



20 Years

INSTITUTE FOR RESEARCH  
ON MUSIC & ACOUSTICS  
Greek Music Information & Documentation Center

1989-2009



**iamic:**  
International Association of Music Information Centres



A Regional Group of the  
**International  
Music Council**



**emo**  
european music office



IEMA is member or representative for Greece on the following international organisations:

- International Association of Music Information Centers (IAMIC)
- International Association of Music Libraries and Archives (IAML)
- International Association of Sound and Audiovisual Archives (IASA)
- European and International Music Councils (EMC-IMC)
- International Music Society (IMS)
- European Music Office (EMO)
- International Computer Music Association (ICMA)
- European Conference for the Promotion of New Music (ECPNM)
- Electronic Music Foundation (EMF)

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- IEMA becomes a member of the <b>International Association of Music Libraries and Archives</b> (IAML), the <b>International Music Society</b> (IMS) and the <b>International Association of Sound and Audiovisual Archives</b> (IASA)	5 0
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- IEMA becomes a member of the <b>European and International Music Councils</b> (EMC-IMC) and of the <b>European Music Office</b> (EMO)	0

## What is IEMA

The Institute for Research on Music & Acoustics (IEMA) - Greek Music Information and Documentation Center, is a non-profit, non-governmental organization, covering the areas of music research, documentation and information.

It was founded in 1989, with the aim to develop and support research in the field of music and acoustics, as well as to provide systematic music documentation and information.

During the twenty years of operation, IEMA has established a permanent cooperative relationship with the Greek ministries of Culture, Education and Research. It was member of the National Music Network, and is connected with the National Network of Research and Technology. IEMA is currently the most active organization involved in music research, documentation and information within Greece.

The objectives of IEMA, as defined in the statutes, are:

*Scientific research and implementation via the use of new methods and technology as well as Documentation and information provision through a series of actions (archives, publications, sound recordings, concerts) on the following subjects:*

- *Systematic musicology and Ethnomusicology*
- *Sound processing*
- *Original musical creation and performance*
- *Musical Acoustics - Psychoacoustics*
- *Greek Musical Heritage*
- *Musical education*
- *Music information & documentation*



The conference room



## Substructure

IEMA is located in Plaka, the old city of Athens, on Adrianou str 105. The facilities of the institute consist of a conference and meeting room, offices equipped with computer workstations, a music DTP department, extensive on-line Intranet - Internet services, Music library and archive, the Experimental Lab of Musical Instruments and the Computer Music and Sound Processing and Audio digitization Studio (with control and recording room) equipped for multi-channel digital recording and sound editing, sound synthesis, sound analysis, audio mastering.

### **Experimental Lab of Musical Instruments**

The Lab facilitates research on the acoustics of instruments, reconstruction of ancient instruments and development of new experimental instruments. In addition it is used for the construction of self made instruments for schools but also for the organization of seminars on instrument building and instrument reparation.

### **The studio**

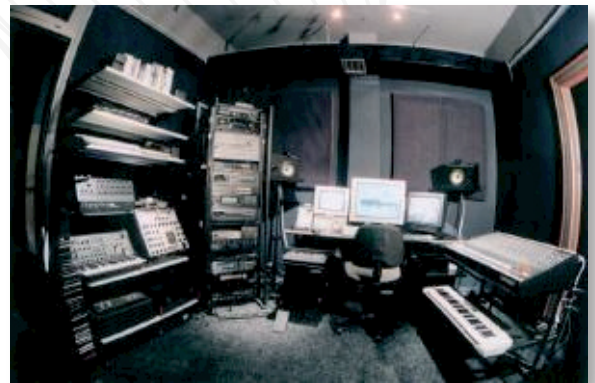
The Computer Music and Sound Processing Studio (with control and recording room) is equipped for measurement and audio analysis, digitization of audio material, multi-channel digital recording, sound editing, sound synthesis, algorithmic composition, sound restoration and audio mastering. The equipment is of high quality and a wide range of software (including custom made) is used and available. The studio supports IEMA's activities, but is also offered to young researches and composers for their projects.

The studio provides the basis for:

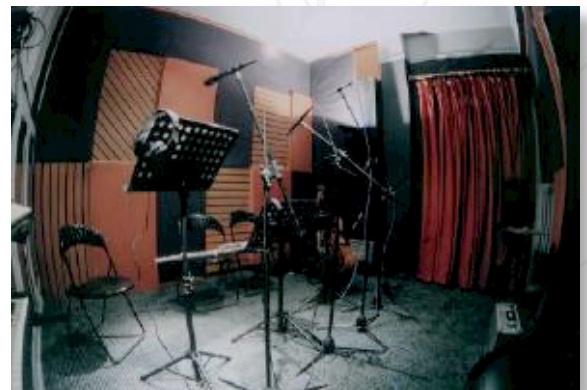
- Research on acoustics
- Digitization of audio and music material
- Original music creation
- Educational programs and activities
- Specific music and audiovisual productions
- Software and hardware development
- Restoration of old recordings and Mastering



The Experimental Lab of Musical Instruments



The control room



The audio measurement and recording room

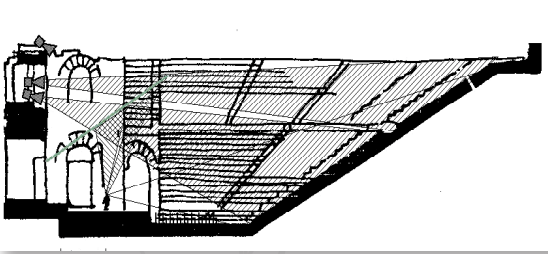


## Research Projects

Since its' founding, IEMA has realized a series of research projects, all of which entailed the extensive use of new technology.



The sound reflectors at Herodeion ancient Theater



Study for the acoustic simulation



Electroacoustic enhancement at Herodeion Teater with 28 mikrophones (blue) and 32 laoudspeakers (red)

### Computer-aided analysis and synthesis of Greek language phonemes

This is the first attempt towards an analysis of the musical qualities of the Greek language according to the comprehensibility of the vowels in relationship to the consonants. The aim of this project was the study of vocal comprehension process as well as to extract results that could help the digital greek phonetic synthesis. (Announcement at the Linguistic Conference of the A.U.T., April 1991)

### Acoustic concert hall simulation

This software package, based on the calculated impulse response of a hall, creates a simulation of its acoustic behavior, allowing generation in real-time of the acoustic impression of sound events in that hall. The package can be applied to architectural designs of concert halls before the actual building process begins. It can also be used for experimentation aimed at improving the acoustics of an existing hall.

### Sound Enhancement in Open Space Concerts

IEMA has developed this project in order to propose solutions for the acoustic enhancement of open space concerts. So far, the research has yielded the following outcomes:

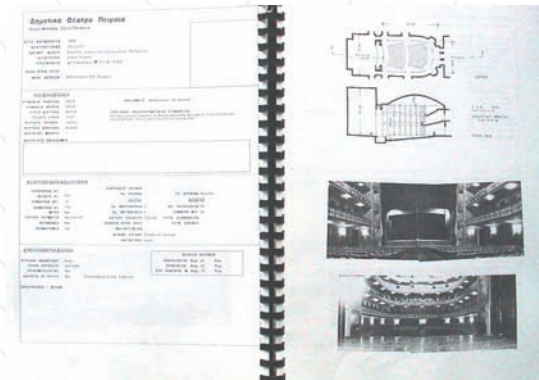
- a. Development and construction of movable ground sound reflectors that "collect" the diffused sound re-directing it to the musicians and to the audience. In this way, sound loss is limited and the acoustic result is enhanced.
- b. Development of a model simulating indoor acoustics in open spaces. This is achieved by the use of multiple microphones collecting the scene sound and directing it to a computer, where it is processed and distributed to a net of loudspeakers reconstructing reflections of an imaginary ceiling.

Both the reflectors and the simulation program have been successfully used at performances given in the Herodeion Theatre in Athens



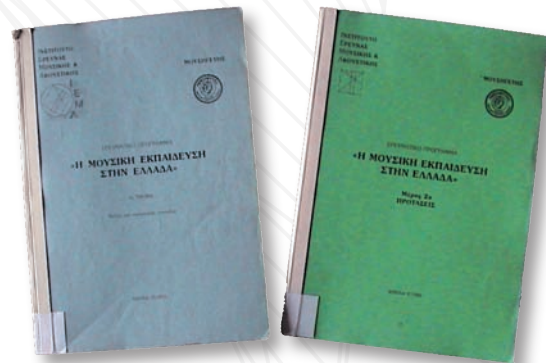
## Development of Inventory of all important concert halls in Greece

Documentation and evaluation of concert halls, theatres and auditoria within Greece. 25 researchers made field research on 220 locations all over Greece. For each space the following information was recorded: dimensions, architectural designs, photos, acoustic features, technical and musical equipment, supporting rooms, usage, location, management etc. The results of this research are available as a web and multimedia application.



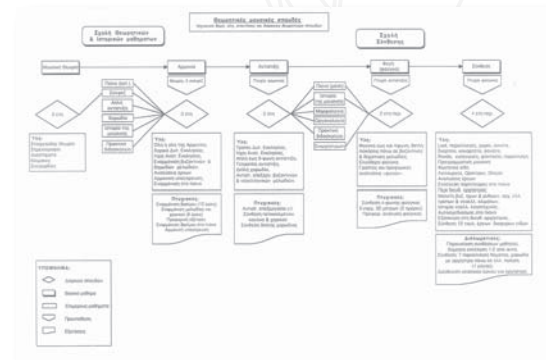
## Music Education in Greece

This research project has registered and studied the current situation of Music education in Greece from many aspects: legal status, existing institutions, statistical analysis, questionnaires, and comparative studies with other countries. A special part of the project is a proposal for a new improved music education system adapted to EU standards. (In cooperation with the "Mousigetis" organization, financed by the Ministry of Culture)



## Study for the establishment of the Department of Music Studies in Ionian University

Before the establishment of the Music Studies Department at the Ionian University, an extensive advisory and implementation study was developed with the participation of IEMA in the domains of market research, employment of graduates, comparative study with departments abroad, EU legislation etc.



## Greek Bibliographic Guide to Music

This project comprises the first comprehensive music bibliography for Greek musical publications (4.200 items), with data collected from major Greek libraries and bibliographical references. The data is provided in digital form, and can be used in computer networks and/or multimedia applications with multiple search criteria. The project had a duration of three years, and was sponsored by the Greek Ministry of Culture. The guide served as contribution to the creation of other music libraries like the Big Music Library L. Voudouri.

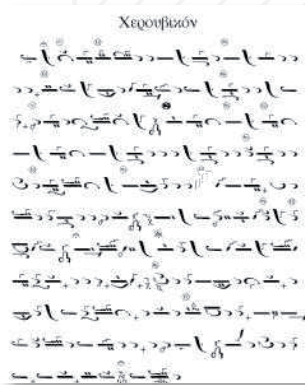


Bibliographic Guide to Music

## Development of software for digital processing of Byzantine music notation

This software was developed in 1992 and is the first DTP for Byzantine Notation in postscript.

In the frame of the "Polymnia" project IEMA also developed in 2006 the ability for Optical Music Recognition of Byzantine Music as a web service.



Page made with the Byzantine notation software

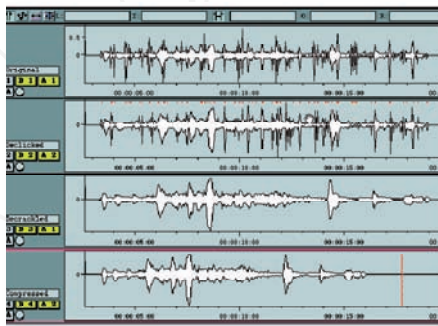
## Work catalogue of Greek Electronic Music

Compiled in 1994 in collaboration with the German organisation DECIME for the European Catalogue of Electronic Music. It consists of the first analytical registration of Greek electronic music. In parallel a database of electronic music terms translated into Greek was developed while in the near future a full digitized Greek Electronic Music Archive is planned.

## Sound Archive

Collection and indexing of sound samples for music, cinema and multimedia uses. The project is divided into two parts:

- the archival recording of characteristic sounds of the Greek countryside and culture,
- a collection of sound samples organized in a multimedia database with index, preview and user friendly retrieval.



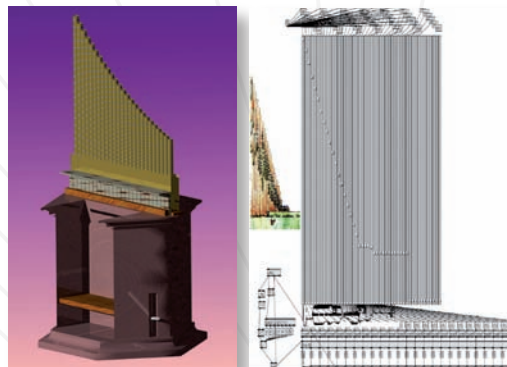
## Digital noise reduction, restoration and enhancing of old recordings

IEMA has installed one of the first digital workstations in Greece for noise reduction, restoration and enhancement of old recordings using custom software developed at the Institute. Till today, with the use of IEMA's and other software, more than 2.000 old recordings and soundtracks were restored in the studio.

## Reconstruction of ancient water organ «Hydraulis»

Based on the findings and archaeological discoveries at Dion, a research group of IEMA in collaboration with the Delphi Centre and the archaeologist D.Pandermalis has reconstructed the ancient Greek water organ "Hydraulis". In the frame of the project before the physical reconstruction, a computer sound simulation of the temperament and the timbre of the organ was developed. Additionally, the creation of a three-dimensional visual representation of the instrument assisted greatly in its' final reconstruction.

The first reconstruction was presented at Delphi in 1998.



Digital visual 3D and sound simulation of Hydraulis



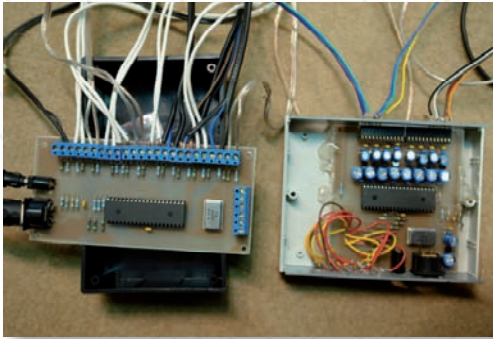
Presentation of the model and the first reconstruction of Hydraulis at Delphi

## The resonators of the ancient Greek Kithara

Based on unique features found in the construction of the ancient Greek Kithara, this project, after measurements, controls the acoustical consequences of the use of springboards on the bridge of the instrument. The computer tests and compares the different audio results. Aim of the project was to address the question of the amplification of ancient Kithara sound.



The measurement construction for the development of physical modeling of the ancient kithara



The control devices developed at IEMA

## Development of analogue to digital conversion devices

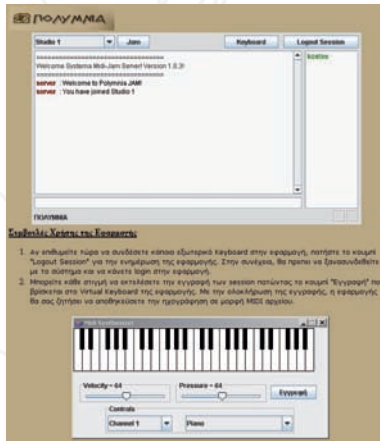
Design and realization of portable devices for the bilateral? control of several analogue systems (analogue synthesizers, sensors, lights) by computer. These devices are used for interactive concerts and installations.



The application of Digital Music Networks at Darmstadt

## Digital Music Networks

This project concerned the possibility of setting up a network among various music organizations for the transfer of music data via wired or wireless communication. One of the objectives, apart from information exchange and mutual communication, was to generate real time music interaction through networks. Seventeen European institutions and studios were involved in this endeavour, which was realized at the Darmstadt Summer Academy in July 1992.



In the frame of the "Polymnia" project, in 2006, a web utility for music jamming through the internet ("midi jam session") was developed.

## “e-motion” system for the transformation of movements to music

E-motion is a device that captures the movement of a performer and transfers it to digital information. It functions with a series of infrared sensors that the performer can use as a controller.

The analogue information of the sensors is transformed through a custom developed interface to MIDI information that is entered into a computer, were, with the aid of software (MAX/MSP), it can drive any MIDI-able device. e-motion is developed in the frame of the “Polymnia” project.

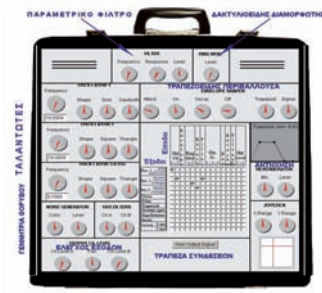
In 2008 a newer version was developed (**dance2music**) that functions with 2 cameras registering the movement of the performer in three dimensions and transforming them to music.



The systems e-motion and dance2music

## Development of Virtual Web Synthesizers

In the frame of the “Polymnia” project an interactive web application was developed that simulated the functioning of the classic synthesizer VCS3 (AKS) from EMS, a fundamental composition utility for two decades. This synthesizer does not exist any more. The web simulation is fully functional and useful for music creation allowing composers to produce pure electronic sounds, as well for educational purposes for showing the principles of sound synthesis.

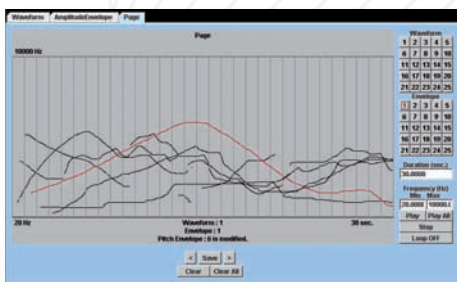


The original synthesizer and its simulation

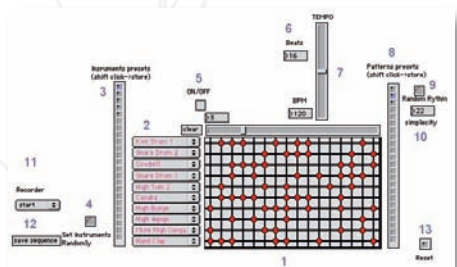


### Simulation of the digital system UPIC of Iannis Xenakis

In 1975 Iannis Xenakis developed the UPIC (Unité Polyagogique Informatique du Cemamu) system that can produce sound results through the drawing on a digital canvas. Giving that this interesting system is expensive and not easily available, in the frame of the "Polymnia" project a simulation of it as an interactive web application was developed. The webUPIC allows users to produce easily sound results even if they do not have knowledge of electronic music, only by drawing in a monitor waveforms and following their evolution in time.



The original system and its simulation



### Virtual Utility for the creation of rhythmic phrases

This digital application offers an easy and fast way for the creation of rhythmic patterns. The user has available a database of 300 percussion timbres and can through a matrix design create his own rhythmic patterns. This utility developed in the frame of the "Polymnia" project, functions as standalone or as a web application. The aim is for it to serve as utility for music education and music creation.

## Development of a Virtual Music Accompaniment on the web

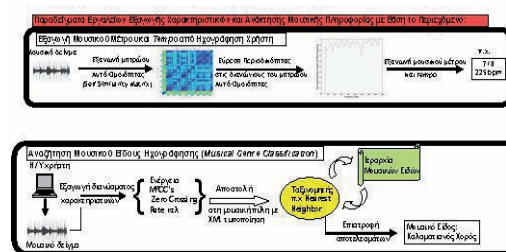
This utility developed in the frame of the "Polymnia" Project allows users to play music with a MIDI instrument, while the system is following this play by playing in parallel the accompaniment. For example the player plays the right hand in a keyboard while the system plays the left hand. The system can understand the speed of performance through a follow-up process. This application functions also on the web as a utility for beginners and scholars.



The Music Accompaniments system

## Content-Based Music Retrieval Tool

This system was developed in the frame of the "Polymnia" project by the University of Athens in collaboration with IEMA. The application has the ability to recognize the music parameters (rhythm, melody, instruments, tempo etc) of digitized material, extract them as metadata, sort them with music criteria, compare them and finally retrieve the material based on its music content. This utility is extremely useful for a) audio music archives (national archives, discography, broadcasts b) recognition of originality (intellectual properties societies) c) search from users only by melody.



## Virtual Museum of Greek Folk Instruments

This web application was developed with the purpose of familiarizing the public with Greek traditional instruments. The user has the possibility to wander in the museum, to approach and browse the instruments, to gain information, listen to sound examples and see relevant videos.

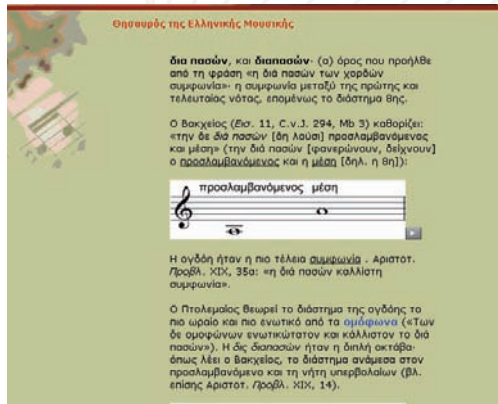


The entrance of the virtual museum an a 3D instrument model



## Digital Thesaurus of Greek Music

This open multimedia platform was developed in order to store terms, information, persons and documents related to Greek Music Civilisation. The Thesaurus is addressed to all groups of users, especially in education and consists of an important means to promote Greek Music.



Page from musipedia

In the next stage the Thesaurus was transferred to the open platform wiki as "musipedia" ([www.musipedia.gr](http://www.musipedia.gr)), allowing users to modify the entries in a common environment.

Musipedia today has 13.000 entries and many thousands of visits every month.





## Project: Digital Music Education and Training (DMET)

DMET is a EU project supported by the Directorate-General for Education and Culture (Culture 2000 program). It is developed by IEMA in collaboration with 5 other European partners and the Panteion University. The goals are:

- To create a valid overview on business opportunities in the profit- and not-for-profit part of the online-music-market with a special focus on interactions with the live-music sector, synopsis of market surveys, conference reports, literature, market research
- To create an online resource base on research papers and materials concerning the topic, using the knowledge base as well as a curriculum that can help the academic and professional education institutions to include the study of digital music entrepreneurship in their studies program.

The activities include:

- A guide to business opportunities of the online-music-market.
- Virtual "observatory" for market development.
- Online resource base on research papers and materials concerning the topic.
- Overview and list of available music business education.
- A serial of international conferences to create awareness for the problem and to disseminate DMET.
- A curriculum, learning material and workshop modules for the "digital music artisan".
- Establish a network of trainers and speakers available on local level and train them.
- Build a network of music education institutions to implement the curriculum.
- New standard contracts for the right holders about music digitalization and distribution.

In the frame of DMET project a series of original studies were compiled, such as for example the methods of distribution of music and scores on the internet, the digital and legal protection, the entrepreneurship models, the future of the digital market etc.

An analytic curriculum was developed on digital music entrepreneurship that was distributed to relevant education institutions for application.

Five International conferences were organized (two of them in Greece) on the subjects of the project as well as many workshops for the professionals.

(more: [dmet.iema.gr](http://dmet.iema.gr))





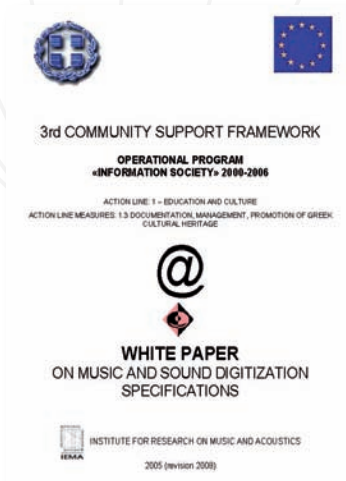
## Project: Digitization and Promotion of Greek Music

One of the main objectives of the Institute is the preservation and promotion of Greek Music. Therefore in December 2001, IEMA prepared in collaboration with the Ministry of Culture an action plan for the Digitization and promotion of Greek Music in the frame of 3rd European Support Frame. That led to the realization of a project for the creation of a Greek Digital Music Archive financed by the operational program "Information Society"

The project was structured in the following sub-projects

- Creation of a Centre for Digitization and Promotion of Greek Music
- Development of a Digital Archive of earlier and newer Greek Music Civilization
- Creation of a thematic portal dedicated to the promotion of Greek Music

In parallel a group of researchers at IEMA was charged by the Athens Polytechnic School to develop the "Specifications for the Digitization of Music and Audio" as a guide for all digitization projects in Greece. This study covers all digitization cases of audio, the digitization of scores, specifications of hardware and guides for the management of the digitized material.



The laser record player



Records cleaner



Reel-to-reel machines



High quality AD/DA converter

### Creation of a Centre for Digitization and Promotion of Greek Music

This centre was created in the frame of the digitization project and is one of the most modern facilities of the kind. It is situated today in the Institute grounds in Plaka and comprises:

- a) The studio of audio digitization, with high quality devices for reproduction and digitization (records washer, tapes baking machine, laser records player, high quality real to real players and AD/DA converters).
- b) The work-station for the digitization of two dimensional documents also with professional equipment (A2, A3 scanners, book scanners, digital cameras etc)
- c) The storage space of the digital archive
- d) The centre for the promotion of the Archive (areas for study and events).

## Development of a Digital Archive of earlier and newer Greek Music Civilization

Today, IEMA's digital archive of Greek Music is maybe the richest. For its development, apart from the digitization of its own archives, IEMA has collaborated with other important and representative archives, such as:

- The Archive of Rembetiko of Panagiotis Kounadis
- The archive of Hellenic Composers Union
- The Audio Archive of the Peloponnesian Folklore Foundation
- The Greek Music Archive of G. Kostantzios
- The Archive of musicological field recordings of P. Kavakopoulos
- The Archive of musicological field recordings of N. Dionisopoulos
- The sound Archive of "Amphitheatro" theatre

And also 20 full personal archives of composers, such as:

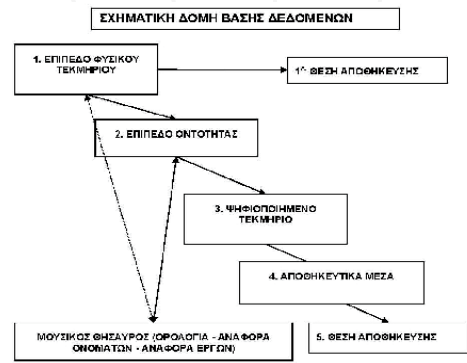
- Dimitris Dragatakis
- Theodore Antoniou
- Yorgo Sicilianos
- Michael Adamis
- George Koumentakis
- Georges Kouroupos
- Michael Grigoriou
- Nikiforos Rotas
- Stefanos Gazouleas
- Minas Alexiadis

and many others.

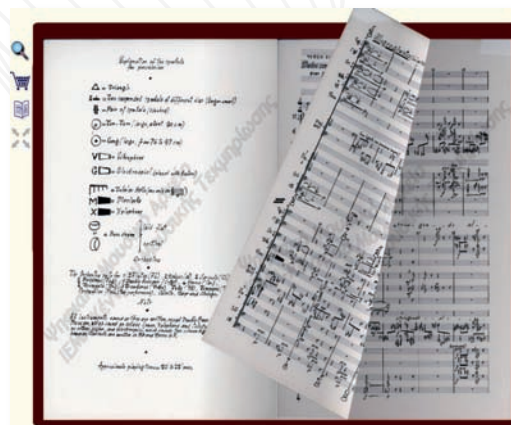
The Digital Archive of IEMA comprises today 110.000 documents from about 2.000 creators from all music genres.

## Creation of a thematic portal dedicated to the promotion of Greek Music

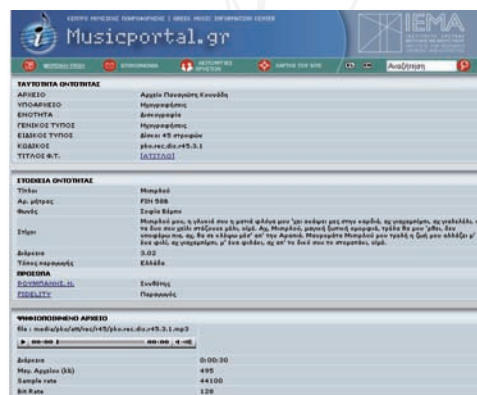
The digitized material is available on the Music Information portal of IEMA ([www.musicportal.gr](http://www.musicportal.gr)) with possibilities of multiple criteria search and preview engines of the digitized documents. In addition, on the musicportal there are specific references in Greek and English as introduction to all periods and genres of the Greek Music Civilization.



The database structure



The score preview system developed at IEMA



The database at the internet



Η εικόνα αυτή έχει την προέλευσή της σε έναν από τους τόμους, οι μετ' ημετέρας να ανήκουν στα εγχειρίδια διδασκασίας, αναμενόμενο εφόσον είναι πρόκειται για εκπαιδευτικό βιβλίο της εποχής από τους μελετητές, Έθνης Βέλλου.

Οι όμοιες φωτογραφίες αυτές να μην αναφέρονται, τον τίτλο που αφορούν στην κοινή διαμόρφωση των κοσμημάτων από τον κοινό λαό. Το 1922 βίβλος από τον Κωνσταντίνου Παπαδόπουλου παρακινεί στην εξερευνητική προσπάθεια των πρώτων φορέων όσον αφορά στην ιστορία, την «Εθνη», «Εθνο-Μουσική» κ.α. προεργάζοντας στην πρόθεση κοσμηματολογίας και αρμοστικά του αυθεντία με τη της εποχής στην το δικό του είδος της βιβλίου κρημνίζοντας με μελωδία, θρησκευτικά και θρησκευτικά στοιχεία (1922) κ.α.



## Music Information and Documentation Centre

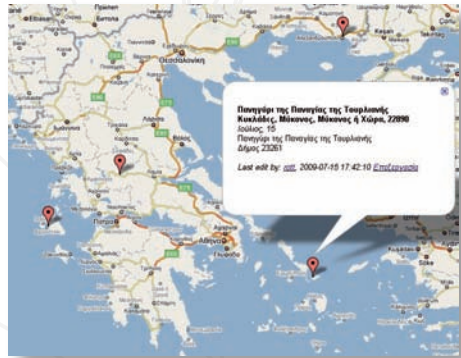
In 200 IEMA, based on the extensive material collected and experience already acquired, inaugurated a special activity concerning Music Information in Greece, aiming to:

- Collect of information on Greek music life
- Give response to information requests from institutions or people
- Document and promote Greek Music
- Promote new music creation
- Organize activities concerning music information
- Compile and distribute weekly music newsletters

### Documentation material

The documentation archive is the richest available in Greece, numbering 70.000 records in digital form and available through searchable databases on the Internet. It consists of:

- **Concert halls** in the Greek territory (220 sites with photos, plans, analytical data and acoustical comments)
- **Music ensembles** (800 records: choirs, bands, orchestras, small ensembles)
- **Music schools and conservatories** (780)
- **Audio engineering schools** (34)
- **Music Institutions and Associations** (116)
- **Music Bibliographical Database** (4.285 titles)
- **Greek Music Discography** (45.000 records)
- **Music periodical press** (24)
- **Database of Traditional Music Events in Greece** (2.200 records)
- **Festivals in Greece** (70)
- **Music Editors – Music & Sound houses** (595)
- **Music libraries and archives** (88)
- **Concerts organizers** (19)
- **Sound & light rental** (116)
- **Recording studios** (91)



Pages of the Music Information Portal





## **Other activities**

A big part of IEMA activities is dedicated to promoting contemporary experimental music. The contribution of the Institute has several forms.

### **“Composers Forum”**

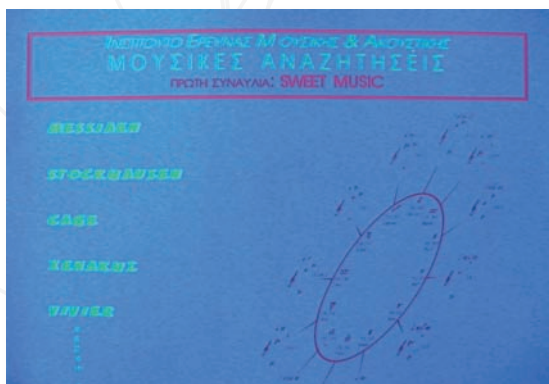
A cycle of music events dedicated to contemporary music, where well-known and emerging young composers present their work assisted by recorded musical samples and live performances. These are followed by public discussions. Currently, more than 35 composers have presented their work during the course of the forums.



The New Music Ensemble “ACTIS”

### **New Music Ensemble “ACTIS”**

“ACTIS” is a 15-person chamber ensemble created by IEMA in 1995, specializing in contemporary and avant-garde music. ACTIS was active in many events such as tributes to composers, productions, concerts etc.



### **Concerts Cycle “Musical Investigations”**

This was a thematic cycle of contemporary music concerts with a concrete subject each time. The aim was to familiarize the wide public with contemporary music trends.

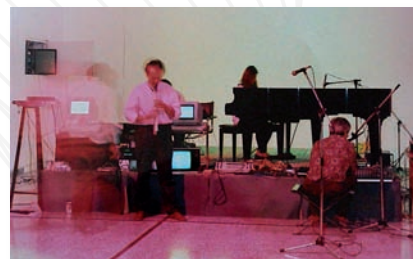
## Tributes to composers

Small festivals dedicated to important contemporary composers, like the tribute to the 75 years of Iannis Xenakis in the Cultural Capital of Europe Thessaloniki and recently at the Museum of Modern Art, the tribute to Walter Zimmermann etc.



## Electronic and Computer Music Concerts

These are often organized in collaboration with Municipalities, Universities, the Composers Union, the Composers of Electroacoustic Music Association, concerts and “marathons” of electroacoustic and computer music in order to familiarize the public with this special genre. Among others, concerts have been organized in the University of Patras, the Goethe Institute, the Hellenic-American Union, Monastiraki square, the Petra and Chalandri festivals etc.



## Celebration of European Day of Music – Festival of Music Improvisation

IEMA has initiated in Greece the celebration of the Day of Music on 21st of June from 1992. In 1996 in the frame of the “Day of Music” celebration, a festival of Music Improvisation was organized at the Gas Factory “Technopolis” initiating its use as an urban cultural place. The festival had a duration of three days with the participation of 75 ensembles and 250 performers from all music genres.

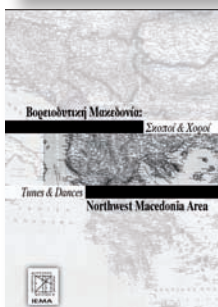




"Anastenaria"



Bells measurements at Agion Oros



IEMA Publications

## Ethnomusicological field recordings

More than 500 hours of audio material and 200 hours of video have been recorded at important traditional musical events in Greece as well as Mount Athos.

In particular field recordings were made at:

- "Ragoutsaria" in Kastoria
- Ai Simios Celebration at Mesologgi
- Music and Lyra players in Lemnos
- Celebration of "Agios Trifonas" in Goumenissa
- "Anastenaria" Firewalking at Meliki, Lagadas, Ag. Eleni and Mavrolefki
- Music of the Pomaks in Thrace and Bulgaria
- Bells and Simantra of Agion Oros

## Lecture on Music Research and Conferences

IEMA offers the ability to researchers to announce the results of their projects and discuss them with the public in the frame of the cycle "Lectures of IEMA". Till now 16 such events were organized in several domains of music research.

IEMA also organized conferences such as the 1<sup>st</sup> Conference of Music Research, the Conference on Music Digitization and the conference "The Musician in the Digital Era".

## Publications

The following books have been published:

- *Tunes and dances of NW Macedonia*, by P. Kavakopoulos (200 songs and 40 dances) with 2 CDs in Greek and English
- *Texts for a Functional Theory of Music*, by Haris Xanthoudakis
- *An Introduction to Greek Traditional Music*, by Marios Mavroidis
- *The Modes of Traditional Music*, by Marios Mavroidis
- The Music Atlas, 2 volumes (Nakas)
- *Full Work catalogue of G. A. Papaioannou* (greek-english)
- *Anthology of Music for the Schools – 2 vol.* (published by the Ministry of Education)
- *Teaching Music in School. A guide for music teachers (MELINA project)*
- *The Music of Mediterranean area (educational material)*
- *White Book for the Digitization of Audio and Music*





## Educational Activities

A variety of significant educational activities have been developed since 1993: seminars, compiling of new educational material, implementation of pilot programs in education and other music-related pedagogical research projects.

### Introduction of new music educational methods in schools (in the frame of the “MELINA –project)

The project “MELINA – Education and Culture” was a joint initiative of the Greek Ministries of Culture and Education aiming to enforce the presence of culture and arts in schools. IEMA participation was focused on the field of music education. Apart from organization and support of training of educators, a series of CD-ROMs, special software and publications have been created and distributed in schools. In parallel distance learning interactive systems and content were developed (see Virtual Museum of Folk Instruments).

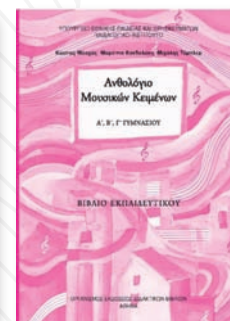
### Compiling of two Music Anthologies for the Greek Schools

After national competition the Ministry of Education has committed to IEMA the compilation of two Music Anthologies for use by the Schools. The Anthologies comprise about 150 songs each one, from all kind and genres of music. Each songs is accompanied by its score, the original audio recording, historical data and directives for the educators how to teach it.

### Production of 6 CD-ROMs for use by the schools

By commission of the Ministry of Education the following music CD-ROMs were compiled and produced for use by the Second Chance Schools:

- *Introduction to Traditional Music*
- *A music geography of Greece*
- *Greek Traditional Instruments*
- *The rhythms of Greece and of the Word*
- *World popular genres*
- *The music of 20<sup>th</sup> century*





## Training program on Music pedagogy and Cultural administration

The training program, financed by the EU, had a total duration of 400 hours and was addressed to graduate students of music pedagogy. Aim was to train managers that could serve either as animators and educators of music or as cultural/music managers. 47 trainers have taught during the program.

The program was implemented in conjunction with "MENTOR" Educational Institute and "MELINA" Educational Program.



## "ENIHA" - Training Program for the Construction of Music Instruments

This program, financed by the EU and the Ministry of Culture, had as its goal to train music instrument builders. The courses included practical and theoretical topics (theory of traditional music, development of hearing, acoustics, history etc). Three different groups were formed: a) string instruments, b) wind instruments and c) multi-string instruments. During the "Eniha" project participation reached the total of 40 people who are currently working as instrument makers or instructors of instrument making.

## Seminars and workshops

On a regular basis many different seminars and workshops are organized in order to help people specialize in the objectives of the Institute. Usual topics are:

### Computer music

- Algorithmic composition
- World music
- Musical Acoustics – Psychoacoustics
- Music pedagogy
- Music terminology and translation
- Approaching the music of the 20<sup>th</sup> century
- Early music
- Performance techniques
- Instrument building
- Concert hall acoustics
- Sound and environment





*The logo of I.E.M.A. is the “Elikon”, an ancient Greek experimental instrument for measuring intervals. (Ptolemaeus “Harmonika” II, 2 I.D. 41).*

