

Byzantine Chant Ison Martyries Mobile App

Introduction:

This mobile app was designed to address a need that exists for Byzantine Orthodox Christian parishes throughout the United States. Ison Machines are musical instruments, much like an organ, that are designed to provide the digital ison for Byzantine chanters, but can be fairly expensive and can be very difficult to come by. This mobile app recreates some aspects of ison machines and also provides tools for chanters in training to learn how to chant. Those using this app should already have previous musical training in Western notation and/or some knowledge of Byzantine chanting. The app is best used by head chanters to teach their chanters how to be either the ison or regular chanter, and how to follow along in Byzantine notation, but can also be used by individuals at home.

The best part about this product is that the subject matter expert used on this project is Fr. Seraphim Dedes, who is well known throughout the Orthodox community for his work on translations and converting Byzantine chants from Byzantine notation to Western notation. In fact, it is his recorded voice that will lead users through the process of learning how to chant Byzantine music, boosting its appeal to potential users greatly.

Objectives:

The application can be used by individuals with limited exposure to Byzantine music to learn how to chant using Byzantine notation. The student can either practice being the ison, chanter or both. Through the websites provided, the user can get access to tutorials on how to chant, information on its relation to Western notation, and some selected sheet music written in Byzantine notation. The sound buttons are labeled with the symbols from the Byzantine scale and are to be used to mark (find the proper pitch) the Martyries from the sheet music, which is one of the main functions of an ison (a person that provides a second voice and ensures the chanters are on the right pitch throughout a song). Using the information and tutorials from the links provided in the top three buttons, the user can familiarize themselves with this process and work with the tutorials using the app as the ison or learn how to chant the ison parts themselves.

It can also be used by the head chanter at the chanter stand during a service. It is often that head chanters work with new students and use live events as training opportunities. This

can be problematic, especially if there is not a well-trained ison already in place. The app therefor, if plugged into the audio system, works as a type of pitch pipe while the chanters chant. It is common for the head chanter to play the role of the pitchfork themselves in the middle of an event, but this mobile app will allow them to ensure that the ison is on key and that the chanters stay on key without any awkward interruptions or breaks in the music. In this format, the application is used as an extension of what is learned in the classroom.

Naturally, this brings us to its use in a formal classroom setting. This is where the app is most effective and all the foundation for the other uses, including home individual use, of the app gets established. This is where isons learn their craft under the mentoring of the head chanter, learning how to read the sheet music along with making sure the right martyria is applied when using the app. With the chanters, they can learn how to read the sheet music and use the app as an ison machine substitute. In short, this mobile app provides, to some degree, some expertise to users that head chanters generally provide.

User Guide:

THE 8 ISON BUTTONS

The natural Diatonic Scale in Byzantine chanting is composed from seven notes, and each note of the scale is named using the Greek letters, as shown below:

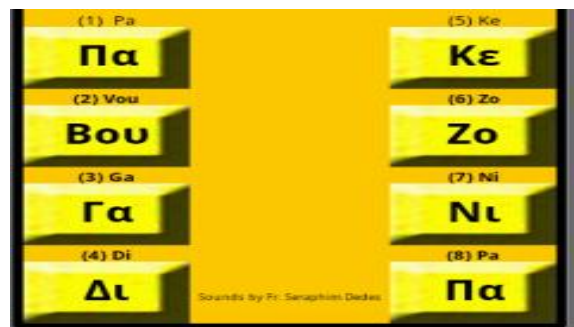
Greek: A B Γ Δ E Z H

Greek: **Πα Βου Γα Δι Κε Ζω Νη**

English: Pa Vou Ga Di Ke Zo Ni
[Re Mi Fa Sol La Si Do]


[D E F G A B C] ---Western note equivalent

Every Byzantine chanter who learns how to chant by reading Byzantine notations is very familiar with this scale since learning how to chant starts there. To represent this scale, there are eight musical keys that are labeled accordingly, as shown below:



Unlike Western music, Byzantine music does not have things like tempo and harmony. It was actually the first ever recorded music in Western music history. It started with only one voice and eventually added a second, called the ison. In essence, the ison was arguably the first written harmony. It also serves the dual purpose of ensuring that the chanters, while following the Byzantine notation, start and end a stanza on the right note. To help this process, symbols called Martyries were created. It is here where Head chanters have to sometimes stop to make sure that they are on the right note, using their own voices as the tuning fork.

A modern invention called the Ison Machine has been created to help carry out this tasks. This instrument takes the place of human isons that carry out the tasks mentioned above. Since it is difficult to come by trained chanters just to lead a parish, it is even more difficult to find people skillfully trained in the art of being an ison alone. In addition, Those who do get formal training for Byzantine chant prefer to learn the more active regular chanting parts instead of dedicating as much time learning only the ison (the equivalent to the bass guitar in a rock band). People are always looking for a good bass player so-to-speak since they are so hard to come by, as is with professional (volunteer really) isons.

The Ison Machines help to solve the scarcity of professional ison problem, but it too is difficult to come by. The Byzantine Chant Ison Martyries Mobile App helps to overcome this obstacle. The belief is that Android phones will become highly popular and therefor more readily available. The user simply pushes one of the eight musical keys (Πα, Βου, Γα, Δι, Κε, Ζο, Νι, Πα) that the Marteria in the sheet music calls for. For example, if the Martyria calls for a Western D note, the user well press the corresponding “Πα” button on the screen. 

THE 3 TOP BUTTONS

To get a better overall understanding of how this process works and to learn these chanting skills, this app also has buttons that take you to specific websites that serve three purposes: training for chanters, breakdown of Byzantine chanting, and a collection of Byzantine songs written in Byzantine notation to practice with. See the illustration below:



The GoArch.com website offers several tutorials on how to learn Byzantine chant. Most of these tutorials offer a hybrid of original Byzantine chant and Western notation. None the less, it is rich with valuable lessons and is an excellent place to start for those learners who are interested in Byzantine notation only. In fact, going through all of the tutorials offered in this website can compensate for a lack of any previous formal music training. The “Sunday Orthros,” “Service of the Small Paraklesis,” and the “Akathist Hymn” sections provide words to the music, along with audio clips that allow you to listen to the sections and then practice what you heard while reading along. The “Divine Liturgy” section offers an audio tutorial where you listen to the major parts of the liturgy and then practice what you heard while singing along. The CHANT.HCHC.EDU section provides more interactive tutorials for more experienced learners.

The last two buttons are for more experienced users. The Byzantine Scale website offers an excellent breakdown of what Byzantine chant is and how it works, especially in relation to Western notation. It gives an excellent breakdown of the four major modes (Diatonic, Soft Chromatic, Hard Chromatic, and Enharmonic) and their sub-modes (1-8 and “Grave”). Finally, the Music Sheets website offers original Byzantine music texts. Without previous training, or the assistance of a head chanter, it would be very difficult, if not impossible, to start there. There are four sheets of music in this site that do offer hymns in Western notation for those already well versed in music, but those people using that method would not have a need for this app.