THE UILLEANN PIPES

User's Manual

ILYA EFIMOV UILLEANN PIPES

Ilya Efimov Uilleann Pipes for Kontakt

The Uilleann Pipes are the national bagpipe instrument of Ireland. It consists of a bag, bellows, the chanter reed, three drone reeds (bass, baritone and tenor) and three regulator reeds (also bass, baritone and tenor). The instrument's bag is placed under the left elbow, while the set of small bellows is strapped around the waist and the right arm of a player. Thus both elbows are engaged in operating the instrument, which is done in a sitting position. The right elbow pumps the bellows and keeps the bag inflated, when the left elbow slightly presses the bag and supplies air to the reeds. Hence the name of the instrument, - "uilleann" means "elbow" in Irish.

The chanter is the main reed of the instrument and is used to play the melody. It has the range of two full octaves, including sharps and flats. The three drones produce constant monotonous sound in the key of D and they can be turned on or off with a special switch. The regulators are keys on the regulators reeds. They are arranged so, that they can be played individually or in chords. A player opens and closes the regulator keys by using the side of the right wrist, providing simple rhythmic or harmonic accompaniment. The notes of the regulators, from lowest to highest, are as follows: bass - G, A, B, C; baritone - D, F#, G, A and tenor - F#, G, A, B, C. Baritone and tenor notes of F#, G, A sound in unison (are the same notes).

It is the unique blend of chanter, drones, and regulators, which gives the Uilleann Pipes its harmonic structure, sounding sweeter and quieter than many other bagpipies.

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Features:

♪   576 Mb ncw compressed format

♪   750 samples, 44,1 Hz/24 bit, stereo

♪   2 natural legato types: normal and glissando

♪   8 different articulations

♪   Two vibrato types

♪   Control of realistic vibrato – its amount and speed

♪   6 round-robim realistic staccato

♪   Reassignable keyswitches and midi-controllers

♪   3 modes of legato performance

♪   Drones tune and volume control

♪   Chromatic scale for regulator keys

♪

For this product it is not possible to use the "Libraries" tab to "Add Library". Only encoded and locked "Powered-By-Kontakt" libraries are loaded through the "Libraries" window.

To start using Ilya Efimov Uilleann Pipes, browse in NI KONTAKT for the folder where you have copied downloaded files and then load the patch called "Ilya_Efimov_Uilleann_Pipes.nki"

If a typical preload buffer size is set in Kontakt, this library will require 164 MB of RAM.

ILYA EFIMOV UILLEANN PIPES

1. Please go to the download links you received after purchase and download all of the files.

2. Make sure you put all downloaded files into a single folder.

3.1. Unpack the downloaded files to any folder. Let's call it - the library root folder. Please note that the sample files you downloaded are a multi-part archive, so you do not need to extract every file; you only need to extract the first file that contains 'part1' in its name.

To extract your files we recommend using Winrar for PC users, or UnrarX or Rar-Expander for the Mac. They're all free and you can find them here:

http://www.rarlab.com/ (for PC users)
http://www.unrarx.com/ (for MAC users)
http://download.cnet.com/unRAR/3000-2072_4-26159.html (for PC users)
http://rar-expander.en.softonic.com/mac (for MAC users)

3.2. Place 'Ilya_Efimov_Uilleann_Pipes.nki' file into the library root folder.
3.3. Please check the file structure. It must be like on the picture below.

📁 [Documentation]	
📁 [Samples]	
⅏ Ilya_Efimov_Uilleann_Pipes	nki
📄 Uilleann_Pipes	nkc
📄 Uilleann_Pipes	nkr
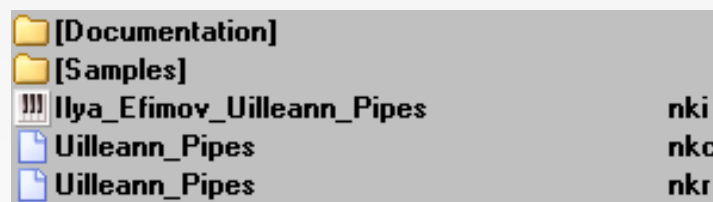
4. You need to have the full retail version of Kontakt 5.6 or later to use this library. The free Kontakt Player does NOT support this library.

5. Open the Kontakt 5 browser (look at the left-hand side of the Kontakt user interface) and click the "Files" tab. Find the library root folder, where to you have extracted the files earlier, and double click on the Ilya_Efimov_Uilleann_Pipes. nki file which should be in that folder. You can use the Quick-Build Database option to allow Kontakt finding and storing the location for faster browsing and loading.

ILYA EFIMOV UILLEANN PIPES

The instrument's chanter range is from the D3 to D5 – two full octaves.

The three drones: bass, baritone and tenor produce the D2, D3 and D4 notes respectively. They sound all together, you can not turn on/off the drones individually, only all of them using relative keyswitch (D2) or GUI button.

The regulator notes are:

F4#, G4, A4, B4, C5 – at the tenor reed
    D4, F#4, G4, A4 – at the baritone reed
    G3, A3, B3, C4 – at the bass reed

As you can notice tenor and baritone reeds have the same three notes - F4#, G4 and A4. The user can choose which reed to play when pressing these three notes. With velocity above 64 the F4#, G4 and A4 of the tenor reed will sound. If below, you will hear F4#, G4 and A4 of the baritone reed.

Also for more convenient playability we extended regulator notes chromatically from G3 up to C5. Overall mapping of regulators range is shown below

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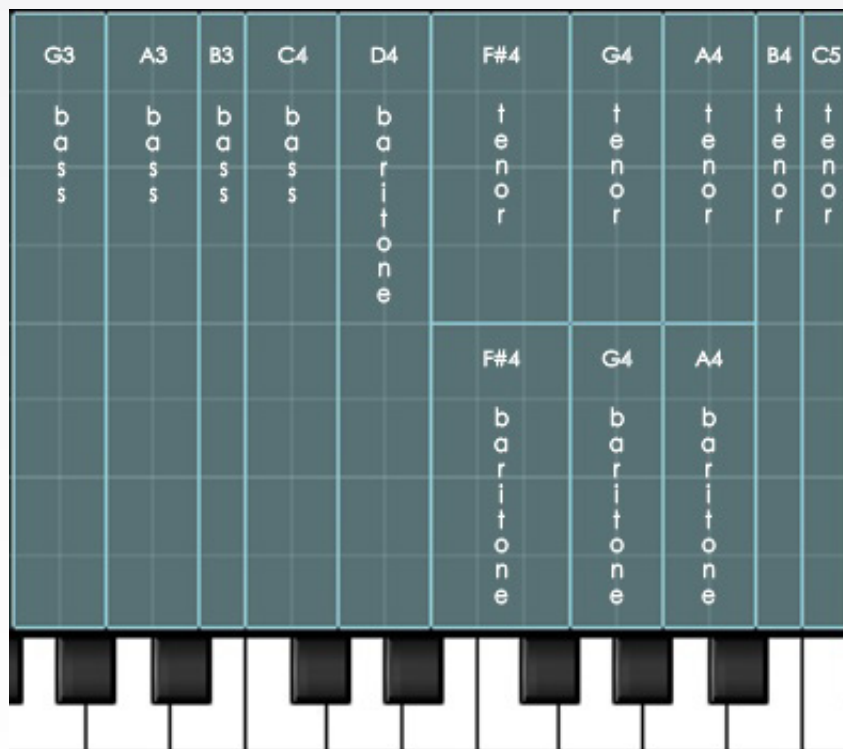
On the Uilleann Pipes the regulator keys are arranged in rows and thus they can form simple chords as a player opens them with the wrist. These chords are next – from the highest regulator keys to the lowest:

C5, A4, C4 chord
B4, G4, B3 chord
A4, F#4, A3 chord
G4, D4, G3 chord

F#4 note doesn't form any row with other regulators.

To trigger these four chords we assigned four special keyswitches:

C2 for C5, A4, C4 chord
B1 for B4, G4, B3 chord
A1 for A4, F#4, A3 chord
G1 for G4, D4, G3 chord

So the Kontakt keyboard is divided as follows: chanter chromatic range is blue, articulations keyswitches are red, drones switch is yellow, regulators chords are green and regulator notes chromatic range is cyan.

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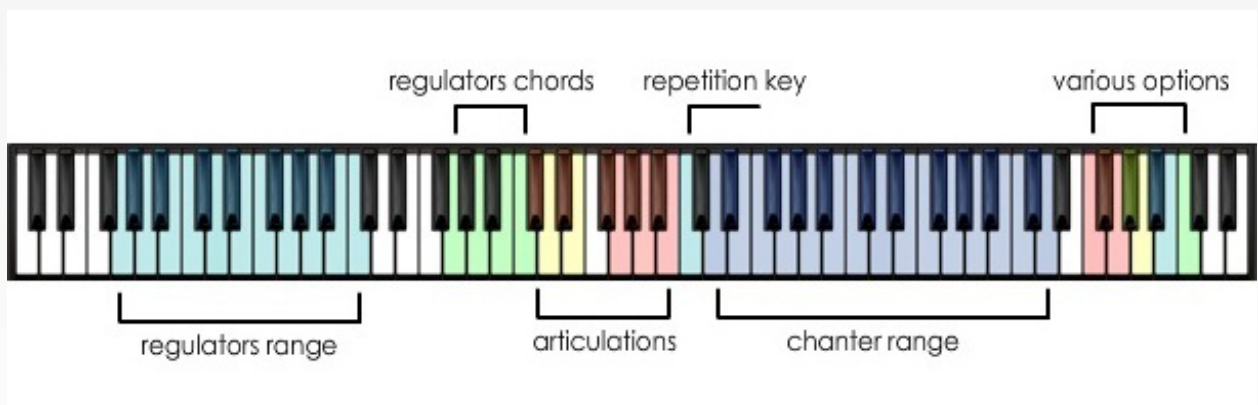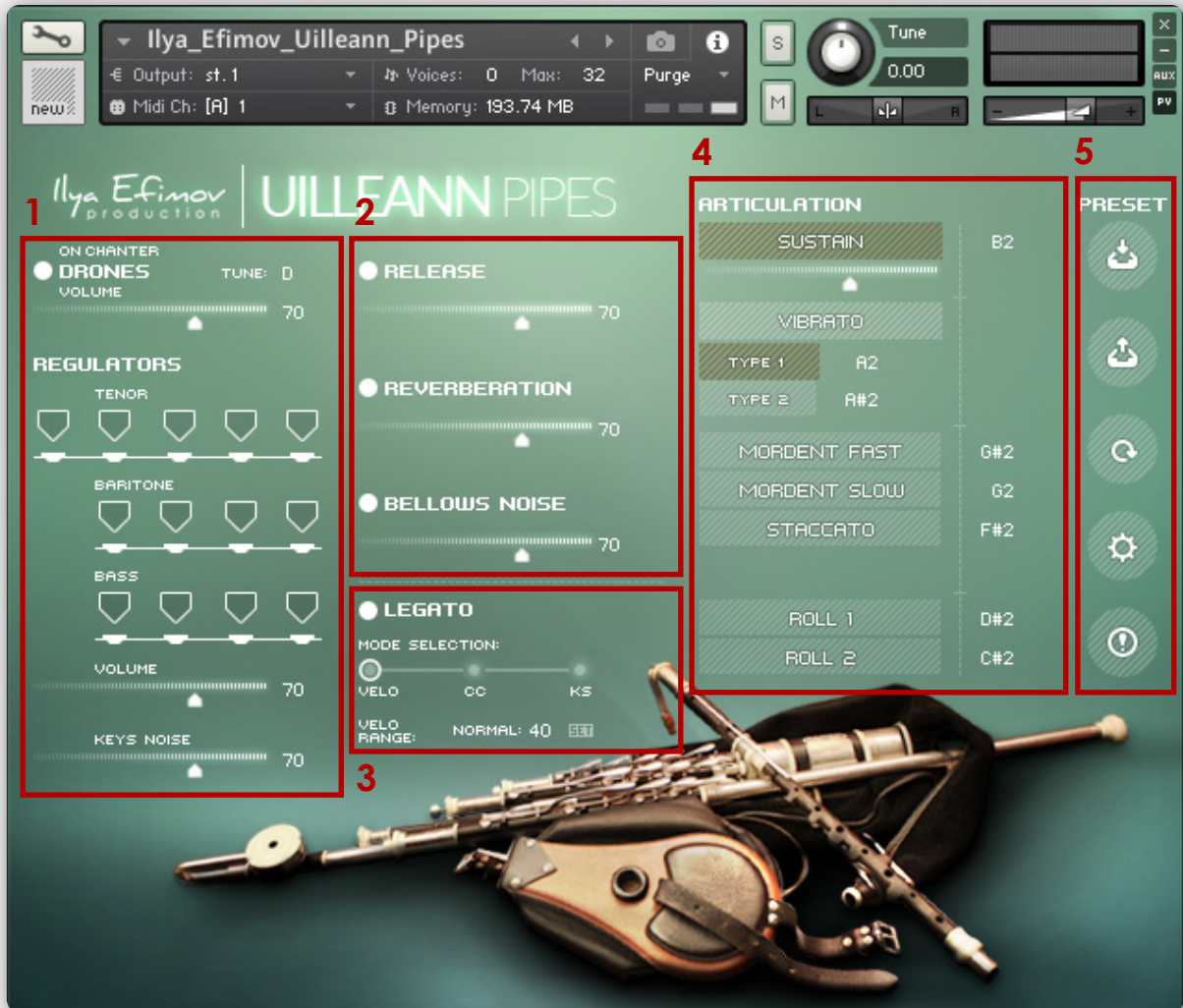
The GUI's main page is divided into a few blocks:

drones and regulators [1], effects [2], legato [3], articulations [4], preset and options block [5].

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The Uilleann Pipes have 3 drones and 3 regulators.

Drones on/off

You can "open" or "mute" drones using either the circle button to the left from "Drones" section on the main page of GUI or the yellow Keyswitch D2 on MIDI-keyboard. The keyswitch is velocity-dependent, i.e. if the velocity is more than 64, drones are opened, if it's less than 64, they are muted.

Drone control mode

We designed two modes of how you can control drones: "On Chanter" and "Always On" mode. In "On Chanter" mode the drones start playing as soon as you press any key in the chanter range. In "Always On" mode the drones produce sound all the time like on a real bagpipe, assuming that they are turned on by Drones on/off button or keyswitch. You can switch between drone control modes using E2 velocity dependent keyswitch. The interface will display which mode is active.

Drones volume

To set volume of the drones use Drones volume slider

Drones tune

To change a basic tonality of the drones use the drop-down menu. Usually the Uilleann Pipes drones are tuned in the key of D. But you can choose any key, which allows you to have monotonous drone sound in any tonality. Notice that selection of a new key will transpose four regulator chords as well, but the keyswitches, which trigger these chords, will remain the same - C2, B1, A1 and G1.

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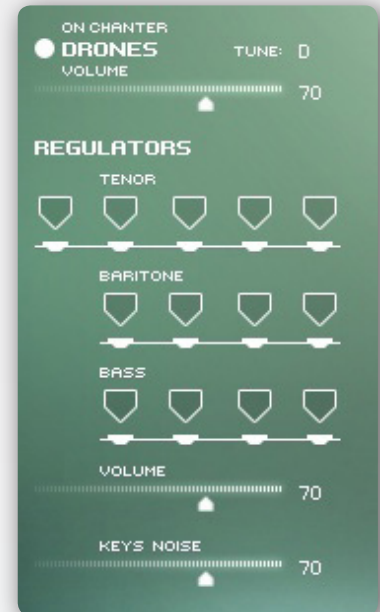
Regulator keys

This section shows the animation of regulator keys as they open and close when chords are played.

Regulators volume

To set volume of the regulator notes use Regulators volume slider

Keys Noise

Regulator keys, being pressed down and up, produce a click noise. Keys Noise slider sets the volume of this mechanical noise.

Release sound

The release sound will only be heard at the end of non-legato notes. You can control the volume of the release by moving the slider or turn it on/off. To turn on/off Release use the circle button at "Release" section or Keyswitch F5. This keyswitch is velocity-dependent. If the velocity is more than 64, the Release is enabled. Otherwise it is off.

Reverberation

The reverberation effect, based on an IR impulse, can be added to the instrument. You can control the amount of the reverberation by moving the slider or turn it on/off. To turn on/off Reverberation use the circle button at "Reverberation" section or Keyswitch G5. This keyswitch is velocity-dependent. If the velocity is more than 64, the Reverb is enabled. Otherwise it is off.

Bellows noise

For more realistic sound of the Uilleann Pipes there is a feature of adding bellows noise. You can control the volume of Bellows Noise by moving the slider or turn it on/off. To turn on/off Bellows Noise use the circle button at "Bellows Noise" section or Keyswitch F#5. This keyswitch is velocity-dependent. If the velocity is more than 64, the bellows noise is on. Otherwise it is off.

ILYA EFIMOV UILLEANN PIPES

The articulations are divided into 3 groups.

Group One (3 articulations): natural dynamics and vibrato of two types are used for the first and subsequent legato notes.

To vary dynamics of sound from *pp* to *ff* use MIDI controller (CC11 by default). With that the slider beneath SUSTAIN button will be moving from left to right

To add vibrato to the notes being played, use MIDI controllers (CC1 by default). With that VIBRATO label will be changing its color from white to brown.

Vibrato type is selected by buttons "TYPE I" and "TYPE II" or relative keyswitches A2 and A#2.

Using MIDI controllers (CC9 by default) you can vary vibrato speed.

Group Two (3 articulations): MORDENT FAST, MORDENT SLOW and STACCATO. They can be used only for non-legato (non-overlapping) notes.

If the Legato mode is off you can use any articulation at any time.

If the Legato mode is on you can choose any of these 4 articulations for the first non-legato note played.

Group Three (2 articulations): ROLL 1 and ROLL 2. These articulations are short ornaments. The pitch of the ornament repeats the pitch of a previously pressed key in the chanter range. As the ornament finishes playing it triggers the sustain note of the same pitch.

You can switch between articulations by clicking directly on the GUI buttons or by using the midi-keyboard keyswitches.

You can use "repetition key" (C3) to repeat the last note.

Legato mode is enabled by default. To turn off the Legato mode use the circle button at the "Legato" section or Keyswitch A5. This keyswitch is velocity-dependent. If the velocity of the pressed Keyswitch A5 is more than 64, the Legato mode will be enabled, otherwise it will be turned off. To perform legato notes, you must play overlapping notes (i.e. the second note must be played before the first note is released).

There are two legato types: normal legato and slow legato. For easy switching between legato types during real-time playing, there are three different options: using velocity of a pressed note, switching with a keyswitch and using a MIDI-controller. To select the method of switching between the legato types use relative "mode selection" buttons.

1. Velo
Switching between legato types using note velocity.

0-40	slow legato
41-127	normal legato

You can change the threshold of the velocity ranges by adjusting the Velo Range value. You can do it using arrows or SET button. Click the button and play note on the MIDI keyboard with the desired velocity. It will set the new velocity range.

2. KS
Switching between legato types using the keyswitches.
If this method is selected, velocity level will not affect the change in legato types. In this mode, if no keyswitches are used, legato remains "normal". To change the normal legato to slow one press and hold the Keyswitch G#5. Slow legato will be active as long as this keyswitch is held.

3. CC
Switching between legato types using a MIDI-controller (CC5 by default). The desired legato type will be selected depending on the CC position.

0-30	slow legato
31-127	normal legato

ILYA EFIMOV UILLEANN PIPES

Options

At this page you can reassign any keyswitch or MIDI-controller, using one of several methods:

* Use "up" and "down" arrows located to right of the keyswitch cell.
* Double-click a desired cell and type in the necessary note or value
* With the cursor initially positioned over the selected cell, drag the mouse up or down while holding its left button.
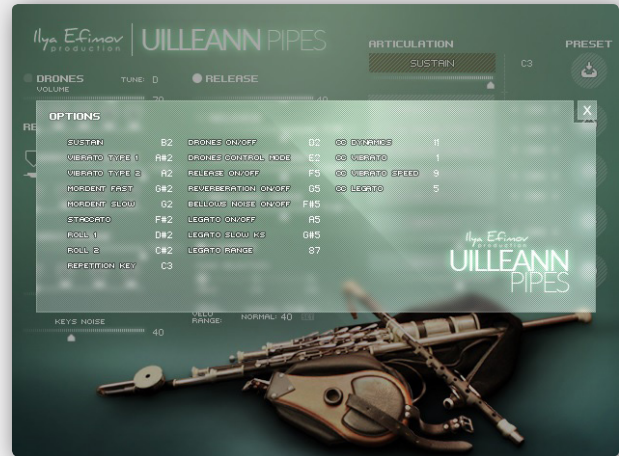
All keyswitch changes will result in corresponding Kontakt keyboard color changes.

Presets

All changes you make on the "Option" page can be stored to a user preset on your hard drive by pressing the "SAVE" button on the main page. To load the saved user settings, press the "Load" button. To revert to the default settings, click the "Default" button. Returning the settings to their default state may also be done by using the Keyswtich C6. This is helpful for correct opening of any MIDI examples from us or other users.

Keyswitch and CC list (by Default)

B2	Sustain	
MIDI CC11	Dynamics	
MIDI CC1	Vibrato (added smoothly)	
MIDI CC9	Vibrato Speed	
A#2	Vibrato Type I	
A2	Vibrato Type II	
G#2	Forshlag I	
G2	Forshlag II	
F#2	Staccato I	
D#2	Roll 1	
C#2	Roll 2	
C3	Repetition key	
D2	Drones on\off	
E2	Drones control mode	
C2	Regulators chord C5, A4, C4	
B1	Regulators chord B4, G4, B3	
A1	Regulators chord A4, F#4, A3	
G1	Regulators chord G4, D4, G3	
G#5	Slow legato (hold) *"KS set" must be on*	
MIDI CC5	31-127	normal legato *"CC set" must be on*
MIDI CC5	0-30	slow legato *"CC set" must be on*
A5	Legato on\off (velocity)	
F5	Release on\off (velocity)	
F#5	Bellows noise on\off	
G5	Reverb on\off (velocity)	
A#5	Tune up (velocity)	
B5	Tune down (velocity)	
C6	Default reset	

Credits

Produced by Ilya Efimov
Creation and development: Ilya Efimov
The Uilleann Pipes: Alexender Karavaev
Recorded at Alexandr Rusanov Studio
GUI design: Alexey Sirotkin & Ilya Efimov
Mapping: Oleg Merkuryev
Script: Oleg Merkuryev & Ilya Efimov
Manual: Oleg Merkuryev & Ilya Efimov

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