KORE SOUNDPACK

DISCOVERY SERIES

NORTH INDIA

OPERATION MANUAL

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Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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1. Welcome to NORTH INDIA!

Thank you for purchasing NORTH INDIA. On behalf of the entire Native Instruments team, we hope that this KORE SOUNDPACK will truly inspire you.

NORTH INDIA adds 30 new sounds to your collection of instantly usable KORE SOUNDS®. These KORE SOUNDS have been designed to integrate seamlessly into your KORE SOUND database. Also, like the KORE 2/KORE PLAYER factory content, all KORE SOUNDPACKS utilize the KORE 2/KORE PLAYER's Integrated Engines: You only need KORE 2 or KORE PLAYER to make full use of their sonic capabilities. Furthermore, the sounds have been equipped with dedicated Control Page assignments, putting the most important musical parameters right at your fingertips. Individual Sound Variations have been created for each KORE SOUND of this product, adding to the number of preconfigured sounds.

This manual will help you get started with your KORE SOUNDPACK. If you want to start immediately, proceed to section 3 "Installation and Activation". Please read that chapter carefully and fully, as it explains all the steps required to integrate the KORE SOUNDPACK into KORE 2/KORE PLAYER. Following the Installation chapter is an explanation of how to use the KORE SOUNDS within KORE 2/KORE PLAYER. If you are already familiar with KORE 2/KORE PLAYER, this will be straightforward, but it might be worth a look nonetheless. Finally, the last section of this manual adds some more details regarding the sounds that come with NORTH INDIA.

2. What is NORTH INDIA?

Inaugurating a new regional-themed series, this KORE SOUNDPACK journeys to North India to draw on the rich and varied musical heritage of Hindustani classical music. Packed with beautifully sampled classical instruments as well as some contemporary realizations, this sound pack is perfect for creating authentic classical performances or for adding North Indian textures to film scores, urban, pop or electronic productions.

North Indian classical music is a complex and distinct musical style which has evolved over many centuries. In its simplest definition, it is characterized by a highly ornamented melodic line above a static drone with rhythmic accompaniment. NORTH INDIA: DISCOVERY SERIES contains the two main instruments of Hindustani Music, the Sitar and the Tabla as well as other important North Indian instruments such as the male and female Tanpura, the Bansuri, the Harmonium or the Shehnai. See the carousel for more details.

Except for the Bansuri and Shehnai, all instruments have been recorded exclusively for this pack and were rendered highly playable via advanced scripting. The melodic instruments can be played in both the North Indian modal and microtonal context or in a chromatic fashion and feature extensive implementations of different glissandi and other ornaments, while the Tabla has been programmed to easily realize virtuosic rhythmic passages. With such an emphasis on authenticity, this pack brings the stunning sounds of North India into a contemporary format.

Utilising the power of KORE 2 and KORE PLAYER's KONTAKT, REAKTOR and GUITAR RIG engines, this soundpack also contains synthetic drones and melodic sounds that reference the influence of Indian music on western culture, from The Beatles to contemporary urban music.

3. Installation and Activation

The following section explains how to install and activate NORTH INDIA. Although this process is straightforward, please take a minute to read these instructions, as doing so might prevent some common problems.

3.1 Installing NORTH INDIA

After downloading the KORE SOUNDPACK, unzip the compressed archive you received from Native Instruments. It contains this documentation as a PDF file, as well as an installer application.

To install NORTH INDIA, double-click the installer application and follow the instructions on the screen. The installer application automatically places the new KORE SOUND content files into the folders that KORE 2/KORE PLAYER expects them to be in. In the course of the installation procedure, the installer application will ask you to specify another folder for additional files, like this manual.

3.2 Activating NORTH INDIA

When installation is finished, start the SERVICE CENTER, which was installed with KORE 2/KORE PLAYER. It will connect your computer to the internet and activate your NORTH INDIA installation. In order to activate your copy of NORTH INDIA, you have to perform the following steps within the SERVICE CENTER:

1. Log in: Enter your Native Instruments user account name and password on the initial page. This is the same account information you use in the Native Instruments Online Shop, where you bought your KORE SOUNDPACK, and for previous Native Instruments product activations.

Activation of KORE SOUNDPACKS is optional. However, it will give you access to free updates.

2. Select products: The Service Center detects all products that have not yet been activated and lists them. You can activate multiple products at once – for example, KORE 2/KORE PLAYER and your KORE SOUNDPACK, or several KORE SOUNDPACKS at once.
3. Activation: Proceed to the next page. The Service Center now connects to the Native Instruments server and activates your product.
4. Download of updates: When the server has confirmed the activation, the Service Center automatically displays the Update Manager with a list of all available updates for your installed products. Please make sure that you always use the latest version of your Native Instruments products to ensure proper functioning.

Now you are ready to use NORTH INDIA. Please start KORE 2/KORE PLAYER in standalone mode. This will trigger the database update process automatically and integrate the new KORE SOUNDS into KORE 2/KORE PLAYER's database. The next chapter will explain how to use the new sounds in KORE 2/KORE PLAYER.

! Downloading updates is optional. After activation is complete, you can always quit the Service Center.

4. How to use NORTH INDIA

The following sections will give you a brief overview over some of the basic operations: you will learn how to search for sounds you have in mind and how to load and play KORE SOUNDS. For details about these topics please consult the KORE 2/KORE PLAYER manual.

4.1 Finding a KORE SOUND

All NORTH INDIA KORE SOUNDS are directly integrated into KORE 2's/KORE PLAYER's database. They will show up in the Browser's Search Results List alongside all the other sounds that match your specific search criteria – for example, a combination of KORE Attributes. To restrict your search results to a specific pack's sounds, select the desired SOUNDPACK from the SOUNDPACK column of the Attributes List. The Search Results List shows the entire content of the particular pack.

There is another way to restrict your search results to a specific pack's sounds: simply enter the KORE SOUNDPACK's name into the Quick Serch Field of the Browser, or even just a part of the name – for example, "refraction" The corresponding KORE SOUNDS automatically appear on the Search Results List.

If you don't want to limit the results to a specific KORE SOUNDPACK, but do want to have the display grouped by SOUNDPACKS, you can have the list sorted by SOUNDPACK Banks; to do so, right-click the Search Results List's header row and activate the Bank entry in the upcoming context menu. This will show each KORE SOUND's bank name in a new column of the Search Results List. Now click the Bank column's header to sort the list according to this specification. This will group the results.

KORE 2 users: if the Soundpack column is not visible in the Attributes List, right-click on the Attributes List header and select the SOUNDPACK entry in the upcoming context menu.

4.2 Loading the KORE SOUND

4.2.1 Loading a KORE SOUND in KORE PLAYER

After you have located your KORE SOUND, load it by double-clicking its Search Results List entry. Alternatively, drag it onto KORE PLAYER's Global Controller. Both actions replace the currently loaded KORE SOUND – if it is the first KORE SOUND you are loading after start-up, it will replace an "empty" KORE SOUND.

When the KORE SOUND is loaded, its Control Page is mapped onto the Global Controller. This pre-assigned Control Page gives you access to the KORE SOUND's most important parameters. The exact buttons and knobs assignments on the Control Page are specific to each KORE SOUND, as well as the number of Control Pages. With the Global Controller, you also have immediate control of the KORE SOUND's Sound Variations. Please refer to the KORE PLAYER manual for details about Control Pages and Sound Variations.

Saving the KORE PLAYER Settings

If you are using KORE PLAYER as a plug-in in a host environment, you can save the positions/states that you set on the eight knobs and eight buttons of the Control Page: saving the host's project saves all settings of all incorporated plug-ins (among others, KORE PLAYER) and thus all changes you made to the loaded KORE SOUND.

4.2.2 Loading a KORE SOUND in KORE 2

After you have located your KORE SOUND, load it by double-clicking its entry from the Search Results List. Alternatively, drag it onto KORE 2's Global Controller. Both actions will replace the KORE SOUND currently focussed on – if it is the first KORE SOUND you load after start-up, it will replace an "empty" KORE SOUND. If you want to place the KORE SOUND into a specific Channel Insert within the Edit Area (instead of loading the KORE SOUND into the focused one), you can also drag it directly into the Sound Matrix.

When loaded, the KORE SOUND will automatically be displayed so that its Control Pages are directly mapped onto the Global Controller. For each KORE SOUND, a User Page has been pre-assigned, granting direct access to the KORE SOUND's most important parameters. The exact buttons and knobs assignments on the User Page are specific to each KORE SOUND. With the Global Controller, you also have immediate control over the KORE SOUND's Sound Variations. Please refer to the KORE 2/KORE PLAYER manual for details about Control Pages and Sound Variations.

If you have the full version of the Integrated Engine installed, you can also open the engine itself. Just click the Plug-in Editor Icon within the Global Controller, or double-click the Channel Insert within the Sound Matrix. This will give you full access to all parameters of the KORE SOUND, exceeding the options in KORE 2's Control Pages. Note that this will change the status of the KORE SOUND: After you have opened a KORE SOUND using its associated plug-in editor, it will always require the respective fully licensed plug-in version to be installed (of course, opening a KORE SOUND as full version does not alter the original KORE SOUND file, but creates a copy that you might want to save as a separate file later). If you do not use the full editor for editing a KORE SOUND, but instead only use the Control Pages and the Sound Variations, the KORE SOUND will again be loadable without the full license.

Saving the KORE 2 Player Settings

After you have tweaked the KORE SOUND to your liking, you can save it to the User Sounds content by dragging it back onto the Search Results List – just the opposite of the loading process. Within the Save List, you can edit the KORE SOUND's name, enter your name as the KORE SOUND's author and so on. When finished, click the Done Button to save the KORE SOUND to the database. It is now available for each project you are working on.

Alternatively, the KORE SOUND and all changes you made are also saved when you store the Performance of KORE 2. However, the KORE SOUND is not automatically added to the Browser's database. The same happens if you are using KORE 2 as a plug-in: saving the host's project saves all settings of all incorporated plug-ins (like KORE 2) and thus all changes you made to the loaded KORE SOUND.

If these terms are completely new to you, chapter 3.1 of the KORE 2 manual provides general information on how to use the modwheel on C1 to trigger different slides, and chapter 3.1.4 covers the Control Page system and Sound Variations.

5. Content Description

The following paragraphs describe the NORTH INDIA SOUNDPACK content, how to use and perform it and provides some general information on North Indian classical music.

However please note that this documentation is not intended to be an extensive treatise on Hindustani music. You can find plenty of information on the web, plus there is a small list of recommended books in the appendix.

Indeed, we have chosen to not even use Indian terms throughout this documentation, e.g. when distinguishing between the tabla drums we'll simply refer to them as the left (or low) drum and the right (or high) drum, not "dayan" and "bayan". This is a tradeoff since many of these terms are impossible to be translated well into simple English. So for the sake of simplicity we have chosen to do so.

5.1 Quick Tour

NORTH INDIA consists of 30 KORE SOUNDS in these main three categories:

- acoustic instruments
- contemporary interpretations of acoustic instruments
- synthetic drones

There are seven acoustic instruments: sitar, tabla, bansuri, two tanpuras, harmonium and shehnai. Those instruments with the prefix "Authentic" are programmed to enable you to play the most authentic sounding performance in a North Indian classical music context. The contemporary instruments use the same samples but are intended to be used in a non traditional context. Finally, the drones are purely synthetic and a counterpart to the acoustic tanpura.

5.2 A Small Introduction to North Indian Music

Again, this is not a textbook on North Indian Music. However, we still would like to give you some background information to help you better understand this fascinating music.

North Indian classical music (or Hindustani music) is a deeply rooted Indian music style. This music has a tradition spanning centuries. There is also another classical music style in India called “South Indian Music” or respectively “Carnatic” music. While the two styles share some similar roots and principles, they diverged centuries ago and are different in many ways today. The sitar and tabla for example are not being used in South Indian music.

A North Indian ensemble usually comprises three elements:

- melodic instrument (sitar, bansuri) or a singer
- rhythmic accompaniment (tabla)
- drone playing the root and fifth or fourth scale degree (tanpura)

North Indian music is monophonic, modal and contains no harmonies or modulations. The choice of a particular root note is up to the musicians and their instruments (for example many sitars are tuned to C sharp).

Melody

A concept of Indian music that is quite well known in the western world (but also very often misunderstood) is the concept of raga. It is not easy to define a raga, but to put it in simple words, a raga is more than a scale and less than a composition. A raga is not just defined by a scale but also by certain melodic movements, ornaments, dominant notes, note variations being used when moving through scales and much more. The theory and performance of ragas is a complex matter and we have chosen not to implement any form of a “Raga Selector Knob”, since it is simply not possible. However, you have the option to play the instruments in one of the ten scales known as “Thaat”.

Any raga can (more or less) be attached to one of ten scales known as “Thaat”. A “Thaat” is merely a scale and is used to classify ragas. You will find a list of all ten scales in the appendix of this document.

Some suggestions when trying to perform a melodic instrument:

- always choose a particular scale, do not perform with SCALE set to “Chromatic”.
- try to play as many ornaments as possible like glides and bends.
- from the seven notes of a given scale, you do not need to play all seven notes, you could just pick five or six of them. The first and fifth scale degree however should always be included.
- usually in a raga performance, one note (not necessarily the root note) is more prominent than others.

Rhythm

Similar to the concept of the raga is the concept of tala. A tala in its simplest definition is a meter or metric phrase structure. For example, the most common tala in North Indian music is called tintal and is structured in four measures with 4 beats each: 4 + 4 + 4 + 4. When you play a C5 with the “Authentic Tabla” Kore Sound, you will hear a kind of basic groove (called theka) in this particular tala.

Putting together a piece

There are two basic sections in a performance of Northern Indian music

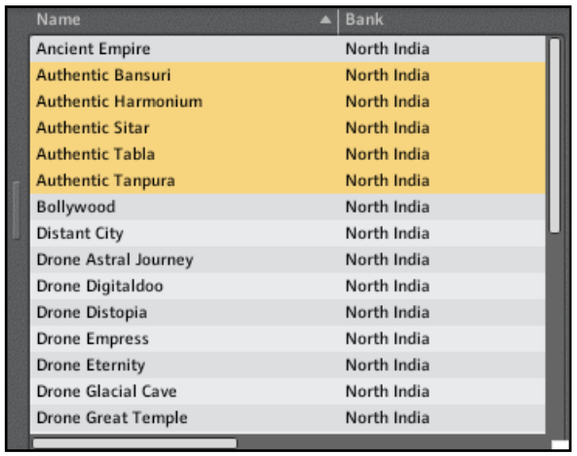
- a slow section without tabla accompaniment, just the melody instrument unfolding the raga supported by the tanpura drone. This section has no meter and no definite rhythm.
- a section with tabla accompaniment. This section is in a specific meter (tala) and can have a moderate tempo where a fixed composition is stated to a very fast improvisational section.

But again, this little chapter cannot substitute for listening to the actual music. For a tiny list of very famous performers, check the appendix. You will also find a small list of suggested books.

And now have fun exploring NORTH INDIA!

5.3 The Acoustic Instruments

NORTH INDIA comes with seven acoustic instruments. Five of them carry the prefix "Authentic" in their KORE SOUND name:



We'll discuss these instruments in detail in this chapter.

5.3.1 Common Elements of the "Authentic Instruments"

There are certain features that are used in more than one instrument and which are described here.

Scale (Thaat)

The Scale knob is available for the melody instruments (sitar & bansuri). This knob allows you to constrain played notes to one of ten available scales. When a particular scale is chosen, the seven white keys on the keyboard always respond to the seven "Indian" scale degrees:

- C → Sa
- D → Re
- E → Ga
- F → Ma
- G → Pa
- A → Dha
- B → Ni

The black keys are also remapped:

- Db → Re
- Eb → Ga
- Gb → Ma
- Ab → Dha
- Bb → Ni

Turn the SCALE knob all the way to the left to play the instrument chromatically.

Microtuning

The second user page of the sitar and bansuri enables you to retune the individual scale degrees by cents:

The button EQUAL TMP switches from Equal Temperament to user tuning, so make sure to turn it off when making adjustments to the tuning. The pre-programmed user tuning has been set to just intonation.

Drone

The sitar and bansuri KORE SOUNDS are equipped with a small version of the (male) tanpura:

Clicking on RUN starts the typical tanpura accompaniment sequence. 4TH/5TH lets you choose the scale degree of the first note, and DRONE VOL sets the volume of the tanpura.

5.3.2 The Sitar

The sitar is a plucked instrument (a type of lute) and is considered as the main melody instrument of North India. It is the rich sound of this instrument many people in the western world associate with Indian music, since it was introduced to the Western world in late 60s rock music by people like George Harrison and Ravi Shankar.

The sitar is a complex instrument, both in terms of playing but also from the way it is constructed. In the main sitar KORE SOUND “Authentic Sitar” we have tried to capture the fascinating resonating qualities of this instrument as well as to come up with a simple yet powerful way of performing authentic sounding performances with a 61 MIDI note keyboard.

The sitar usually has 19 metal strings, which are subdivided into these three categories:

- the main melody string (plus one auxiliary main melody string) - on this string the various melody tones and bends are produced.
- five “accompaniment” strings - these strings are tuned to the tonic and fifth and are accompanying the melody.
- eleven resonance strings - these strings are located under the other seven strings and are tuned to a specific scale. The resonance strings are excited by the playing of the other seven strings.

The following is important about the sitar and its playing:

- due to the construction of the frets, bends on the melody strings can easily be performed. This kind of ornament is very common and important in Indian music.
- accompanying the melody by frequently striking the accompanying strings – especially in the slow introductions – is a characteristic trade of sitar playing.
- due to the nature of the instrument and the modal principles of Indian music, the sitar is best played in a modal context (see below) and not in a chromatic fashion.

Now let's get familiar with this instrument; load the KORE SOUND "Authentic Sitar". The sitar samples alone have 1.7 GB in size, so the loading process may take a while. There is also a smaller KORE SOUND called "Sitar (small)". It features the same programming but with far less samples (hence less authentic).

Upon loading, you will see the following user page:

Now, with your right hand, play some notes in the range C2 to G4: these are the plucked notes from the main and auxiliary melody string.

Now, with your left hand, play the black keys in the octave C1 to B1, that is (Db1, Eb1, Gb1, Ab1 and Bb1) and make sure to play them from the lowest key (Db1) to the highest key (Bb1) quite fast, as if you would strum a guitar chord or perform a glissando on a harp.

Practice both hands: play melody notes with the right hand and accompany yourself with the left hand playing the black keys.

Now let's perform some bends:

- play and hold E1, then play C3: you'll hear a bend of a major second down (that is from D3 to C3) while still holding E1, play C3 softer and louder: the bend will be performed slower and faster.
- you can also do the opposite: first play and hold C3 (a normal note is played) and then play E1: the same bend will be performed (we call this dynamic key switches).

Now, with the same key switch (E1) play some other notes from C3 to C4: notice that not all bends are major seconds! This is the case since SCALE is set to "Major" and E1 triggers a bend from the note above in the scale, and not merely a fixed interval. This allows you to perform various bends without having to worry about playing notes outside a given scale!

It's up to you now to explore other key switches. Try the white notes in the octave from C1 to B1:

- C1 will trigger the same note again.
- D1/E1 will trigger a bend from the note below/above the scale to the played note.
- F1/G1 will trigger a bend from the note a third (scale wise) below/above the played note.
- A1/B1 will trigger always trigger a bend from the note a fourth below/above the played note.

Last but not least there are eleven resonance strings tuned to a given scale. These strings are mapped to Ab4 and the white keys from A4 to C6. Note these strings are not really played during a performance, they are initially strummed at the beginning of a performance to establish the mood of a given scale. You can imitate this by playing a glissando on your MIDI keyboard; play the white keys from C6 downwards.

There are times when you need to play the sitar in a chromatic fashion. You can do so by turning the Scale knob all the way to the left ("Chromatic" will appear in the display). This mode will change the following settings:

The key switches for the bends are now chromatic and also triggered by the black keys. Thus, the accompanying strings are triggered an octave below. Also, the resonance strings are now chromatically mapped. Needless to say, this is more or less impossible on a real sitar.

Here are the remaining controls of these powerful instruments:

C/C#: this changes the overall instrument from C to C#. Note that the sitar is originally tuned to C#, the overall sound will sound better when played in this key.

Random: Enables randomization of the melody notes.

Rel Vol: Controls the volume of the release sound when Short is activated.

SHORT: The melody notes are usually not dampened or stopped. If Short is activated, the note will be dampened and a release sound (that of the metal plectrum touching the strings) will be heard. This is especially useful in a fast passage.

You can also turn up the mod wheel, this will also dampen the melody string.

RESO VOL: controls the volume of the resonance strings. When turned all the way to the left, no sound is heard and no notes will be triggered, resulting in a lower voice count.

The other controls refer to an EQ and to the included drone (see chapter 5.3.1 "Common Elements of the Authentic Instruments" for a discussion).

5.3.3 The Tabla

The tabla is a set of two small drums played with the hands. They could be thought of two miniature timpani drums, since both drums produce a more or less defined pitch. The tabla is the main percussion instrument of North India and is used for the accompaniment of both melody instruments (sitar, bansuri, sarod etc.) and singers, but is also used in a solo context.

The following is important to note about the tabla and its playing:

- the right drum is smaller and produces a clear pitch, usually C#.
- the left drum is bigger and is known for its characteristic pitch slides.
- there are open (aka resonant) and closed (aka non resonant) strokes for each drum.
- each stroke is named with a specific syllable, e.g. Ta, Ti, Ke, Dha etc.

The KORE SOUND "Authentic Tabla" is the main tabla patch of this KORE SOUNDPACK. The playable keys range from C1 to C6 and are structured in the following manner:

- C1 - B1: strokes of the left drum (use the modwheel on C1 to trigger different slides)
- C2 - B2: strokes of the right drum
- C3 - E3: compound strokes (stroke left and right drum, use the modwheel on C3 and D3 to trigger different slides of the left drum)
- F3 - B3: various closed and open strokes triggered both on note down and up

The compund strokes are not static samples but triggered in real time from the left and right single strokes. This yields a much more realistic and dynamic result and enables you to tune the right drum without altering the pitch of the left drum.

- C4 - B4: white keys trigger several rolls, the black keys trigger a kind of ending cadence (always 8 beats in length). You can change the velocity with the pitch bend wheel while the phrase is playing.
- C5 - B5: each note triggers one basic groove in a specific meter (i.e. tala).
- C6: a loud and resonant stroke of both drums, usually played at the end of a performance

For additional information, please refer to the list of tabla strokes in the appendix of this document.

Now let's continue with the control assignments of the two user pages. The first user page offers the following controls:

The SPEED Knob and the LATCH button refer to the groove section (C5 - B5). Pressing LATCH will keep the groove playing even when you release the note. SPEED changes the tempo of the groove, from quarter notes to triple time.

Next to the right, the SUB DIV Knob changes the rhythmic subdivision of the rolls and phrases from C5 to B5 from 4 (sixteenths) to 7 (septuplets). SPEED changes the tempo of the rolls to double time.

The TEMPO knob enables you to accelerate the grooves and phrases temporarily and independently from the master tempo. Tempo acceleration appears frequently in North Indian music.

The remaining knobs and buttons control Reverb, EQ and Compression.

The second user page offers controls for mixing and tuning the two drums:

When you trigger a groove from C5 to B5, you can still trigger other strokes or rolls. While the loop will continue to play internally, there will be no sound output until the notes outside this range are released. This is a great way of adding variety, accents and fills to the static groove.

Here you can change the tuning, pan position and volume of the drums independently from each other. As stated above, the right drum is tuned to C#, which sometimes might cause a conflict with your song, so try tuning the right drum to C or D.

5.3.4 The Bansuri Flute

The Bansuri Flute is a transverse flute made of bamboo with open holes. In North Indian music the bansuri functions either as a solo instrument accompanied by the tabla and tanpura, or as an auxiliary melodic instrument supporting a main melody instrument like a sitar.

Since the bansuri has open holes, it is able to achieve all kinds of ornaments and bends (glissando), which again, is so important in this style of music. The KORE SOUND "Authentic Bansuri" lets you play a variety of ornaments and bends.

Load up the KORE SOUND "Authentic Bansuri":

Play and hold G3, then play G2: the pitch slides down and the note decays. You can also first play G2 and then G3: the note is faded in with a small slide upwards. There is a number of slides available, which are triggered in the range of C2 to B2 (see below).

- C2/Db2: volume decay slow/fast
- D2/Eb2: intensity increase slow/fast
- E2: vibrato (same as mod wheel)
- F2/Gb2: bend down/up
- G2 - B2 : various bends

You can also combine the above bends. Try playing E2 first (vibrato) and then C2 (slow fade out).

Now again play and hold G3 and then play G1: notice the little ornament which is executed on the G3. The notes from C1 to B1 trigger different ornaments. Of course you can combine the ornaments with the bends. As with the sitar, the ornaments are implemented as dynamic key switches meaning, you can play the key switch first and then the note, or vice versa. The latter is great for making ornaments and bends on the same note. Ornaments are such an important element in Indian Music. Don't try to play as many notes as possible, try to concentrate on some notes and come up with many different ornaments by combining notes from the range C1 - B1 and C2 - B2.

Just as with the sitar, it is important to note the difference between the authentic modal approach and Scale being set to chromatic. When Scale is being set to anything other than "Chromatic", the ornaments will always be in scale. A complex ornament like the one triggered by B1 will therefore sound much more natural.

The speed of the played ornaments can be set with Ornt Time.

5.3.5 The Tanpura

The Tanpura is an unfretted lute with four strings. It is solely used as an accompanying drone instrument. NORTH INDIA comes with two tanpuras, the larger male tanpura and a smaller female tanpura. The KORE SOUND "Authentic Tanpura" is a male tanpura.

Load up the KORE SOUND "Authentic Tanpura":

You can play this instrument either by playing MIDI notes or by pressing the Run button and triggering a typical accompaniment sequence. The tuning of the four strings is always like this:

- the 1st string is tuned to either the 4th or 5th scale degree.
- the 2nd and 3rd strings are tuned to the 1st scale degree (root note).
- the 4th string is also tuned to the 1st scale degree (root note), an octave below the 2nd and 3rd string.

In a performance, the tanpura player usually strums the four strings from the first to the fourth string, regardless of the tempo. The function of the tanpura player is to supply a steady drone.

If RUN is activated, you can control the sequence with the following controls:

- TEMPO controls the speed of the sequence.
- ROOT sets the root note.
- 4th/5th chooses the note for the 1st string.
- Buzz changes the timbre of the plucked strings. Technically speaking, it triggers different recorded samples. The buzzing nature of the strings is achieved by a little thread under the string and the bridge. By adjusting this thread, the string either buzzes or not.

The goal is to achieve a unified stream of tones, which is why we included controls for the volume envelope (Attack and Decay), Stereo image and added a Delay control to thicken up the sound. In North India, often an electronic tanpura or a tanpura CD is used to supply the drone, so it's ok to adjust the sound even if it is not possible to get that result from an acoustic instrument.

As a special feature, we have included controls for changing the tuning and panorama of the individual strings:

Check out the sound variations of this KORE SOUND. You can get pretty drastic results by morphing though them. Also try the smaller version of the Tanpura by loading the sound "Female Tanpura", or try the KORE SOUND "Two Tanpuras" with both tanpuras included.

5.3.6 The Harmonium

The Indian harmonium originates from the European harmonium, but it was modified over the decades to better suit the practices of Indian music. It is played with the right hand while the left hand operates a bellow, supplying the air for producing tones. The Indian harmonium is used as an accompanying instrument for singers and solo tabla performances. It then plays a single melodic line which depicts the tala and raga.

Please load the sound “Authentic Harmonium”:

Here’s what you can do when performing the harmonium:

- change the sound by adjusting the two stops with the Stop 1 Vol and Stop 2 Vol knobs.
- add an octave to the played note by activating Coupler.
- dampen the instrument with Damp (this simulates the actual damping mechanism).
- finally, adjust the sound of the key clicks with Noise Vol.

This last knob also controls the volume of the sound of the bellow. This sound is heard when you turn the mod wheel up and down. The pitch bend wheel controls the volume of the instrument and lets you simulate the changes in volume of a real harmonium.

Note that Indian harmoniums are supplied with a drone stop. You can activate it with Drone and set its Volume with Drone Vol. You can change the root note with Root Note, switch from a perfect fifth to a perfect fourth with the 4th/5th button and even adjust the volume of this second note with 4th/5th Vol knob.

The harmonium can also be tuned microtonally on the second user page.

There is also a version with a Leslie added to the sound. The KORE SOUND is called “Rotor Harmonium”.

5.4 The Contemporary Instruments

The contemporary instruments have the same acoustic samples as the authentic instruments as their starting point but feature extensive programming:

- "Ancient Empire" - A koto like instrument made from samples of the sitar's sympathetic strings being plucked and the least resonant tanpura samples.
- "Distant City" - playable resonances from the sitar.
- "Forbidden City" - a layered bansuri flute and harmonium create the base of this patch. It can sound anywhere between an organ and a Tibetan horn.
- "Over the Ganges" - a lonesome pad from the sound of the bansuri flute.
- "Prepared Sitar" - a layering of the sounds of a Mizrab (a metal plectrum) muting the strings and the sympathetic strings. The volume of each can be adjusted to produce unusual percussive sounds.
- "Tanpura Strings" - easily playable chromatic tanpura with adjustable buzzing. It is important to note that the buzz control does not alter the volume of the buzzing, but switches between layers, so a note can be played at full buzz and left ringing as secondary buzzless notes are played on top.
- "Easy Pluck" - a stripped down version of the Authentic Sitar. It has none of the Kontakt scripting featured in the Authentic Sitar patch and, thus, is playable chromatically in an equal tempered scale. "Easy Pluck" also features Tanpura samples in the lower registers, for manual accompaniment. The modwheel switches between a static note, a halftone bend up and a halftone bend down.

There are also 3 additional Kore sounds, based on this patch, that utilize the power of guitar rig to create different flavors; from Bollywood to 60s psychedelia. For each of these patches, the playing style of the sitar remains the same as the "Easy Pluck" patch.

5.5 The Drones

The included synthetic drones were created using REAKTOR's Metaphysical Function ensemble. All ten patches are based on the North Indian musical concept of drones as accompaniment. In keeping with this concept, each drone features an open fifth with a root pitch adjusted using the PITCH Kore control. The MOVEMENT button switches on or off a pattern that mimics the traditional playing style of the Tanpura.

The controls are spread across two pages. The first page (Main Controls) controls the main effect parameters as well as the switches for activating/deactivating the effects:

The second page (Additional Controls) allows for further tweaking of these effects as well as a master volume knob:

The MIDI button (situated at the top right of the first page) when activated allows the user to control the main pitch of the drone with his MIDI keyboard or sequencer. This can be a useful tool for some unique sounding bass lines.

A MUTE button was also included to stop the drones pre-effects, so that once the sound stops, the delay and reverb trails continue for a natural sounding finish.

6. Credits

Concept and Specification: Nicki Marinic

Sound Design: Adam Hanley

Kontakt Script Programming: Nicki Marinic

Samples recorded by Native Instruments in Berlin

Documentation written by Nicki Marinic

The instrument pictures were kindly made available by India Instruments GbR Berlin (www.india-instruments.de)

7. Appendix

7.1 Suggested Reading & Listening

“The Raga Guide” by Joep Bor - ISBN 0-9543976-0-6

“My Music, My Life” by Ravi Shankar - ISBN 1-60109-005-6

“Music in North India” by George E. Ruckert - ISBN 978-0-19-513993-8

“Learning the Tabla” by David Courtney - ISBN 0786607815

Suggested Listening would include recordings of Nikhil Banerjee, Vilayat Khan, Ravi Shankra (all sitar), Hariprasad Chaurasia (bansuri) and Zakir Hussain (Tabla) among many others…

7.2 Detailed List of Tabla Strokes (Bols)

Here’s a list of the different tabla strokes, phrases and thekas of the “Authentic Tabla” KORE SOUND:

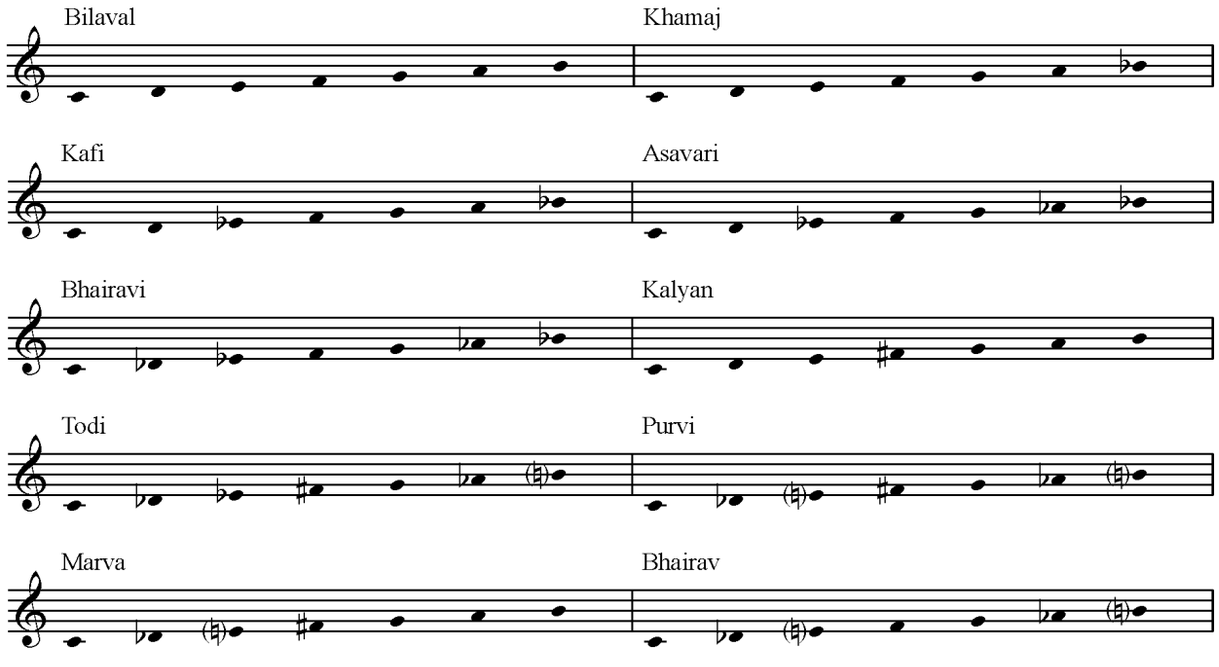
NOTE	STROKE
C1	Ga (change with mod wheel)
Db1	Ghin
D1	Ga Down 1
Eb1	Ga Down 2
E1	Ga Down 3
F1	Ga Up 1 (change with pitch bend)
Gb1	Ga Up 2
G1	Ga Up 3
Ab1	Ki

NOTE	STROKE
A1	Ka
Bb1	Ke
B1	Kat
C2	Na
Db2	Na (Damp)
D2	Tin
Eb2	Tun
E2	Di
F2	Ti
Gb2	Ti (Ghost)
G2	Re
Ab2	Ta
A2	Te
Bb2	Tik
B2	Tak
C3	Dha (change with mod wheel)
Db3	Dha (change with pitch bend)
D3	Dhin (change with mod wheel)
Eb3	Dhin (change with pitch bend)
E3	Dhun (change with mod wheel)
F3	Na - Ka
Gb3	Ta - Ke
G3	Ti - Te
Ab3	Ki - Te
A3	Na - Re
Bb3	Ti - Re
B3	Tik - Tak
C4	Roll: Ti Re Ki Ta Ta Ke Ti Re Ki Ta
Db4	Tihai 1

NOTE	STROKE
D4	Roll: Na Ka Ti Ra Ki Ta Ta Ka
Eb4	Tihai 2
E4	Roll: Ti Ta Ka Ta Ga Di Ge Na
F4	Roll: Ki Ra Na Ka Ta Te Ki Ra Ta Re Ki Ta
Gb4	Tihai 3
G4	Ta - Ti Ta Ki Ra Na Ka
Ab4	Tihai 4
A4	Roll: Dha - Ti Ta Gi Ra Na Ga Ta Ka
Bb4	Tihai 5
B4	Roll: Dha - Ti Ta Gi Da Na Ga Dhin Na Ta Ga
C5	Tintal (4+4+4+4)
Db5	Ank (2+4+3)
D5	Jhaptal (2+3+2+3)
Eb5	Chatrus (4+2+2+2)
E5	Dadra (3+3)
F5	Dipchandi (3+4+3+4)
Gb5	Lokmata (2+2+2+2+2+2+4+2+1)
G5	Rupak (3+2+2)
Ab5	Arjun (4+2+4+2+2+4+2)
A5	Kaherava (4+4)
Bb5	Bhairav (4+4+2+4+2+2+4)
B5	Dhammar (5+2+3+4)
C6	Final Stroke of Performance

Here's a chart with short explanation of the used bols. Please note that some syllables are called differently depending on the particular tabla style.

BOL	DRUM	SOUND	SOUND DESCRIPTION
Ka	Left	Closed	common stroke, flat slapping sound
Kat	Left	Closed	more accentuated than Ka, alternative to Ka
Ke	Left	Closed	softer and lighter than Ka
Ki	Left	Closed	similar to Ka
Ga	Left	Open	most common stroke of the lft drum, through various degress of pressure the pitch can be raised or lowered
Ghin	Left	Open	similar to Ga, but without modulation and louder
Na	Right	Open	most common stroke of the right drum, sharp sound with defined pitch
Tin	Right	Open	softer and less overtones than Na
Tun	Right	Open	soft and resonant tone, no muting, contains more bass than Na or Tin
Di	Right	Open	harder than Tun
Ti	Right	Closed	flat tapping sound
Re	Right	Closed	flat tapping sound, slightly different than Ti
Ta	Right	Closed	flat tapping sound, slightly different than Ti or Re
Te	Right	Closed	flat tapping sound, slightly different from the above
Tik	Right	Closed	sharp closed sound, with some tonality, accentuated version of Tin
Tak	Right	Closed	sharp closed sound, played often in conjunction with Tik
Dha	both	Open	very common sound, combination of Ga and Na
Dhin	both	Open	very common sound, much softer than Dha, combination of Ga and Tin
Dhun	both	Open	combination of Ga and Tun

7.3 List of Scales (Thaat)

Here's a list of the ten different scales used by the SCALE remapping feature: