

**YCAM presents  
The exhibition of new installations**

## **Ryoji Ikeda "datamatics"**

In his first solo exhibition in Japan, renowned electronic composer and artist Ryoji Ikeda presents new and existing works from his datamatics series.

Since 1995, Ikeda has been intensely active through concerts, installations, and recordings, integrating sound, acoustics and sublime imagery. In the artist's works, music, time and space are shaped by mathematical methods as Ikeda explores sound and vision as sensation, pulling apart their physical properties to reveal their complex relationships with human perception.

The datamatics series is a long-term programme of moving image, sculptural, sound and new media works that take data as their theme and material, exploring the ways in which abstracted views of reality - data - are used to encode, understand and control the world.

Ikeda's works both examine and apply mathematical and scientific theory, and test the extreme potentials of digital technology, to reveal the microscopic matter - and data - that permeates our universe, whilst challenging our own thresholds of perception.

This solo exhibition presents the recent works **data.film [n°1-a]** and **data.tron**, alongside a major new installation commissioned by YCAM, entitled **test pattern [n°1]**. The exhibition opens with a live performance of Ikeda's critically acclaimed concert piece **datamatics [ver.2.0]**.

### ■ EXHIBITION

**Period: March 1 (Sat) to May 25 (Sun), 2008** \* Closed Tuesdays, the next days if it falls on a holiday

**Time: mon-fri/12:00-19:00, sat, holiday/10:00-20:00**    **Admission: Free**

**Venue: Yamaguchi Center for Arts and Media / Studio A, B**

**<http://datamatics.ycam.jp/>**

### ■ OPENING EVENT / audiovisual concert "datamatics [ver.2.0]"

**Date/Time : March 1 (Sat) 2008 19:00 open 19:30 start**

**Venue: Yamaguchi Center for Arts and Media / Studio A**

**Admission: 2,000 yen    door 2500 yen**

Organizer: Yamaguchi City Foundation for Cultural Promotion | Support: Yamaguchi City, Yamaguchi City Board of Education  
| Special support: AMBASSADE DE FRANCE AU JAPON | Sponsorship: Mix Wave, Inc | Co-sponsor: THE ASAHI  
SHIMBUN FOUNDATION, The Agency for Cultural Affairs Government of Japan in the fiscal 2007 | Produced by: Yamaguchi  
Center for Arts and Media | Technical support: YCAM InterLab | Project Curator: Kazunao Abe (YCAM)

## ■ **datamatics [ver.2.0]**

Ryoji Ikeda's project **datamatics** is an art project that explores the potentials to perceive the invisible multi-substance of data that permeates our world.

**datamatics [ver 2.0]** is the new, full-length version of Ryoji Ikeda's acclaimed audiovisual concert. Ikeda has significantly developed the earlier version of this piece (premiered in March 2006), adding a newly commissioned second part.

Driven by the primary principles of **datamatics**, but objectively deconstructing its original elements – sound, visuals and even source codes – this new work creates a kind of **meta-datamatics**. Ikeda employs real-time programme computations and data scanning to create an extended new sequence that is a further abstraction of the original work. The technical dynamics of the piece, such as its extremely fast frame rates and variable bit depths, continue to challenge and explore the thresholds of our perceptions.

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*“datamatics [prototype] showed Ikeda at the height of his powers, building on his own unique and unmistakable artistic language.” – The Wire, 2006*

concept, composition: Ryoji Ikeda

computer graphics, programming: Shohei Matsukawa, Daisuke Tsunoda, Norimichi Hirakawa, Tomonaga Tokuyama

co-commissioned by AV Festival 06, ZeroOne San Jose & ISEA 2006

produced by Forma

co-produced by Les Spectacles Vivants-Centre Pompidou and YCAM

supported by Recombinant Media Labs

## ■ **data.tron**

How many points are there in a line?

What is the number of numbers?

How can we verify that the random is random?

**data.tron** and **data.film** are parts of the **datamatics** project, which is a series of experiments that explore such questions, physically and mathematically. Visitors will experience the vast universe of data in the infinite between 0 and 1.

**data.tron** is an audiovisual installation, where each single pixel of visual image is strictly calculated by mathematical principle, composed from a combination of pure mathematics and the vast sea of data present in the world. These images are projected onto a large screen, heightening and intensifying the viewer's perception and total immersion within the work.

concept, composition: Ryoji Ikeda

computer graphics: Shohei Matsukawa

co-produced by Le Fresnoy, Studio National des Arts Contemporains and Forma

## ■ **data.film** [n°1-a]

A sculptural wall installation, **data.film** consists of a series of 35mm film mounted in a light box. The image on the film is constructed from microscopically printed data codes and patterns from pure digital sources, while the unusual proportions of the light box (4 cm high, 10 metres wide, 4 cm deep) create a long, narrow strip of film. Only upon close examination by the viewer can the film and its contents be recognised.

**data.tron** and **data.film** mark exciting new developments in Ryoji Ikeda's **datamatics** project, a long-term programme of moving image, sculptural, sound and new media works. This body of work uses data as its theme and material to explore the ways in which abstracted views of reality – data – are used to encode, understand and control the world.

concept, composition: Ryoji Ikeda

computer graphics and LED light box design: Shohei Matsukawa

35mm film development and print: Color by Dejonghe n.v.

co-produced by Le Fresnoy, Studio National des Arts Contemporains and Forma

## ■ **test pattern** [n°1] - World Premiere -

Ryoji Ikeda's new project **test pattern** is interrelated with his **datamatics** project. **test pattern** is a system to convert any kind of data (text, sounds, photos and movies) into barcode patterns and binary patterns of 0s and 1s. Through its application, the project's aim is to examine the relationship between critical points of device performance and the threshold of human perception.

In the first edition of the project, an audiovisual installation, **test pattern** is a sequence of tests for machines and humans, comprising visual patterns converted and generated from sound waveforms in real-time.

The installation comprises 8 computer monitors and 16 loudspeakers aligned on the floor in a dark space. The 8 rectangular surfaces of the screens flicker intensely with black and white images, floating and convulsing in the darkness. 16-channel sound signals are mapped as a grid matrix, passing and slicing the space sharply. Via a real-time computer program, the signal patterns are converted into 8 barcode patterns, which are tightly synchronized. The velocity of the moving images is ultra-fast, some hundreds of frames per second at certain points, providing a performance test for the devices and a response test for visitors' perceptions.

As part of the project, and driven by the same concept, test pattern CD is released on German label raster-noton, 25 February 2008.

concept, composition: Ryoji Ikeda

computer programming: Tomonaga Tokuyama

commissioned by Yamaguchi Center for Arts and Media (YCAM), 2008

## Ryoji Ikeda

Japan's leading electronic composer/artist, Ryoji Ikeda, focuses on the minutiae of ultrasonics, frequencies and the essential characteristics of sound itself. Since 1995, Ikeda has gained a reputation as one of the few international artists working convincingly across both visual and sonic media. His concerts and exhibitions integrate sound, acoustics and sublime imagery. In the artist's works, music, time and space are shaped by mathematical methods as Ikeda explores sound as sensation, pulling apart its physical properties to reveal its relationship with human perception.

Ikeda has gained a reputation as one of the few international artists working convincingly across both visual and sonic media. Using computer and digital technologies to the utmost limit, his audiovisual concerts *datamatics* (2006 present), *C<sup>4</sup>I* (2004 - 2007) [commissioned by YCAM] and *formula* (2000 - 2006) suggest a unique orientation for our future multimedia environment and culture. His acclaimed installations *data.tron* [prototype] (2007), *data.film* [n°1-a] (2007), *data.spectra* (2005), *spectra* [for terminal 5, JFK] (2004), *spectra II* (2002) and *db* (2002) continue to diffuse Ikeda's aesthetic of 'ultra minimalism' to the art world.

Ikeda's latest body of work, *datamatics*, is a long-term programme of moving image, sculptural, sound and new media works that use data as their theme and material to explore the ways in which abstracted views of reality - data - are used to encode, understand and control the world.

He has been hailed by critics as one of the most radical and innovative contemporary composers for his live performances, sound installations and album releases. His albums +/- (Touch, 1996), 0°C (Touch, 1998) and *matrix* (Touch, 2000) pioneered a new minimal world of electronic music, employing sine waves, electronic "glitch" sounds, and white noise. Ikeda released his critically acclaimed, seventh solo album entitled *dataplex* (raster-noton), as part of the *datamatics* series, in 2005.

The versatile range of Ikeda's research is demonstrated by his collaborations with Carsten Nicolai on the project *cyclo.* and with choreographer William Forsythe/Frankfurt Ballett, artist Hiroshi Sugimoto, architect Toyo Ito and artist collective Dumb Type, among others.

The first complete catalogue of Ikeda's seminal work, *formula* [book + dvd] (Forma) was published in 2005.

Ikeda has exhibited and performed at many of the world's leading festivals and venues including: the Australian Centre for the Moving Image, 2005 (Melbourne); MIT, 2006 (Massachusetts); Centre Pompidou 2004 and La Villette 2002 (all Paris); Sónar 2006 (Barcelona); Architectural Association 2002, Barbican 2006, Tate Modern Turbine Hall 2006 (all London); Auditorium Parco della Musica 2003 (Rome); ICC 2005, Tokyo International Forum 2006 (Tokyo); Göteborg Biennial 2003 (Göteborg); Le Fresnoy 2007 (Tourcoing).

In 2001, Ikeda was awarded the Ars Electronica Golden Nica prize in the digital music category and he was shortlisted for a World Technology Award in 2003.

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### <INQUIRY>

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