Manual

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1 Welcome to WEST AFRICA

Thank you for purchasing WEST AFRICA. On behalf of the Native Instuments team, we hope this new KONTAKT library truly inspires you.
WEST AFRICA adds a selection of exclusively sampled percussion and melodic instruments that integrate into the latest versions of KONTAKT 4 or the free KONTAKT PLAYER. These instruments have been carefully crafted to be both authentic and easy to use, so creating the atmosphere of a West African musical ensemble should be a simple task, even for those who are not deeply familiar with the musical style.
This manual will explain the different instruments that have been sampled for this collection, as well as some basics of West African music and how to use the KONTAKT instruments.

1.1 What is WEST AFRICA?

Continuing Native Instruments' Discovery Series of sounds from around the world, WEST AFRICA is a collection of multi-sampled instruments from the respective region. Based on traditional techniques, this library is designed to add authentic West African flavors to your music productions.
West African music has a characteristic focus on rhythm, so for this library we created a intuitive pattern sequencer using the KONTAKT script engine. This sequencer has several “under the hood” features that apply a realistic feel to the patterns. The library also comes with a collection of preset rhythms and patterns to get you started. Because WEST AFRICA does not use any looped samples, the patterns will never repeat exactly, as if a real musician had played them.
Different tuning presets are provided for the melodic instruments, to give you the option of the original tuning of the instrument, or the chromatic standard of western modern music. This gives you the choice between authenticity, or compatibility.
Likewise, the pattern sequencer can either synchronize to your host tempo, or play at it's own rate, depending on your preference.

2 Content Description

The following section of the manual will describe the instruments provided with the library, as well as some musical concepts to better understand how the instruments work.

2.1 The Library

The library consists of three main categories:

- **Percussion Ensemble**: this is a single KONTAKT instrument containing six different drums of a traditional West African ensemble.
- **Single Percussion Instruments**: this collection contains some additional percussion instruments, as well as more detailed versions of the instruments from the percussion ensemble.
- **Melodic Instruments**: this collection features melodic instruments common in West African music. All melodic instruments are heptatonic, i.e. they have seven notes per octave.

The instruments of each category in this library share certain features and are designed to be consistent, so you are likely to find the same controls in the same area, or similar keyboard mapping conventions throughout the library.

2.2 Shared Features

2.2.1 Pattern Player

All of the instruments included in WEST AFRICA contain a pattern playback engine. In some cases this is editable (like with the percussion instruments) and in some cases it is not (as with the melodic instruments).

The main pattern controls for the percussion instruments

The main pattern controls are common across all of the instruments and are located to the bottom left of the instrument's interface. For all of the percussion instruments they are as follows (from left to right):

- Trigger: selects how the patterns are triggered. If set to Host, the pattern will begin playback when the host clock starts running; if set to Notes the pattern will playback when you play a MIDI note in the range C1-B1.
- Play button: activates playback of the selected pattern, regardless of the Trigger selection. You can automate this control in your host in order to stop and start playback.
- Tempo edit area: if Sync is set to off, you can edit the pattern playback tempo by clicking and dragging in this area, or by clicking on the arrows. Holding shift when using these controls offers finer resolution.
- Sync: This switch controls whether the instrument is synchronized to the host tempo or not. If Sync is on, the pattern will also link to the host song position.
- Variation: selects the pattern for playback. This knob is also controlled by MIDI notes C1-B1.
- Edit: Opens the pattern editing window, which is explained later in this section.

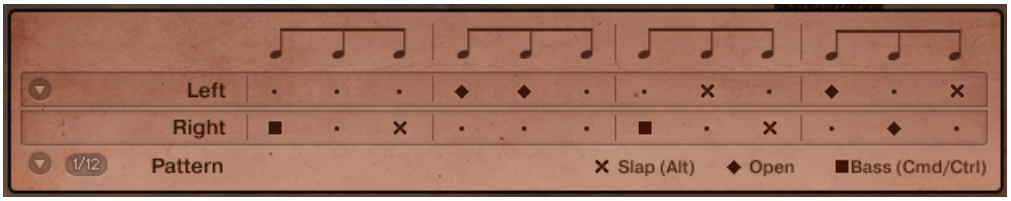
For the melodic instruments, the Edit button and Trigger switch are removed. The pattern are only triggered from MIDI notes C1-B1 or by pressing the Play button on the instrument. The other controls, although re-arranged to have Variation placed first, behave in the same way as they do for the percussion instruments.

Taps

Usually, the players of African percussive instruments will keep their hands in motion to the pulse of the music, which produces constant quiet tap sounds. For some of the percussive instruments, the sequencer will mimic this playing style by adding small taps to the empty steps of the sequence. The volume of these taps can be set in the instrument options.

Editing a Pattern

Patterns for the percussion instruments can be edited from the pattern editing window, which is opened by pressing the Edit button. From this window you can alter the different steps in the pattern. Below the tracks is a legend, with a guide to the different hits available for the instruments and how to activate them in the sequencer. In this area you will edit the pattern that is currently selected with the Variation knob.

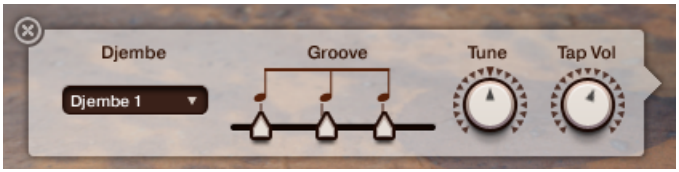


The pattern editor for the Djembe

To the left of the tracks are editing options for the whole pattern. Basic editing options (copy, paste and clear) are in the lowest drop-down menu, whereas track specific options are accessible from the higher drop-down menus (where available). You can change the pattern between 12 steps and 16 steps from the button beside the main pattern edit drop-down.
If the sequencer offers tracks for the left and right hands, when you put a hit on the same step of both tracks (ie. on both hands at the same time) the sequencer will automatically convert this into a flam style hit.

2.2.2 Groove controls

WEST AFRICA features an advanced approach to controlling the groove of the percussion instruments. The groove controls give you fine control over how the patterns deviate from the beat, giving it a more authentic feel.
The overall deviation can be scaled using the Swing knob. This knob is bipolar, so the central position means that the patterns will not deviate at all from the beat, moving the knob clockwise will increase the deviation, and moving it counter-clockwise will inversely increase the deviation (so the hits will move away from the main beat in the opposite direction).



The groove controls are displayed with the instrument options

The feel of the swing can be altered in the instrument options, which can be opened by clicking on the image of the drum you want to edit. When you open the instrument options window, you will see some notes with handles below them in an area marked Groove. This

area displays where the different notes from the patterns will be relative to the absolute beat. You can alter this by clicking and dragging on the note or the handle below it. The first note behaves differently in that it shifts the whole groove forwards or backwards.

2.3 Included Instruments

2.3.1 Percussion

Dunun

Dunun are traditional double-skinned bass drums with a bell attached. They are played with a stick and come in three main types: *Dununba*, *Sangba* and *Kenkeni* (low, mid and high respectively). In a traditional ensemble there are three Dunun players for each of the three types. In this library, the drum and bell are considered as one Dunun. Four different bass drums and three different bells have been recorded.

Djembe

The Djembe is probably the most famous of the African percussion. It is a single-skinned drum played with the hands. For this library we recorded seven Djembe, one of which has rattles attached called Kessing. In the percussion ensemble there are two accompanying Djembe and one solo Djembe player.

Krin

The Krin is a large woodblock which is played with sticks in both hands and produces different tones when hit in different positions. For this library we sampled three different Krin each in the three main positions: Low (middle), High (towards the side), and side (a less tonal, click-like sound).

Calabash

The Calabash is a simple instrument made from a semi-spherical gourd. It is played with the hands and, depending on the style, can produce different tones.

2.3.2 Melodic Instruments

Kora and Bolon
The Kora is the traditional African harp. Made from wood with a Calabash as a resonating body. For this library we recorded a 21-string Kora.
The Bolon is similar to the Kora, but with fewer strings. For this library we recorded a Bolon with three strings.

Balafon
The Balafon is a percussion idiophone, similar to the marimba. What makes it unique are the resonating gourds attached to the underneath of the instrument. The WEST AFRICA library includes three different Balafon types.

Ngoni
The Ngoni is a small, guitar like instrument. It has a very limited melodic range, but can produce many different tones and is thus used almost percussively.

Fula Flutes
The flutes we sampled for this library are wooden, transverse flutes. As well as the familiar playing styles, the player used a technique that includes singing with the flute tones in various different ways.

3 Using the Instruments

3.1 Percussion Ensemble

The Percussion Ensemble interface

The percussion ensemble is the most complex instrument of the WEST AFRICA library and is the only with two performance view pages. The first contains the different instrument options and the pattern sequencer, the second is a mixer for the different instruments. The mapping for this instrument is also unique as it contains six different drum types.

3.1.1 Mapping

Since the traditional percussion ensemble has five accompanying drums and one solo djembe, the mapping was designed to reflect this:

- **Notes C1 to B1** trigger or select the different patterns for the five accompanying instruments.
- **Notes C2 to B2** contain pre-designed phrases for the solo djembe. Most of these are rolls, except C2 and D2, which are signal patterns. The velocity at which you trigger these patterns sets the velocity of the pattern. However, this can be modified dynamically with the Pitch Bend control.
- **Notes C3 to B3** are a variety of solo djembe hits.
- **Notes C4 to Bb4** are the different strokes of the dunun, with the bells mapped to the black keys and group hits mapped to Db4 and Eb4.
- **Notes C5 to B5** are mapped to hits from the accompanying djembe.

It should be noted that playing a single hit from a drum and holding the key will mute that drum's pattern playback. This can be a useful performance feature.

3.1.2 The Main Interface

The main interface is the first thing you will see when you load the instrument. By default, you will see the instrument mapping in the center of the screen, and the main sound and pattern controls at the bottom. The pattern controls are described in section ↑2.2.1, Pattern Player. The four sound controls for the ensemble are as follows:

- Swing: this controls the amount of deviation from the beat of the patterns. The style of the swing is set using the Groove controls in the instrument properties (described in section ↑2.2.2, Groove controls). If the swing knob is set to the center, no deviation from the beat is applied.
- Feel: applies an intelligent randomization to the velocity and various other places to give the pattern playback a more human feel. When set fully to the left, the ensemble sounds very mechanical, when set fully to the right, the ensemble plays loosely.
- Intensity: controls the main velocity of the Pattern Player.
- Reverb: controls both the reverb return level and the reverb size. Increasing this control will give the ensemble a greater sense of space.

Instrument Properties Window

The main interface with the instrument options of Djembe 2 open

Clicking on any of the six drums will open that drum's instrument properties. For each instrument you can select the specific drum sample set using the dropdown menu. For the dunun you can also select the bell samples using the additional dropdown menu. Here you also have access to the groove controls, which were described in section ↑2.2.2, Groove controls.

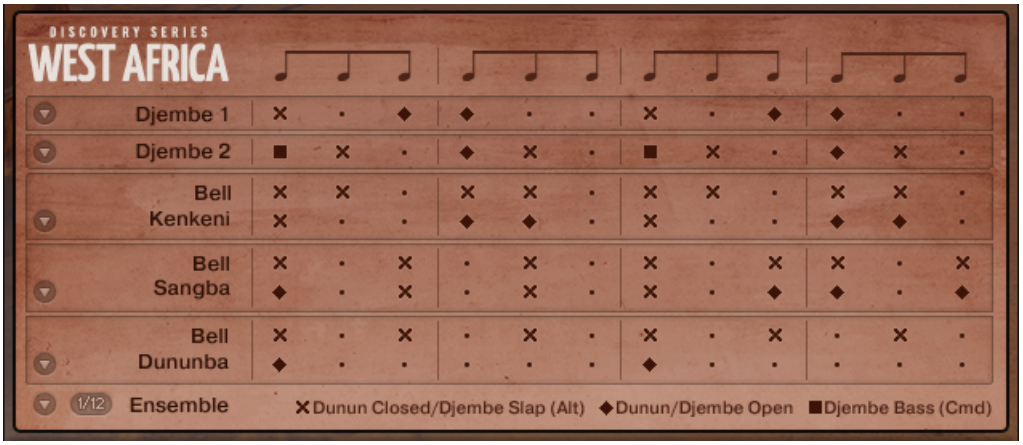
The instrument properties always contain two knobs, the settings for which are stored by sample set – so if you change the solo djembe from djembe 1 to djembe 2, these controls will update according to the settings of that sample set.

The first of these instrument controls is always Tune, which changes the tuning of the drum. At the central point it is always the natural tuning of the sampled instrument.

The second knob changes depending on the drum type:

- For the Dunun it controls the bell volume.
- For the Accompanying Djembe it controls the volume of the taps (described in section ↑2.2.1, Pattern Player).
- And for the Solo Djembe it controls the decay time of the amplitude envelope.

3.1.3 The Pattern Sequencer



The pattern sequencer for the percussion ensemble

The Pattern Sequencer shares many of the features explain in section ↑2.2.1, Pattern Player, but has a few unique additions.
The first thing you may notice is that there is not a track for the Solo Djembe. This is because in traditional West African music the soloist would not play a fixed pattern with the rest of the ensemble, but would improvise and embellish on top. This is why octave C2 to B2 contain phrases for the Solo Djembe.
The second unique feature for the Pattern Sequencer of the ensemble is that you can copy and paste patterns between drums of a similar type (ie. From Djembe to Djembe, or from Dunun to Dunun).

3.1.4 The Mixer

The Mixer page

The percussion ensemble includes an easy-to-use mixer to adjust the balance of the six different drums. You can access these controls by clicking on the Mixer tab at the bottom of the performance view. Each of the six channels have the same five controls:

- Pan: adjusts the stereo panorama of the drum.
- Mute: mutes (silences) the drum.
- Solo: mutes all other drums in the ensemble.
- Volume Fader: sets the volume of the drum.

- Output Menu: selects the output channel for the drum. If your instance of KONTAKT and your audio set-up support multiple outputs, you can assign each drum to a different output in order to process them individually. If set to Main, the drum will be routed through the instruments output.

3.2 Single Percussion Instruments

All of the single percussion instruments share the same control set, with a few minor variations depending on the instrument.

3.2.1 Mapping

For all of the single percussion instruments, C1 to B1 select and can trigger the different pattern variations. C2 to B2 can have different functions depending on the instrument type:

- For the Dunun, they trigger the single hits of the main Dunun.
- For the Krin, Calabash and Djembe, they trigger short phrases (like rolls).

C3 to C5 usually trigger single hits, except for the Krin and Dunun, for which they trigger the additional hits of the different sample sets.

3.2.2 The Main Interface

An example of a single percussion interface

The main interface is the first thing you will see when you load the instrument. By default, you will see the instrument mapping beside the picture of the instrument, and the main sound and pattern controls at the bottom. The pattern controls are described in section ↑2.2.1, Pattern Player. The four sound controls for all of the instruments are the same as the Percussion Ensemble controls, which are described in section ↑3.1.2, The Main Interface.

3.3 Melodic Instruments

All of the melodic instruments share the same basic control layout, similar in some ways to the percussive instruments.

An example of a melodic instrument interface

To the bottom left you will find the pattern controls, described in section ↑2.2.1, Pattern Player, to the right of this you will find the Mapping area with access to the main instrument mapping method and a tuning edit button (this will be described in detail later in the manual). To the bottom right you will find four knobs which are as follows:

- Swing: controls the amount of swing applied to the timing of the pattern playback.
- Transpose: shifts the positions of the notes in the scale of the patterns.
- Intensity: controls the velocity of the patterns.
- Reverb: sets the reverb return level and size.

For the Kora the Transpose knob is replaced by Balance, which controls the velocity balance between the thumb and index finger elements of the patterns.

3.3.1 Mapping

All melodic instruments have two mapping modes: *Authentic* and *Chromatic*. By default, all instruments are set to *Authentic*, but you can alter this from the Mapping drop-down menu.

The mapping controls

When in *Authentic* mode, the instruments are set to a traditional heptatonic scale, mapped to the white keys of the keyboard. The black keys then contain special articulations like octaves, trills, percussive hits, etc.
When set to *Chromatic*, the instrument will play back in a standard 12-tone scale, removing special articulations from the black keys.

It is important to note that there are sometimes other articulations mapped to the higher velocities or different octaves, so that hitting a key hard will play the note back in a different style. For each instrument, play around to familiarize yourself with the different kinds of articulations on offer and where they are mapped.

Editing the Tuning

An example of the scale and tuning controls

It is possible to edit the scale and tuning of the instrument by clicking on the button to the right of the Mapping drop-down. This will open a window with several editable parameters. The window can then be closed by clicking on the button again, or by clicking on the "X" to the top left of the window.
In this window there is a Tuning preset drop-down, from which you can select and load a selection of instrument tuning presets. Beside this is the tuning edit table, which has two sections: the upper section is a bipolar table from which you can fine tune each note in the scale; the lower section either displays the notes in the scale. If a note has arrows beside it, this means that it can be changed by clicking and dragging on the note. The note will only move up or down a set or two, depending on the instrument and its traditional tunings.

Key-switches

The flute mapping differs slightly from the other melodic instruments with the inclusion of key-switches in the octave above the patterns. Pressing these will alter how the playback of the instrument behaves. The flute has many different and unusual articulations, but there are some standards for the key-switches:

- C2 returns the instrument to its default articulation selections. Generally, this means sustained notes, with some trills mapped to the higher octave and the black keys.
- Db2 selects short style articulations (like staccato).
- The other black keys select articulations in which the flute player also sings with the flute tones. There are several variations to choose from, so play around with these and explore the full potential of the instrument.

4 Credits

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