# REALIVOX BLUE MANUAL (Version 1.4)

Congratulations on your purchase of Realivox Blue!    We've put a lot of time and effort into not only the recording editing and coding of Blue, but also the research and experimentation of what goes into an authentic vocal performance.    We believe Blue is the most sophisticated vocal instrument on the market.



There are two screen pages for Realivox Blue.   These are toggled by clicking the "Click here for Settings/Wordbuilder page" link at the lower right.   The first page is the:

## WORD/PHRASE BUILDER

You can "type" in (using the array of consontant and vowel buttons) your own words and phrases for Blue to sing.   A phrase can be up to 20 syllables.   To start a new word, click the **"Reset"** button.

Each syllable is entered by typing a starting consonant (the left array of consonants) and/or a vowel (the middle array.)    After the vowel, you can optionally type in closing consonants.    If you want to have a phrase and move to the next syllable, click the **"Next Syllable"** button.   To make a change, click the **BackSpace (left arrow)** button, or click any earlier syllable in the phrase display.

You can have multiple consonants, by the way.   Suppose you want Blue to sing "Streets."   Type "S," then "T" then "T" (from the left array, then type "Ee" from the center vowel array, then type "T" and "S" from the right array.

You don't have to use consonants at all.   You might want to just sing "Oo," for instance.    Just type the "Oo" vowel and you're all set.   Or try the **"Special"** choices.

## KEYSWITCHES

After typing in a word or phrase, you may wish to store it on a keyswitch.   To do this, simply press an available key twice (like double-clicking a mouse) and it will be entered there.   Now that it's entered on this keyswitch, any time you press this same key, that phrase will appear.

# EDITING PHRASES

You can use the Backspace (left facing arrow) Button to edit from the end of the phrase, but you can also edit any syllable in a phrase by clicking on it.    This will change the text of that syllable from white to yellow.     You will now have a set of five options: Replace, Delete, Extend, Change Vowel, and Add Syllable.
The screen looks like this:



**REPLACE** – If you click this button, your selected syllable (in this case – "reh") changes to "- - - - -"  and your screen looks like this:



The starting consonant and vowel buttons are now lit and available, so you can type in a new syllable.   When finished, click the "Complete" button.    (Note that the "Complete" button is in the same place as the "Next Syllable" Button used to be.   (This button was also "Add Syllable" when you entered syllable edit mode.)   After you click it, it changes back to "Next Syllable" again.

**DELETE** – If you click this button, then that syllable disappears.   In our example, "doh reh mee" would become "doh mee."

**EXTEND** – If you click this button, then the vowel of the selected syllable is extended. This is useful if you want to add a little vocal flourish to a syllable. In our example, "doh ree mee" would become "doh reh eh mee."

**CHG VWL** is short for **CHANGE VOWEL** – If you click this button, then the consonants (if any) stay as they are, but the vowel changes to whatever you select. This is useful when you're not sure which vowel would sound best and you'd like to experiment without re-typing the entire syllable. You can keep changing the vowel as many times as you like. When you're happy with your choice, click "Complete."

It's worth mentioning that even when not in "**Chg Vwl**" mode, you can always change the vowel of the *last* syllable in a phrase by simply pressing any vowel key. A handy trick!

**ADD SYLLABLE** – If you click this button, a new syllable (indicated with "- - - - -" will be inserted before your selected syllable. In our example, it would be inserted before the "reh" like this:



Now you simple type in the consonants and vowel for that syllable (or even a vowel with no consonants), then click "Complete," and you're all set.

# LOADING AND SAVING PHRASES

Suppose you've created some positively brilliant phrases that you want to save for future songs.   We've added a way for you to do this.    First, click the yellow "Load/Save" button below the keyswitch keyboard.
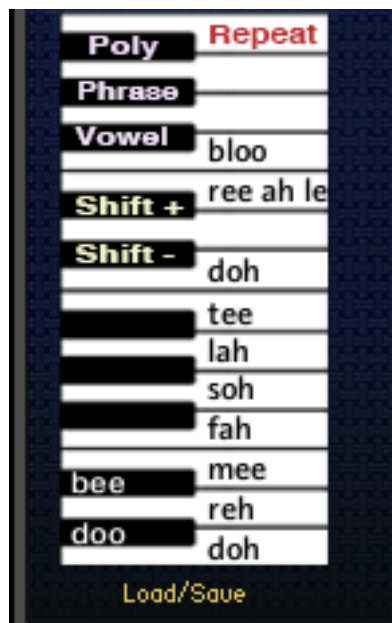


Then you'll see this screen:
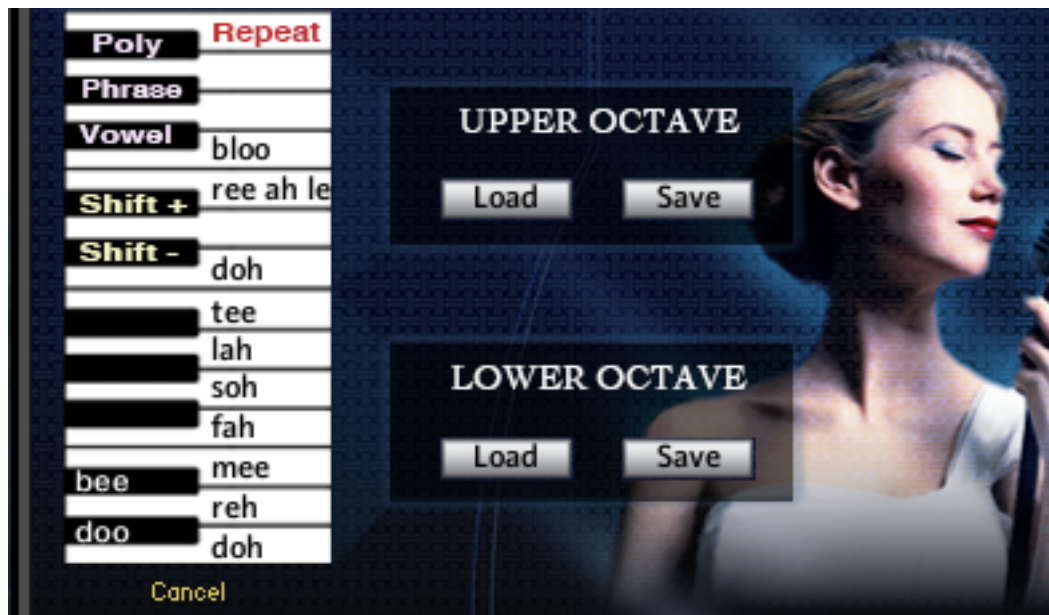


Note that "Load/Save" has changed to "Cancel," just in case you're having second thoughts about the brilliance of those phrases you wanted to save.

Notice that you can save the upper octave's phrases, or you can save the lower octave's phrases.   We split it this way so that you can mix and match phrases more easily.

For example, you can save a set of Upper Octave keyswitches, then load them into the Lower Octave.

One thing to be aware of, though, is that the Upper Octave only loads or saves C1, D1, E1, F1, G1 and A1.   That's because the black keys, as well as B1, are reserved for other keyswitch duties.   So if you save the Lower Octave in this example:
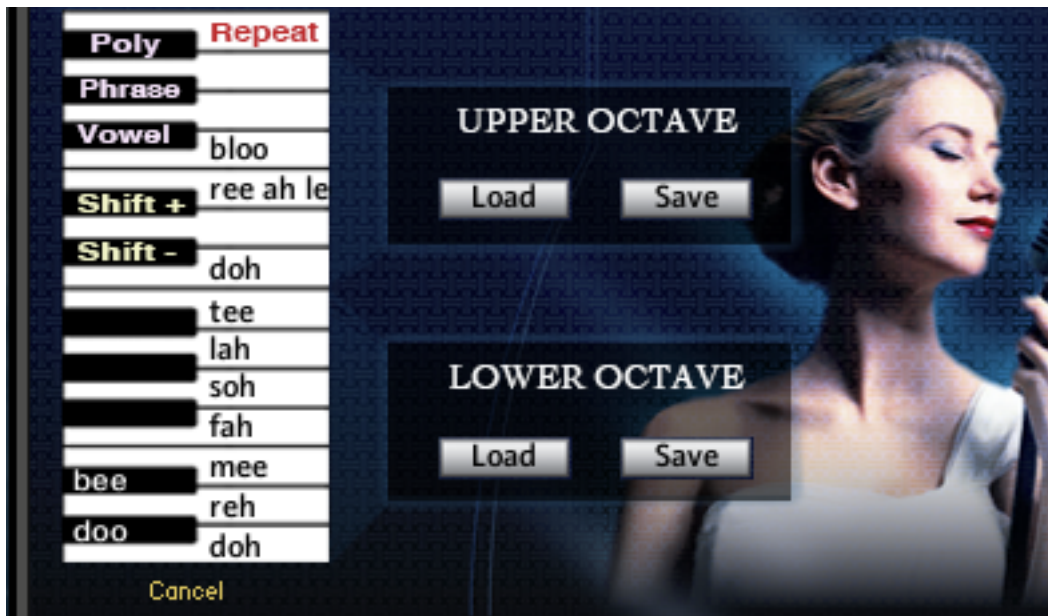


and then "Load" that set into the Upper Octave, only doh, reh, mee, fah, soh and lah will be loaded into the Upper Octave.   "Tee" will not be loaded, because the B1 key is reserved for the "Repeat Key."   Also, "doo" and "bee (which we saved on the Lower Octave black keys C#0 and D#0") won't be loaded, because C# and D# in the Upper Octave are reserved for our "Shift" keyswitches.
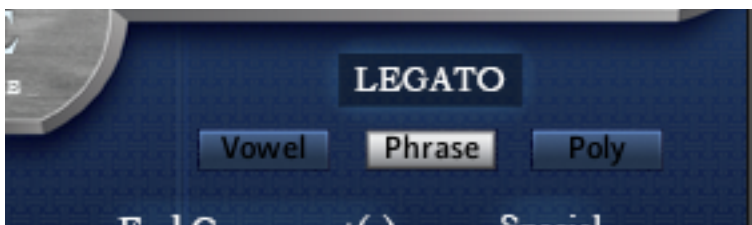
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# EXPRESSION KNOB



Using CC11, you can add dynamics, making the voice louder or softer as you play with

# LEGATO MODES

Realivox Blue incorporates sampled legato.   (Sometimes called "true legato.")   This means we actually recorded the transitions.   You have three legato options;   Vowel, Phrase and Poly Legato.



**VOWEL** and **PHRASE** legato are both monophonic legatos that engage when you play overlapping notes.   **Vowel** stays on the vowel, while **Phrase** continues through the consonants and syllables.

These are engaged via keyswitches F#1 and G#1.)   You can change legato in the middle of a phrase.   For example, you may have a phrase, "heer mee seeng."   Turn on "**Phrase** Legato," then the first note will automatically be "heer," the next note will automatically be "mee," then the third note will be "seeng," but maybe you want a flourish on the "ee" of sing.   Press the F#1 keyswitch (**Vowel** legato) and Blue will stay on the "ee" until you press G#1 (**Phrase** legato again) , at which point your next note will trigger the ending "eeng."

**POLY LEGATO** is a polyphonic legato, allowing you to play chords and have legato movement between some or all of the notes.   Unlike our **Vowel** or **Phrase** legatos which trigger legato by overlapping notes, **Poly Legato** triggers legato if new notes are played soon after the *release* of previous notes.

The **POLY LEGATO TIME WINDOW** knob (on the settings page) determines (in milliseconds) how soon after the release newly played notes will be legato.

For example, let's suppose our Poly Legato Time Window knob is set to 200 milliseconds.   You play a C, E and G.   Then you release the E and G, then quickly (within 200 ms) play an F and A.   The F will automatically be played legato from the E, and the A will automatically be played legato from the G.

Or . . . suppose you start with that same C, E and G cluster.   You release the E and G, but this time you play *three* new notes: D, F and A, while still sustaining the C.   The D will play legato down from the E, the F will play legato up from that same E (one E note splitting into two new notes,) and the A will play legato from the G.    So you can change the number of notes.    Our scripting will handle it.

**LEGATO OFF** - You can turn off legato by pressing any two of the three legato keyswitches at the same time.   Or by simply clicking the interface, of course.

# SETTINGS PAGE



## POLY LEGATO RELEASE TIME WINDOW

After you release a note (or notes,) the software needs to know whether you're about about to play new notes (legato,) or whether you're at the end of the phrase and want the note(s) to end.     If you play new notes immediately after releasing old notes, the software assumes they should be legato.

This knob selects (in milliseconds) what the time limit is for how long after the note is released a new note would need to be played.   The default setting is around 200 milliseconds.   Bear in mind that after you release a note, the note won't release right away, since it's waiting to see if you're going to play new notes.   The length of time that it waits is whatever the knob is set to.   So you need to play accordingly if you re at the end of a phrase, although even at 200 milliseconds, the delayed release isn't very noticeable.

If you're a slow player and having a hard time playing new notes within the 200 ms time window, you might want to raise this setting.   If you're a very fast and accurate player (or if you're entering notes in a sequencer,) you may want a lower setting.   It won't take long to get a feel for it.

# SETTINGS PAGE (Continued)

## ATTACK AND RELEASE KNOBS
If you want a slower attack, or a longer release, these are the knobs for you.   Note that they only apply to vowels, not consonants.

## VIBRATO
Vibrato is engaged with the mod wheel.   The **SPEED** knob is pretty obvious.   The **MIX** knob is more interesting.   With vocals (as well as many instruments,) when a singer uses vibrato, she will will not only be varying her pitch, but the volume as well.   The Mix knob lets you decide how much of each you want.

Note that our vibrato is not just a simple LFO.   We actually mapped out the curve of what a singer's voice does when she goes into vibrato.   Also note that if you are playing multiple voices at once, their vibratos will be independent, both in phase as well as speed.   (Although you set the speed yourself, there are variations built in for a more human effect.)

## REVERB
These are for Kontakt's internal algorithmic reverb.    This reverb doesn't use a lot of processing power, unlike convolution reverb, so you might want to keep it on.  If you want to use your own reverb (or delays, which can better for vocals if used subtly,) obviously you can turn this reverb off. .

## POLY LEGATO TIME WINDOW
This knob determines (in milliseconds) how soon after the release newly played notes will be legato.   Note that while in Poly-Legato mode, when you release a note, it will wait this amount of time before actually releasing, since it needs that window of time to see if you play new notes that should be connected.

## VOICES MIXER - ENSEMBLE MODE

**Tune** detunes in cents (1/100 of a semitone.)

**Delay** (in milliseconds) allows you to have voices play at different timings from each other, so they're not so perfectly in sync.   Note that Voice 1 cannot be delayed.

**Pan** is for that left/right thing that's been all the rage since that newfangled "stereo" got invented.

**Volume** is pretty self explanatory.   For a choir effect, keep all three voices at 100.   Or if you're just trying to thicken Voice 1, then set the volumes for Voices 1 and 2 at 50 or less.

# VOICE SELECTORS

**Normal** selects the normal samples, at exactly the pitch they were recorded.   Play a note and you will hear the sample that was recorded at that note.   This is the most typical choice for your lead voice.

**Bright** borrows neighboring samples that are below the pitch of the played note, then pitch shifts them up so they are in tune.   This process gives a brighter sound, hence the name.   "Bright 1" borrows samples a half step lower than the played note, then pitch shifts the samples up a half step.   "Bright 2" borrows samples 2 half steps lower, then pitch shifts the samples up 2 half steps.

**Dark** does the same process in reverse.   For example, "Dark 3" will use the sample 3 half steps *above* the played note, then pitch shift it down 3 half steps, giving a darker tone.

Note that although you will typically use "Normal" for your lead voice, using a "Bright" or "Dark" setting for lead can also be useful, in case you want a more childlike voice, or perhaps a huskier voice.

Also note that if you have "Voice 2" and/or "Voice 3" activated, they must have different voice selections.   You don't want two Voices to both be set to "Normal," for instance, since that would result in both voices using the same samples.

### VOICE SWITCHES
Turns the voices on or off.   Note that Voice 1 must always be on.

# THE KEYBOARD



**BLUE KEYS -** These are the notes that were chromatically sampled, and are the singer's natural range.

**GREEN KEYS -** Sometimes you need notes above or below a singer's natural range. These keys indicate extended notes, which are stretched up (from the highest note) or down (from the lowest note.)

**YELLOW KEYS -** The two octaves below the playable range are for the keyswitches which store words or phrases, as described earlier.

**BLACK/GOLD KEYS -** Sometimes you might not like a particular sample, or perhaps you're playing a repetitive pattern on the same note and want variety of which samples you hear. These keyswitches temporarily play an alternate sample. If you play a normal playable note while holding one of these two keys, an alternate sample will be played. The C#2 key borrows a sample above, the D#2 key borrows the sample below the played note.

**BLACK/PURPLE KEYS -** These are the legato keyswitches. F#2 is vowel legato, which stays on the particular vowel. G# is phrase legato, which is legato that moves from one syllable to the next. A#3 is polyphonic legato, as described above. Note that pressing any two of these keys at the same time will turn legato off.

**RED KEY -** This B2 key is a "repeat" key. Sometimes you will want to play a legato phrase where the same note gets played twice in a row. For instance, you might want to hear "oo-wee" on the same note. It's impossible to overlap the same note (for legato), so pressing B2 means "play whatever the last note was" again. For example, if you play A4 and then play B2, it will sound like A4 and then another A4. (B2 plays A4.)

Note that this keyboard layoput also appears on the main screen.

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# GENERAL NOTES

Note that for all knobs, Control clicking (Windows) or Apple-clicking (Mac) on them will restore the default settings.

To assign a controller (slider, knob, etc. on your MIDI keyboard) to a knob on the Blue interface, right click the knob, then select "Learn MIDI CC# Automation," then nudge your MIDI keyboard's slider (or knob or whatever) and the slider will now be set to this knob.