

# Instrument Introduction

Ancient World: Instruments of Antiquity is an exciting journey to the origins of musical sound. All of the most important instruments of antiquity have been extensively sampled for the first time ever.

Master Luthier, Nikolaos Brass' collection of ancient Greek instruments forms the basis of Ancient World. Brass dedicated his life to the research and re-creation of ancient musical instruments, using the same methods and materials which were used in ages past. Some of the instruments, such as the Syntonon and Copperphone, are extremely rare with only two or three existing worldwide! The multi-sampling of these beautiful instruments presents a rich array of String, Wind, and Percussion implementations.

All of the performance techniques have been meticulously sampled. For instance, the string instruments have articulations such as plucked, with and without vibrato, harmonics, plectrum, tremolo, arpeggios, glissandos, behind the bridge, slides, and more. In some cases, up to thirty samples per note have been recorded.

Beyond the multi-sampled instruments, Ancient World contains an extensive collection of looped performances for almost all the instruments presented in the collection. The loops are categorized in Slow, Medium, and Fast tempos and automatically adapt to BPM changes.

In order to expand the geographical and historical boundaries, many rare instruments from Medieval times, the Mediterranean basin, as well as the Middle-East have been added.

Ancient World is an indispensable tool for composers who are active in film, TV and video games.

# **USER INTERFACE**

Ancient World's interface is simple and easy to use. The controls include:

REVERB - This knob controls the amount of reverb added to the instrument sound. At the top right of the interface, there is a window with a drop-down menu where you can choose between ten different convolution reverbs, each emulating a different type of ethereal and ancient space.

TUNE - A bi-polar knob that shifts the samples/loops up or down in pitch by a half step.

BASS - A bi-polar knob that allows you to increase or decrease low end.

TREBLE - A bi-polar knob that allows you to increase or decrease high end.

ATTACK, DECAY, SUSTAIN, RELEASE - These 4 knobs are your basic ADSR: controlling the shape and sound of the samples.



# INSTRUMENT INFORMATION

Ancient World includes eleven string instruments, eight wind instruments, and thirteen percussion instruments. Additionally, almost every instrument comes with a set of inspiring looped performances.

The GUI was designed to be simple and straight forward. Below are a few helpful notes as to how the instrument patches are organized and laid out.

**Instruments (Keyswitches) -** Not all instruments have keyswitches. Only in the instruments with multiple articulations will you find keyswitches. The active articulation will be displayed in Kontakt's "Info" bar at the bottom of the player. Please see the "Ancient World Keyswitch List" document in the "Documentation" folder to see the articulations available for each instrument.

**Extended Range Patches -** We wanted to give users as much flexibility as possible while still maintaining the original sound and feel of each unique instrument. For this reason we created Extended Range patches which expands the playable range of every chromatic instrument. These patches allow you to go beyond the capabilities of these ancient instruments and take your sound into uncharted territory.

**Loops -** We recorded a diverse collection of tempo-syncing performances for almost all instruments (with only a few exceptions). These performances are a mixture of both ancient songs as well as modern-sounding melodies. The loops are categorized by speed, root key (when applicable), and time signature (percussion only).

The speed of the loops have been broken into three separate categories; slow, medium, and fast. Each speed pertains to the BPM range in which the loops were recorded. As stated above, all loops will tempo sync to your DAW and will stretch as far as you want them to. However, you may begin to hear slight distortions once you begin stretching these performances outside the designated BPM ranges.

Some loops are in different music scales such as the Aeolian, Dorian, Phrygian, Pelog, and others. All such loop patches have the scale type in the name.

Percussion loops do not have a speed label because they can be stretched much further than the melodic loops. All percussion loops are organized by time signature.

**SLOW = 60-90 BPM** 

**MEDIUM = 90-120 BPM** 

**FAST = 120-150 BPM** 

**Multis -** We included seventeen multis which allow you to quickly and easily load several different instruments together and generate interesting and complex sounds in a single instance of Kontakt.

# INSTRUMENTS OF ANCIENT WORLD -Strings-

#### **Kithara**

The Kithara was considered the "professional" instrument of antiquity, and the public highly regarded kithara players. This stringed instrument had a robust construction with two short arms and a characteristic square soundboard. It began with just three strings but evolved to twelve strings during the 5th Century BC. The Kithara was used as a solo instrument but also for song accompaniment. Some of the most important musical forms of antiquity have been created through the development of Kithara playing. Kithara competitions were common and attracted a large audience. One of the most well-known kithara players was Terpandros from the island of Lesbos.

# Lyra

The Lyra was one of the most important and well-known stringed instruments of Greek Antiquity. It originally came from Thrace and was related to the cult of Apollo. It had a nice sound and color but limited sound and volume, hence its performance was restricted to rather small chambers (an equivalent of our chamber music).

The soundboard of the instrument was originally made of tortoise shell, which was later replaced with wooden replicas. A membrane made of cow skin covered the soundboard and contributed to its particular sound.

The Lyra had many variations in size and string number (from 3-12 strings, with 7 strings being considered the ideal choice). The instrument was played with the fingertips and the plectrum as well.

The Lyra was very popular among amateur musicians (unlike the Kithara, which was considered a professional instrument). Ancient World offers three different Lyra types:

Lyra 1 is a "classic" seven-string instrument with a wooden soundboard

Lyra 2 is the "original" version with seven gut-strings, antelope horns, and tortoise shell

Lyra 3 is the "majestic" version, with 12 strings, called Apollo Lyra.

#### **Pandoura**

The Pandoura was one of the most ancient instruments, its origins dating back to Mesopotamia in the 3rd millennium BC. Over the centuries, the Pandoura "traveled"

through Egypt, Cyprus, and eventually reached Greece during the 4th century BC. The most important feature of this medium-sized instrument was its fretboard, which was used by the left hand of the player to shorten the length of the strings. In this respect, its concept has influenced the development of all the fretted and fretless instruments throughout the history of music: modern guitars, lutes, mandolin, the violin family, and so on. The small soundboard had a tortoise shell shape and was covered by skin. It had 3-4 strings and was mostly played by women. Through the centuries, several variations of this instrument have been produced ("Thambura" in the Byzantine era, "Tambura" in the Middle East, and "Bouzouki" in modern Greece).

#### **Phorminx**

The Phorminx was probably the most ancient string instrument of the Greeks. According to Homer, the Phorminx sounds were pure and pleasant to the ear. It was considered a sacred instrument, played by the God Phoebus using a golden plectrum. It was rather small-sized and had a U-shaped body. Different versions of this instrument possessed between three and seven strings. The Phorminx was often used for the accompaniment of epic songs. The later Lyra and Kithara are considered as off-springs of the Phorminx.

## Samvyke

The old sources describe the Samvyke as a sensual instrument, which was used in symposiums and orgies. It was exclusively played by lightly-dressed women, who created an erotic atmosphere. The Samvyke was probably created during the 6th century BC, and its first player was Sibylla. Because of its sensual character, the Samvyke was looked down upon by important philosophers such as Plato, Aristotle, and others. The Samvyke was a rather large instrument with a length of over one meter. Its shape resembled a siege-machine and was thus named after one. Samvyke strings were arranged as four 2-string couples, which were played by both hands. This instrument was later used in the Roman Empire as well as in Alexandria.

# **Syntonon**

Ancient World features the first re-created Syntonon in modern history. The Syntonon was created by the great Greek philosopher and mathematician Pythagoras, who had also established the fundamentals of music theory that we are still using today. The Syntonon was an experimental instrument as well as the ancestor of the Cimbalom. This instrument was played with mallets as well as with the fingers. Paintings or sculptures depicting the instrument are not available. Nikolaos Brass re-created the instrument solely based on descriptions found in ancient texts. Its basic components are the rectangular shape, four long feet, two bridges, six strings, and six brass cylinders, which have different weights to tune the strings differently.

# Triangle (Harp)

The Triangle was, in fact, a harp. Women mainly played it to accompany feasts. The first appearance of the instrument was during the Cyclades Civilization (2,800 BC). The Triangle disappeared for a long time after that but re-appeared during the Sappho times. By the middle of the 5th Century, the Triangle's use expanded to the whole of Greece. The sensual-erotic music played by the Triangle was very popular. Later on, the Triangle was also performed by male players in concerts and used in music lessons. The size of the Triangle was rather big, but its weight was relatively light making it possible for players to handle the Triangle easily. The strings had different lengths (as with modern harps) and numbered between nine and forty.

The Triangle ceased to be used in the Roman Empire around 2nd century BC. The version featured in Ancient World has 30 strings. Its sound is soft and relatively dark.

## **Varvitos**

The Varvitos was used extensively in symposiums, feasts, as well as in Dionysus orgies. The soundboard was made out of tortoise shell and was smaller than the ones used for Lyras. The side arms were much longer than the Lyra's arms. For this reason, the Varvitos was able to produce full and "round"-sounding low notes, not unlike our bass instruments. Many variants existed having between three and thirteen strings, with seven strings being considered the optimum. The Varvitos was used both for accompaniment and solo playing. It was often combined with the Diaulos, Crotala, and small cymbals.

The Varvitos disappeared in early 4th century BC. It was very popular in the Lesbos school (Sappho). The Romans later used it in sacrifices.

# INSTRUMENTS OF ANCIENT WORLD -Winds-

#### **Diaulos**

Diaulos was an instrument that used two separate pipes, each with its own mouthpiece. The two pipes were arranged in a V-form, and the same musician played both. Diaulos players were seasoned professionals because the instrument performance incorporated advanced playing techniques, such as the circular breathing.

The Diaulos' two pipes often had different lengths. One pipe was used for drones and the other for soloing. Quite often the two pipes had different notes distributed to them so that the Diaulos player divided his fingering between the two pipes. According to the situation, different types of pipes were used: for instance, in matrimonial ceremonies, large pipes provided deep sounds while in symposiums, the smaller pipes produced higher sounds.

Ancient World includes two different types of Diaulos. The first one focuses on the dissonant effect of the drone, while the second one is more suitable for solo playing.

# Flogera

The Flogera (or Floghera) is a type of flute used in Greek folk music. It is a simple endblown bamboo flute without a fipple, which is played by directing a narrow air stream against its sharp, open upper end. It typically has seven finger holes.

#### Kavali

The Kavali (or Kaval) is a chromatic end-blown flute traditionally played throughout Armenia, the Balkans, Greece, and Turkey. The Kavali is primarily associated with mountain shepherds. Unlike the transverse flute, the Kavali is fully open at both ends and is played by blowing on the sharpened edge of one end. The Kavali has eight playing holes (seven in front and one in the back for the thumb) and usually four more unfingered intonation holes near the bottom. As a wooden rim-blown flute, Kavali is similar to the Kawala of the Arab world and Ney of the Middle East.

#### Mantoura

Mantoura (or Mandoura) was mainly played in Crete and Greece and was made from a reed. Its mouthpiece, closed by the knot of the reed, is of the clarinet type, with a single thin tongue. When playing, this part enters the mouth-cavity and the tiny reed (or tongue) is vibrated by the player's breath, which creates the instrument's distinctive

sound. The Mantoura is made of reed in various sizes, from about 20 cm to about 25 cm. It usually has four or five holes, and sometimes six. Making and playing the Mantoura is also regarded as a first step before one learns to play the Tsabouna and Bagpipe. The decoration is usually limited to engraved patterns, sometimes geometric and sometimes inspired by the plant and animal world.

## Ney

The Ney is one of the most important instruments in Middle Eastern music (the name of the instrument is of Persian origins). It is also one of the oldest musical instruments, as its use goes back 4,500-5,000 years. It is made from a piece of hollow wood, or end-blown reed, affixed to a brass mouthpiece.

The typical Persian Ney has six holes, one of which is on the back. Arabic and Turkish neys usually have seven holes, six in front and one thumb-hole in the back.

Experienced Ney players often use a set of several Neys in various keys, although it is possible (albeit difficult) to play chromatically on any Ney.

#### Pan Flute

The Pan Flute is an ancient instrument, which was used for sacred ceremonies. It was associated with demigod Pan, who was the protector of the woods and the shepherds. Pan Flutes were built using seven single pipes of different lengths. Variations of the instrument used a number between three and eighteen pipes. The classic Greek Pan Flute used pipes of the same length. To produce different tones, the pipes were sealed using wax. Despite the fact that the instrument was widely used in the countryside, it was not accepted in larger cities because of its rural heritage. Later on, the shape of the Pan Flute inspired the construction of the hydraulis, which was, in fact, an early version of the harmonium or church organ.

#### **Pastoral Flute**

The Pastoral Flute has its origins to the ancient single pipe (Aulos), which was also the ancestor of the flute. It was an instrument easy to build and its construction and use go back to the Paleolithic era. Early on, this instrument was made using bones, and later bamboo or metal. It had three to eight holes on the front side and one hole on the backside, which permitted chromatic playing. In Greece, it was mainly used during the Hellenistic period. In Alexandria (Egypt) there was a local variation of the instrument made from lotus wood.

# INSTRUMENTS OF ANCIENT WORLD -Percussion-

# **Antique Cymbals**

Antique Cymbals are the ancestors of the modern metal cymbals. During the Minoan period, they arrived on the island of Crete from Asia. They were used during the orgiastic ceremonies of Kybele and Dionysus. Antique Cymbals were made out of brass and had a diameter of 6-18cm. A leather belt connected the pair of cymbals.

#### Bendir

The Bendir is a wooden frame-drum of North Africa and the Middle East. It is a traditional instrument that is played throughout North Africa, as well as in Sufi ceremonies; it was also played in Ancient Egypt and Mesopotamia. In Turkish, the word Bendir means "a big hand frame drum." The Bendir often has a snare (usually made of gut) stretched across the head, which gives the tone a buzzing quality when the drum is struck with the fingers or palm. The drum is played in a vertical position. One holds the drum by looping the thumb of the non-dominant hand through a hole in the frame.

# Clay Pot

Actually, a clay water jug with an additional hole, the Clay Pot was originally used in ceremonies and was played by hand. There are many ways that the pitches can be changed, depending on how the hand above the small upper hole is positioned. The player can also produce a bass sound by quickly hitting the large hole, and the whole pot can be played with the fingers. Today the Clay Pot is widely used by percussionists in different music styles. In Africa, this instrument is known as an Udu.

## Copperphone (Chalkeophonon)

The Copperphone was an experimental instrument that was considered difficult to play. The instrument consists of four brass discs which are mounted on four sticks. The

whole is arranged on the top of a curved wooden stand. Each disc produces one fundamental tone and a series of harmonic tones. The most interesting feature of the Copperphone is that a single hit on one disc can produce a very long tail (over one minute), where the overtones move and morph in a beautifully sounding manner. By moving the hands in the air, the player can produce several types of vibrato, or "filter" the sound. The Copperphone was designed by the great philosopher and mathematician Pythagoras. The first Copperphone was built later (around 500 BC.) by his student Hippasos. 2,500 years later, Nikolaos Brass, following instructions by Konstantinos Karmitzanos, remade the instrument. The Ancient World producers are proud to present the rarest copy of the Copperphone.

#### Crotala

Crotala were some of the most ancient instruments and were considered as an extension of the hands and feet to keep the pace and mark the beat. At first, they were played by men, but later this role was assigned to women. Crotala consisted in wood, metal, or shell pairs. These shells were bigger than modern Castanets, and their length was between 12-15cm. Crotala were used in matrimonial ceremonies and feasts and often combined with the Aulos and the Lyra. Some wind players attached a pair of Crotala to their legs to mark the beat while also playing a wind instrument.

#### **Formiskoi**

Formiskoi belongs to the shakers' family. They were played in pairs, like modern maracas. Formiskoi were used to mark the rhythm, provide additional colors, and to connect two phrases with a crescendo.

# **Fruit Shells**

Dried fruit shells were used as shakers to mark the beat and enhance the orchestration with their particular timbre.

#### Seistron

The Seistron came to Greece from Egypt. These instruments were used in litanies and consisted of two parts: the handle and the moving parts, which were metal or wooden bars. Small stones and bones were also used.

## Sleigh Bells

A jingle bell or sleigh bell is a type of bell which produces a distinctive 'jingle' sound, especially in large numbers. They find use in many areas as a percussion instrument, including the classic sleigh bell sound. The simplest jingle bells are produced from a single piece of sheet metal bent into a roughly spherical shape to contain a small ball bearing or short piece of metal rod. This method of production results in the classic two- or four-leaved shape. Two halves may also be crimped together, resulting in a ridge around the middle. A glass marble may also be used as the ringer on larger bells.

# **Small Cymbals**

Small Cymbals were played both in pairs and individually. They were originally used in ceremonies, and later to enrich the percussion palette.

## **Square Drum**

Square Drums are simple goatskin drums played with hands or sticks. They were typically made with sawed wood and fastened with nails. The skin is tunable and easy to adjust to the desired pitch. Two small wedges press against a frame and a strut bar on the back side. This type of drum is found in various parts of North and West Africa.

#### **Tambourine**

The Tambourine is a percussion instrument consisting of a frame, often of wood, with pairs of small metal jingles, called "zills." Classically the term Tambourine denotes an instrument with a drumhead, though some variants may not have a head at all. They can be held in the hands and played by tapping or hitting the instrument. Tambourines come in many shapes with the most common being circular. This instrument is found in many forms of music: Turkish folk music, Greek folk music, Persian music, and more.

# **Water Pumpkins**

Also called "Water Drums" these instruments can be found in Africa (Mali) and other continents. Water Pumpkins are played with the hands or with soft mallets. They usually come in pairs and have a diameter of 32 - 36 cm. The deeper bowl is filled with water, the smaller one is set on the water. The pitch of the water drums can be tuned by changing the water level inside the floating shell. With their low frequencies, Water Pumpkins are fascinating instruments that produce a great effect and a surprisingly warm sound. They were commonly used in religious and other types of ceremonies.

# **Credits**

Producers			Kostas Varotsi	s and Steve Sechi
Luthiers	Niko	olaos Brass, I	Hercules Brass, and	Socrates Metaxas
Musicians	Gregory Drakopo	oulos, Maria-C	Christina Harper, Ali	ki Markantonatou
		Nektarios St	amatelos, and Yann	is Eustathopoulos
Studio AUX - Sound	Engineer		Gio	otis Paraskevaides
Sample Editing and	Patching		. Kostas Varotsis a	nd Michael Boone
Kontakt Scripting				Dan Bennet
GUI Design				Ryo Ishido
Cover Design			A	Aleksandar Andric
Videos				Dimitris Roussis