**An Impact Soundworks Innovation**

CONCEPT

TACT is a modular, scalable system designed to create a consistent plug-and-play performance experience in Impact Soundworks virtual instrument products. It manages articulations with up to 3 triggering types, volume and offset control, and independently controlled legato toggles when applicable. Current supported trigger sources are note range, velocity range, CC range (on any CC# from 1 to 127), keyswitches (latching or non-latching, independently chosen per articulation), and sustain pedal up/down.

TACT is designed to manage user mapping schemes and facilitate experimentation to create the best performance setups for users very quickly and easily. Extra features include:

- A **conflict detection algorithm**, which cross references articulations through their 3 rules and detects if the articulations will trigger under the same input. It will then highlight the articulations in red to so the user can observe and resolve the conflict.

- A crown-jewel convenience feature called "**Automap**", which allows users to quickly lay out, build, and audition structured mapping schemes.

- A utility to **save and load mapping presets** within a sample library. This allows them to create schemes that suit them for different purposes, such as live performance or efficient DAW sequencing. These presets can also be shared with other users, as they are stored as .nka files.

Impact Soundworks looks forward to providing customers a very consistent and reliable experience in the future using TACT in our new virtual instruments!

ARTICULATION MANAGEMENT
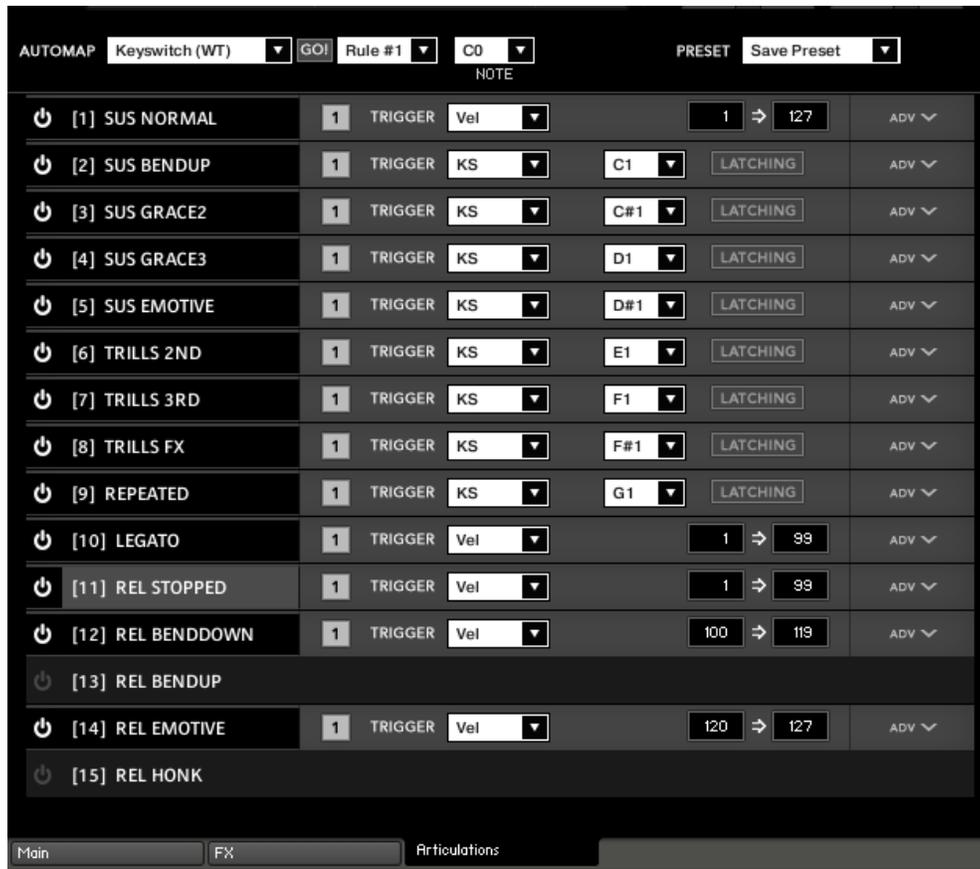
The main screen of the interface shows a list of articulations. Each articulation shows its name, a **power button** to purge it from memory, its first triggering rule, and an **ADV button**.

Pressing **ADV** will expand the articulation to show its 3 rules, as well as other controls like volume, offset, and dynamic control. For legato-applicable articulations, they may allow disabling legato. If expanded articulations make the list exceed the window height, **scroll buttons** will appear on the top right. Holding shift while clicking these scroll buttons will scroll **3 rows at a time**.

The **numbered squares** to the left of each rule are **toggle states** for the rules. If turned off, a rule is not factored into the system's evaluation logic. If all 3 are turned off, the articulation will never play. Note that setting an articulation rule's trigger type to [None] is equivalent to turning the rule off.

Each trigger type can **only be used once per articulation**. If a trigger type is used in a rule, it can't be used for other rules. This is not true of the [None] type, however. Each articulation will preserve its parameters for each rule type, and even if that rule is set to [None]. For example, if you set a keyswitch to B1, then set it to [None], then enable a keyswitch in another rule, it will remember B1 automatically. This is convenient for re-ordering rules for visual organizational purposes.

Each articulation can be selected/highlighted by clicking on its name. This is important for the Automap feature.

Keyboard Shortcuts:

- Holding control, alt, or shift on the ADV will **expand all articulations** at once.
- Holding control, alt, or shift on the keyswitch rule "LATCHING" button will **set all keyswitch rules** to the same latching designation (latching or non-latching).
- Holding alt while moving the volume or offset sliders will **move them simultaneously** across all articulations to the same value.
- Holding shift or alt while scrolling will scroll by 3 rows (a full expanded articulation) instead of 1.

AUTOMAP

Automap works by selecting a list of articulations by clicking their names (activating the blue highlighting to the left), selecting a scheme, such as "CC Split Range", configuring any parameters associated with that scheme (such as for CC Split, which CC# for it to work on), setting the rule # to apply the new mapping on, and the "GO" which executes the automap.

Holding control, shift, or alt while selecting an articulation will select or deselect all articulations.

When automap is executed by pressing GO, the previous mappings will be preserved in memory. If the user wishes to undo the change, they can access the preset menu and hit "Undo Automap". Note that this will only work 1 time, as there is only 1 level of history.

When a new mapping is applied to an articulation via Automap, the associated rule is automatically turned on in every selected articulation. If an articulation already contained a rule with the relevant trigger type, that pre-existing rule will be cleared out first.

For all mapping schemes, especially splits, they are done *in order of selection*, not visually ascending or descending order. For instance, if velocity split mapping was engaged on articulations ABCD that are selected in order CDBA, then articulation C will have the lowest velocity range, D will have the next lowest, and so on. Here is the list of currently implemented schemes:

Keyswitch (WT) - Will map selected articulations starting at the specified keyswitch, ascending by whole tones (2 half-steps).

Keyswitch (ST) - Will map selected articulations starting at the specified keyswitch, ascending by semi tones (1 half-step).

CC Split Range - Will map selected articulations on the specified CC# to ascending ranges that are even divisions of 1 to 127. For example, on articulations AB will map A to 1-64 and B to 65-127.

Velocity Split Range - Will map selected articulations to ascending velocitry trigger ranges that are even divisions of 1 to 127. For example, on articulations AB will map A to 1-64 and B to 65-127.

In addition to the spanning schemes listed above, TACT also features "shared" schemes that apply the same rule to selected articulations:

Shared Keyswitch - Will map selected articulations to the specified keyswitch.

Shared CC Range - Will map selected articulations to the specified value range on the specified CC#.

Shared Vel. Range - Will map selected articulations to the specified velocity range.

Shared Key Range - Will map selected articulations to the specified key range.

Pedal Position - Will map selected articulations to the specified pedal position.

Clear Rule - Will "delete" whatever mapping exists in the selected articulations on the chosen rule (set them to [None]).

A combination of spanning schemes and shared schemes is the key to getting the most out of TACT. For example, in a string library, a user could set all short articulations to a "shared keyswitch" rule, and then have their second rule be a "CC Split Range". This way, they can switch to a general "shorts" keyswitch, and use their mod wheel to select the specific one. Another example is when the user has a satisfactory mapping scheme but would like to trigger legato using the sustain pedal; they can quickly use automap on the non-legato articulations to have them only trigger when the pedal is released.

PRESETS

TACT can save presets as .nka files. These files can even be shared with other users, provided they are using it with the same sample library.

To save a preset, simply open the preset dropdown menu and click "Save Preset". A dialog box will appear prompting you to name your scheme.

To load a preset, click "Load Preset". A dialog box will appear, and you can browse your computer to select your saved schemes.

A preset will completely load all articulation purge states, triggering rule data, legato toggles, offset values, and dynamic control mappings. A preset will not, however, save or load articulation volume values. This is done so that the sound and general tone is not affected if the user wishes to heavily experiment with performance mappings.

CREDITS

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