Palette Primary Colors

An Impact Soundworks Instrument
for Kontakt 6.7.1+
Instrument Version 1.0.0

Product Manual

Introduction

Welcome to **Palette Primary Colors**: a selection of three grand orchestral ensembles (strings, winds, and brass) taken from the full Palette Orchestra Complete, originally released by Red Room Audio.

The **Palette** collection is the ultimate set of easy-to-use yet powerful orchestral scoring tools. Recorded in a dedicated hall with world-renowned performers, it delivers world-class sound while making it as fast and simple as possible to get an authentic, realistic result.

While **Palette Primary Colors** is more limited than the full version, it can still be used to build fantastic orchestral sounds without spending a ton of time on tweaking and programming.

Palette Primary Colors is an excellent standalone tool for sketching out your musical ideas, or a risk-free way to decide whether you want to upgrade to the full Palette Orchestra Complete. We hope you find it inspiring, convenient, and easy to use!

— The Team at Impact Soundworks

Installation

Palette: Primary Colors requires the **FULL** version of Kontakt 6.7.1 or above. If you don't already own Kontakt, get it **HERE**.

1. Install the **Pulse** application if you don't already have it. **Pulse** is a cross-platform desktop app that lets you download and install your libraries with blazing speed!

https://pulsedownloader.com/

2. Once **Pulse** is installed, open it and enter your **Palette Primary Colors** download code. Follow the instructions to download and install the library.

3. Finally, load the included **Palette Primary Colors** in Kontakt. No activation is needed, as this is not a Kontakt Player instrument.

What is Palette Primary Colors?

Palette Primary Colors is the ultimate set of easy-to-use yet powerful orchestral scoring tools. Recorded in a dedicated hall with world-renowned performers, it delivers world-class sound while making it as fast and simple as possible for you to get an authentic, realistic result.

Palette Primary Colors gives you a free taste of what's included in the larger and more comprehensive **Palette Orchestral Complete** collection. This lightweight teaser features strings, woodwinds, and brass ensembles with an abbreviated set of performance techniques. Just like the full collection, each articulation in **Palette Primary Colors** has three dynamic layers and up to seven round robins. For simplicity, **Palette Primary Colors** is limited to a single microphone position (Decca) that best represents the overall sound of the hall.

Palette Primary Colors: GUI Overview

IMPORTANT: Virtually every knob on the interface can be MIDI learned! Simply right click and then move the desired MIDI CC to create a link. Also, you can **hover** over any control to see help text at the very bottom of the Kontakt UI. *(See section* **Setup & Tweaking** *for more details)*

NB: *CC's* `124`-`127` *are forbidden from MIDI learning as they are used internally and may cause a MIDI feedback loop that could result in a crash!*

Palette Logo

The right-hand side of the UI is dedicated to the **Palette** logo and text, while the bottom of this rightmost area has the Impact Soundworks logo.

Articulations

The top row of the GUI holds the `Articulations` panel:

The list of articulation buttons on the left displays the names of the available articulations and, in parentheses, how each articulation is triggered (typically, as in the image above, via Keyswitch).
NB: *Use the radio buttons to unload unnecessary articulations to conserve RAM.*

The articulation buttons themselves have 4 possible states:
NB: *Articulation names may differ from this example!*

Available SUSTAIN (C6)

Currently Triggered SUSTAIN (C6)

Available & Selected for Editing SUSTAIN (C6)

Currently Triggered & Selected for Editing SUSTAIN (C6)

Clicking an articulation button selects it (asterisk) and opens its editing controls in the right side of the Articulations panel; the standard Impact Soundworks `TACT`: Total Articulation Control Technology:

NB: `TACT` *is a powerful yet easy-to-use solution for customizing how an instrument's articulations are triggered.*

Starting at the top of the `TACT` box, there are knobs for adjusting `Volume`, sample `Offset`, `Attack`, `Release`, and a dropdown menu with which to select your preferred method of Dynamic Control (i.e., via Velocity or MIDI CC). The red hamburger icon in the top right opens a menu for saving and loading your own custom `TACT` settings.

In the lower half of the `TACT` box, you'll find two Rules that determine how the selected articulation is triggered. There are 5 options:

Key The articulation will be triggered by pressing the key displayed in the second dropdown. This key can be changed according to your preference. Keyswitches are colored **red** on the Kontakt virtual keyboard and NKS compatible controllers, while the currently-selected keyswitch is colored **green**.

NB: *You can activate multiple keyswitches together to stack articulations!*

- ➔ When the `Latching` radio button is *enabled*, the articulation selected via keyswitch will remain active after the keyswitch is released.
- ➔ When the `Latching` radio button is *disabled*, the articulation selected via keyswitch will only be active when its keyswitch key is held down.

NB: *It is not possible to set a keyswitch in the **blue** playable instrument range. (Or, more precisely, blue*-ish*; which sections are available in that part of the keyboard/playable range change the specific shade of blue.*

Vel The articulation will be triggered when notes are played within a designated velocity range. This range is set by dragging the values up or down in the range boxes.

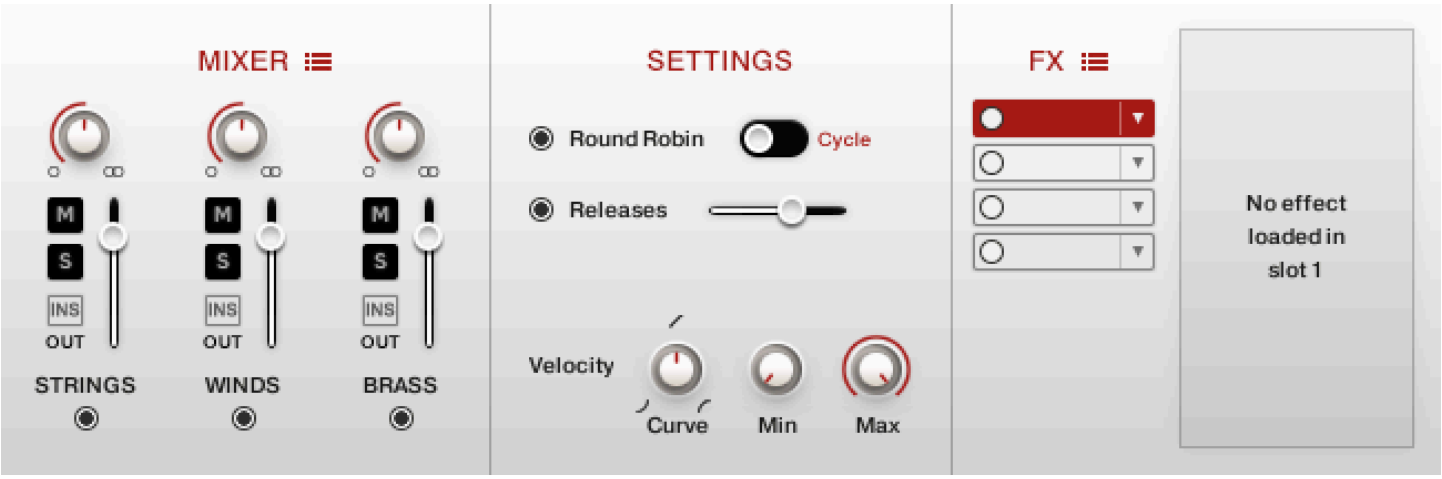
CC The articulation will be triggered by the MIDI CC set in the first box within the range of values determined by the range boxes.

Range The articulation will be triggered when you play a note that lies between the values set in the range boxes.

Pedal The articulation will be triggered upon depression of a Sustain pedal (i.e., `CC64`).

In most cases, like in a typical keyswitched setup, one Rule per articulation would be sufficient. However, there may be times when a second Rule could prove helpful. There are many possibilities—in fact, Rules may be used to layer different articulations! This is useful when, for example, you'd like to create a sforzando effect by overlapping Staccato and Sustain. Set Rule 1 of Sustain to a Keyswitch and Rule 1 of Staccato to a high Velocity range (*e.g.*, `110`-`127`). Now high-velocity Sustains result in sforzando!

NB: *An articulation's Rule(s) are displayed on the articulation button; changing a Rule also updates the text on the articulation button.*



Mixer

This panel of the GUI contains the mixer controls. The controls for each of the orchestral sections (Strings, Winds, and Brass) affect an *in situ* Decca mic mix of that section. For each of the orchestral sections, the controls are as follows:

On/Off Button

Radio button which may be used to turn off unnecessary sections' mic mixes to save RAM.

Volume Fader

Controls the level of the selected section's mic mix.

Stereo Width Knob

Controls the stereo width of the selected section's mic mix between mono and stereo.

Mute & Solo Buttons

Controls whether and how the selected mic mix is (or is not) heard. *Does not unload silenced sections from RAM.*

Output Select Button

Selects the output channel for cases in which each mic mix should be routed to different tracks in the DAW.

Hamburger

This **red** button in the top right allows saving and loading of custom mixer settings.

Settings

Round Robin Turning this radio button off deactivates the additional round robin samples, which makes the instrument sound more 'robotic'. It is recommended that this be left on for more realistic results. The bipolar switch changes the order of playback of the round robins from Cycle to Random.

Releases Releases provide a more natural, realistic ending to sustained notes on key release. It is recommended that these be left on for best results. The slider controls their volume.

Velocity These three knobs allow customization of the velocity curve for additional control over dynamics. These are particularly useful for short articulations, and also when Dyn Control is set to 'Velocity' in `TACT`.

FX

Standard DSP/ audio signal effects housed in a compact yet powerful eight-slot rack.

FX Slots

To load an effect, click on any slot's down-facing arrow. This opens a dropdown menu wherein 1 of 17 effects may be selected or moved up or down in the rack. The radio button in each slot toggles whether the effect in that slot is active or bypassed.

FX Slots have three states:

Clear (white) signifies that the Slot is empty; no effect is currently loaded.

Gray means there is an effect loaded. Though its name is displayed, it is not selected for editing.

Red means the slot is selected for editing; its respective controls appear on the right.

Hamburger

This **red** button in the top right facilitates saving and loading tweaked versions of individual effects as well as the entire FX rack.

Performance Sliders

Where this exists, this bottommost panel allows adjustment of various performance settings, such as Dynamics (default: `CC1`), Expression (default: `CC11`), and instrument-specific performance techniques like Vibrato (default: `CC4`) and Tremolo/Flutter (default: `CC2`).

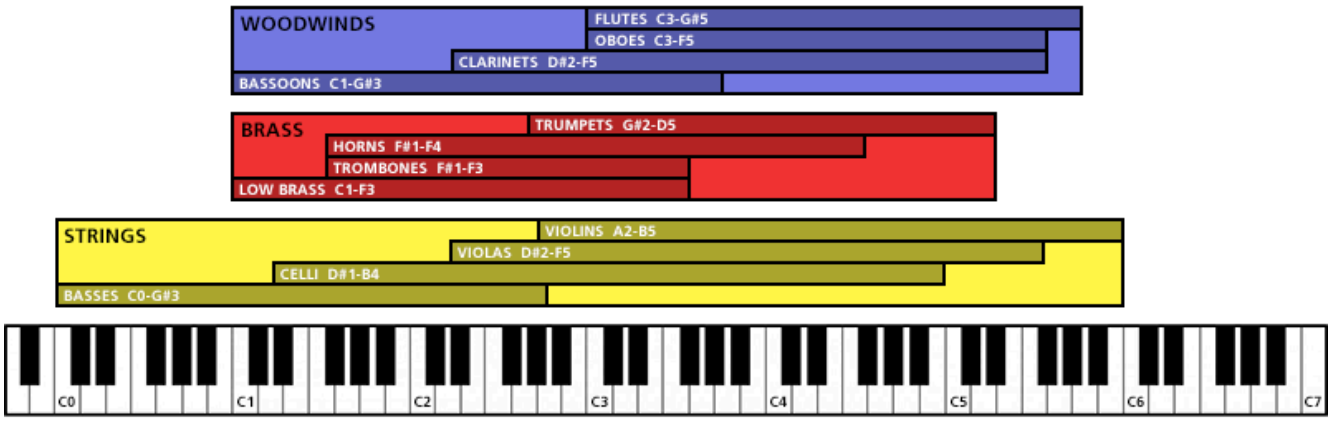
Palette Primary Colors: More Information

Now that we've seen how this library may be controlled, let's take a further look at the material contained within.

NB: *Each section is recorded in situ with the same microphones, performers, studio, and other 'physical' attributes as the full* **Palette Orchestra Complete**, *so mixing and matching between this and that should be seamless!*

True Ensemble Recording

With our players in standard seating positions across the stage, the full range of each ensemble was recorded in unison from lowest to highest note. Instruments play together when their ranges overlap and drop out when they reach their limits (*see graphic below*). This approach has been dubbed 'True Ensemble Recording'; it yields a rich, playable patch that's natural, unscripted, and full of life. Here are the ranges and orchestration of the instruments in these ensembles:



Primary Colors: List of Articulations

Strings	Sustain
Woodwinds	Staccato
Brass	

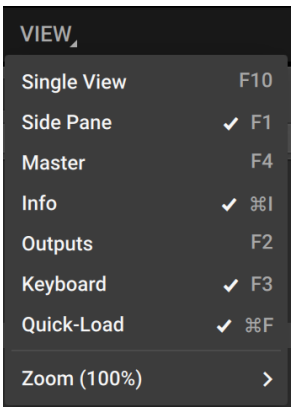
Setup & Tweaking

Tips for Getting the Most out of the User Interface

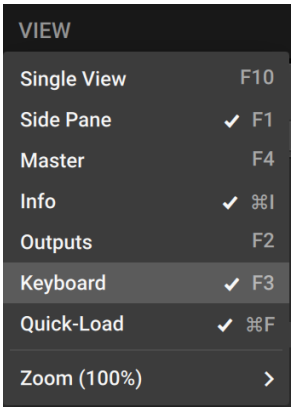
➔ Almost all controls (except for the FX parameters) can be MIDI-learned by (1) right-clicking the UI and (2) selecting 'MIDI Learn'. You will then need to move the control of your choice (*i.e.*, fader, knob, *et al.*) on your MIDI control surface or in your DAW to establish the link.

***NB**: Once you MIDI-learn something, you should save your modified version of that NKI so you won't have to do it again!*

➔ You can view Help Text by hovering over controls in the **Palette Primary Colors** UI. The Help Text will appear at the bottom-left of the Kontakt UI plug-in window. You can go to the Panels drop-down menu by clicking the `VIEW` tab at the top-right of the plug-in window and ensure 'Info' has been checked:



➔ The colorful Kontakt virtual keyboard, seen in our videos, is a Kontakt feature and not specific to **Palette Primary Colors**. To enable the virtual keyboard, simply press **F3** on your computer (*not* MIDI!) keyboard. Alternatively, you can go to the Panels drop-down menu by clicking the `VIEW` tab at the top-right of the plug-in window and ensure 'Keyboard' is checked:



➔ **Palette Primary Colors** is fully NKS Compatible and features quite a few existing host-automatable controls. If you have a Komplete Kontrol keyboard or use the Komplete Kontrol application, you will be able to benefit from this functionality!

Tips for More Realistic Mockups

As with many aspects of music creation, think of these as guidelines, not hard-and-fast rules that can never be broken!

Recording Live vs. Sequencing

If you have decent keyboard skills, it's a good idea to try performing your parts one at a time, recording the MIDI data. The natural variations in timing and expression will often lead to a better result.

Stay Off the Grid

Keeping every single hit 100% quantized to the grid will not sound very natural. The orchestra, as a unit, usually pushes and pulls with the beat to add emotion and musical 'direction'.

- ➔ If you're quantizing your live playing, try using a 50% to 75% quantization value instead of 100%.
- ➔ If you're clicking in notes with a mouse, try manually making very slight adjustments to certain notes!

Use Dynamics

It's tempting to gravitate toward very high dynamics, particularly when you are writing 'epic' or 'cinematic' tracks. But even in these high-energy, hybrid genres, orchestras do not play at 100% maximum energy at all times, and this sound can quickly fatigue the ear. Even for very intense parts, try using a spread of velocities within the same (albeit 'high') range.

Furthermore, ensuring that you're monitoring your music at an appropriate level to begin with (not too quietly, not too loudly) will help you make correct, informed decisions about dynamic performance and dynamic range—not just for your orchestral parts, but for each element in your mix!

Tips for CPU & Memory Optimization

If you experience high CPU and memory usage with **Palette Primary Colors**, there are a number of things you can do to mitigate the issue.

Save RAM and CPU by disabling unused articulations and mic mix perspectives

If you are not using certain articulations and/or mic mix perspectives, for example *Close 2*, consider disabling these altogether by deselecting the radio button. Doing this will reduce both memory usage and voice count.

Balance RAM and CPU with DFD preload settings

Kontakt does not load all samples fully into memory; it only loads (or buffers) a small chunk of each one. By clicking on the wrench icon next to a loaded patch, clicking Instrument Options, and going to the DFD tab, you can adjust this preload buffer amount.

A higher buffer means less CPU usage but more RAM usage. A lower buffer means higher CPU usage but less RAM usage.

It's up to you to determine which setting is best for you.

Save CPU and memory by quitting unnecessary applications

For experienced users, this may seem obvious, but it's easy to lose track of how much computing power is being used by seemingly-innocuous applications. For example, it's not uncommon to have a Chrome browser, Discord, Slack, Skype, Zoom, and Dropbox all running at the same time. All of these not only take up RAM, but can also interfere with real-time audio playback by causing pops & crackles.

So, anytime you work on a very intensive DAW project, it's a good idea to close all applications and services you don't need - even if they just run in the background.

Avoid pops and crackles with a higher buffer size

This applies to your DAW settings in general. Typically, every DAW's audio settings allow you to change the 'buffer size' of the playback drivers. Sometimes, this may only be changeable in a separate application, such as with some RME products.

The buffer size (measured in milliseconds or samples, like `8ms` / `512 samples`) determines the amount of latency in DAW output and input, inversely correlated to CPU usage. In other words, lower buffer sizes are much more demanding on your CPU than higher ones.

Though it feels great to perform and record MIDI at very low buffer sizes, this is also most taxing on your CPU. Consider increasing your buffer size once you're out of the MIDI recording phase, and on to editing, mixing, and mastering.

Credits & Acknowledgements

Red Room Audio - Palette Primary Colors

Concept & Art: Dickie Chapin
Kontakt Scriptor: Mario Krušelj
Sample Editor: Christian Yoder
Live recordings performed by The Sofia Session Orchestra at FourForMusic, Sofia, Bulgaria
Session Producer: Yuliyan Stoyanov
Orchestration & Score Prep: Dickie Chapin & Yuliyan Stoyanov
Engineers: Plamen Penchev & Angelia Vihrova
Conductors: Lyubomir Denev Jr., Georgi Elenkov, Boris Radilov, George Strezov
Special Thanks: Impact Soundworks and the entire staff at Sofia Sessions Studios and FourForMusic

Impact Soundworks Palette Transition Team

Executive Producer: Andrew Aversa
Transition Lead: Shane Roberts
Graphic Design: Paulo Nunes
Marketing: Lauren Liebowitz
Manual Editor: Kent Kercher
Quality Assurance: Fredrik Häthén

Troubleshooting

Having trouble with **Palette Primary Colors**? Use it in a project you want to tell us about? Drop us a line via our **Contact page** (but be sure to read the FAQ first!)

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