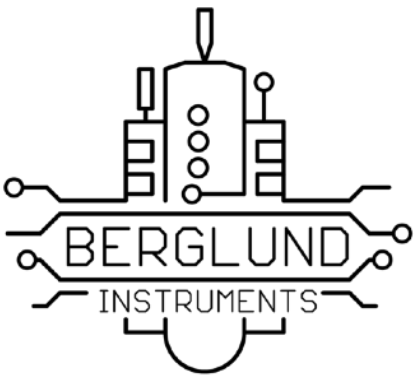
User Guide Addendum

NuRAD R2

Firmware v.1.6.3



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2024-07-27

Overview

The NuRAD R2 (revision 2) has some difference in controls over the original NuRAD. The main keys are now have a slightly concave top to make it easier to feel finger position, and the rollers are a bit wider while still keeping the same thumb movement range. The right hand thumb lever has been replaced by a ground pad and a touch pad is placed in front of the thumb. This pad allows easier control of glide or CC while still being able to do vibrato. A glide strip has been added in front of the thumb by the rollers. This is currently available as an alternative input source for the extra controller, and glide has been added as a destination for the extra controller. As for controller outputs, they are just like on the original NuRAD with the exception of the 3.5 mm TS jack on the side for 5V level breath CV, which has been removed (due to not getting much use out in the wild). The CV on the 5-pin DIN MIDI jack is still there, for use with Berglund CV modules like CVX and CVXG, or the standalone NuMar and "Gray Mini" analog synth boxes.

Changes in the menu

As the lever is now a pad, the menu items LVR CTL and LVR CC are now renamed PAD CTL and LVR CC. Likewise in the VIBRATO menu the SENSE LVR and SQUELCH L are now SENSE PAD and SQUELCH L. Naturally also in the adjust menu, the page is labeled PAD instead of LVR.

For the extra controller, the menu item EXCT SRC has been added. This allows switching between LIP (lip sensor) and GLS (glide strip) as extra controller source. In the EXCT CC A menu, the item GLD has been added. This links the control to the glide routines and menu items GLIDE MOD, GLIDE MAX

and GLIDE MIN will further decide the corresponding glide CC outputs. Like with the PAD, the adjust menu label has been changed, and it is now GLS/EC. Now there are two sensor dots visible in the SNS row, one for the glide strip and one for the lip sensor. Like with the pitch bender, the threshold and max bars are valid for both sensor inputs.

Other notes

The idea is to make the two controls LIP and GLS both available as control sources at the same time, but that is for a future firmware update.

In this version, the green LED is used to indicate pitch bend activity, but this is likely to change when the LIP and GLS are getting their own outputs, as it would make sense to use the green LED for one of those instead.