a valve that serves for equalizing the pneuBite pressure to ambient pressure (needed when using bite for portamento). Fingerings available are standard EWI, extended range EWI, Saxophone and EVI fingerings. More may be added later. Chord play and midi rotator are features from the NuEVI that are present in the NuRAD too, as well as the nice OLED display and menu system with full manual control over all sensor adjustments and easy setup of CCs, MIDI channel, transposition, and much much more.

## Tech specs

**Power source:** 3xAAA alkaline batteries (6-7 hrs battery time), NiMH rechargeables (9-10 hrs battery time) or USB, alt. optional LiPo battery (\$35 extra) with charging through USB port (15 hrs battery time)

**Brains:** PJRC Teensy 3.2 microcontroller dev board (Cortex M4)

**USB:** Micro USB jack, class compliant USB MIDI

**Type of sensing:** Capacitive, using built in Teensy cap touch sense and 3x the MPR121 chip

**Sensors:** Touch keys and rollers, pitch bend pads (proportional), vibrato/portamento lever, breath sensor, bite sensor (for vibrato or portamento) and lip sensor (extra controller)

**Breath sensor system:** Closed (like the Akai EWI1000 and the original Steiner EVIs and EWIs), NXP MP3V5004GP piezoresistive transducer, 0 to 3.92 kPa

**Body:** Main body from 3D printed PLA plastic, top and bottom sheets in transparent laser cut/etched acrylic

**DIN MIDI:** one MIDI OUT jack

**CV output:** Built-in 3.5 mm TS jack outputting breath CV 0 to 5V. Digitally generated, so output responds to breath adjustments in the menus. (In addition there is 0 to 3.3V breath CV through unused pin of DIN MIDI jack, or pitch+breath CV output for amplification by optional module or box.)

**Length:** 46cm (18")

**Weight:** 635g (1.4lbs)

**Accessories included:** Removable handle and neck strap.

Link to user guides and fingering charts: <https://github.com/Trasselfrisyr/NuEVI/releases>

Available standard color ways (almost all example pics are from NuEVI)

- translucent white / clear (aka Snow and Ice) <https://www.instagram.com/p/B1y8bbdodN1/>
- translucent blue / fluo blue (aka Blue Ice) [https://www.instagram.com/p/B4W\\_F4RBA4C/](https://www.instagram.com/p/B4W_F4RBA4C/)  
<https://www.instagram.com/p/B55gX8dBOZ0/>
- blue / fluo blue (aka Kind of Blue) <https://www.instagram.com/p/Bj7M0y0n4--/>
- light gray / smoke (aka Twilight) <https://www.instagram.com/p/Bi18y3TAW4o/>
- red / red (aka Profondo Rosso) <https://www.instagram.com/p/BIYBqSvqkvX/>
- black / fluo blue (aka Midnight Blue) <https://www.instagram.com/p/BiUvZESAhrC/>
- black / dark smoke (aka Obsidian) [https://www.instagram.com/p/BjXK\\_IggahA/](https://www.instagram.com/p/BjXK_IggahA/)

Other combinations can be provided on demand, with possible extra cost for material not in stock and extra waiting time for acquiring material. For example, a red/smoke NuRAD like pictured below would not be anything extra, as that's standard materials used.

(see NuRAD photos after NuEVI section)

## 2. NuEVI (trumpet, horn, tuba fingering instrument)

Dear EVI enthusiast,

Here is some information on the NuEVI and how to get it, as well as some updates for everyone.

I am producing these new EVIs in a small scale fashion. The EVIs are made available to interested parties on a first come, first serve basis. As you have contacted me previously, I am confirming that you are on my list of interested persons.

Please note that the NuEVI is handmade by me in small batches. I am making them available through my company – Berglund Instruments. These new EVIs are built on demand for each person that orders them in the order of payment received. Current cost for the standard version NuEVI is \$995 USD plus shipping/handling (\$35 from Sweden). Sales within the EU will also have VAT (25%) on top of that. Payment in advance will be required in order to get into the building queue. Payments are made through PayPal or IBAN bank transfer.

At the time of order/payment you may also add options to your build. Customization options/additions available at this time are:

- dB (Darren Barrett) mouthpiece, based on the mouthpiece of the Crumar EVI (with the extra controller sensor moved to a place near the vibrato and pitch bend controls and portamento control sacrificed) \$35 Mainly recommended for trumpet players using the "pucker" embouchure. There is also a trumpet style nozzle mouthpiece available. Contact me for more info about these options.
- Wireless system for MIDI, with transmitter installed inside the NuEVI(modified PandaAudio midiBeam) \$220 (Possible to install later, easy plug and play.)
- Built in CV board (not in combination with wireless board, as these occupy the same space) with output jacks for 1V/oct in 8 octaves and breath CV (0 to 10V) \$220 (this version also uses an AA battery holder to compensate increased power consumption)
- PneuBite system. Closed system air pressure sensing bite sensor based on the Steiner Master's Touch bite, but improved with pressure equalization valve. \$130
- Stainless steel rollers upgrade \$30
- Custom color combinations can also be discussed (cost mainly depending on expenses)

If you have previously bought a NuEVI, before the wireless system was introduced, I can offer an upgrade kit that is very simple to install. It is \$220 shipped, and it comes with a bracket in a color matching your NuEVI. Just send me an email if you are interested in this.

I will be contacting people in the order they contacted me, inviting them to place an order, through a separate "NuEVI order invitation" email, so keep your eye out for that one. At that time, you will have the opportunity to purchase a NuEVI and get into the current production queue. If you are no longer interested in obtaining a NuEVI, please let me know and I will remove you from the email list.

If you have any questions, please feel free to contact me.

Sincerely,

Johan Berglund  
Berglund Instruments

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## Technical information:

The NuEVI features all the playing aspects of the original Nyle Steiner MIDI EVI, including the slur sustain and interval/chord functionality. Taking the instrument further, an OLED display with a menu system for settings and sensor adjustments has been added, as well as USB MIDI in addition to the DIN MIDI, settings stored in non-volatile memory, built in battery meter, selectable breath curve, and a number of additional control options. A lip sensor (extra controller) for sending Modulation Wheel or Foot Pedal MIDI CC is also included. Another addition that has been made is a MIDI Rotator function based on Robby Kilgores MIDI Rotator.

To get to know the NuEVI, I can highly recommend the tutorial video series by Mark Steiner (two videos so far):

#1 - Overview - covering the basics of the instrument <https://youtu.be/icrFoA-y1DM>

#2 - Firmware Updates - how to get the latest firmware version installed into your NuEVI  
<https://youtu.be/PTI6aQ9N0c4>

The NuEVI firmware is updated frequently, and new functionality is added. New versions can be downloaded at the NuEVI Github page, along with the corresponding user guide and even source code for those who are interested in that kind of thing (the NuEVI firmware is Open Source). <https://github.com/Trasselfrisyr/NuEVI/releases>

## More geeky tech info:

**Power source:** 3xAAA alkaline batteries or USB

**Brains:** PJRC Teensy 3.2 microcontroller dev board (Cortex M4)

**USB:** Micro USB jack, class compliant USB MIDI

**Type of sensing:** Capacitive, using built in Teensy cap touch sense and the MPR121 chip

**Sensors:** Touch keys and rollers, pitch bend pads (proportional), vibrato lever (for a nice, violin like, manual vibrato), breath sensor, bite sensor (for portamento control) and lip sensor (extra controller)

**Breath sensor system:** Closed (like the original Steiner EVIs), NXP MP3V5004GP piezoresistive transducer, 0 to 3.92 kPa

**Body:** Main body and canister from 3D printed PLA plastic, top and bottom sheets in transparent laser cut/etched acrylic

This is also a confirmation email for the NuEVI/NuRAD list. You will receive updates on price and availability, and you have a place in line for it (not committing to buy). Just let me know if you want to be removed from this list.

Thank you for your support!

Best Regards,  
Johan Berglund

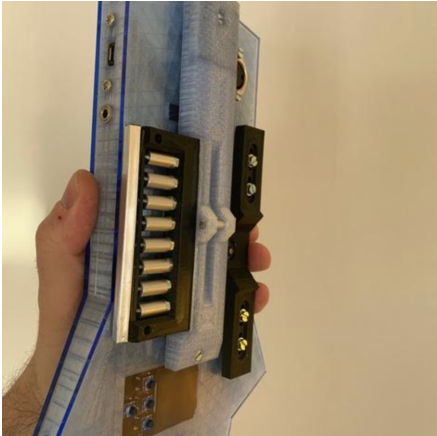
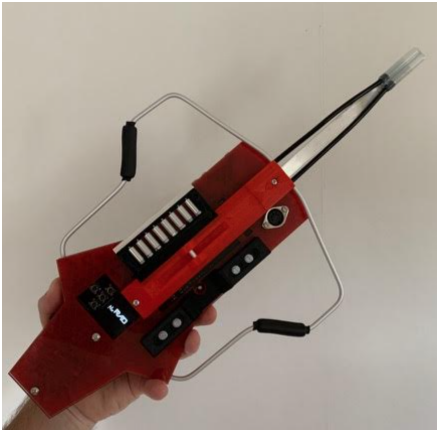
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Instagram: @trasselfrisyr

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NuRAD Pics:





**NuEVI Pics:**

Radioactive Green



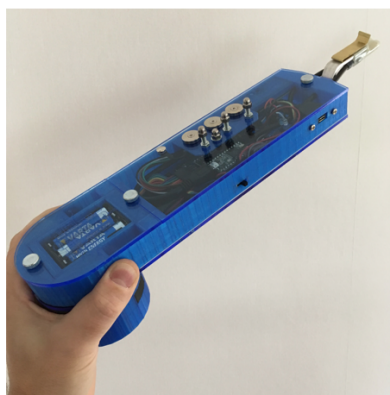
Snow and Ice



Twilight



Kind of Blue



Hot Pink



Midnight Blue



Obsidian



Profondo Rosso



Purple Reign

