# E I G E N W E L T D E R A P P A R A T E W E L T PIONIERE DER ELEKTRONISCHEN KUNST

While the exhibition Eigenwelt der Apparatewelt focuses upon many of the pioneers of electronic arts through presenting some of the tools and instruments of a particular period of activity, it is essential to point out that this is a narrow slice of a much larger tradition. Since it has been impossible to be comprehensive, given the exhibition constraints and limited time, the catalog serves to provide a slightly larger context for the physical exhibits and an interactive link to its supplementary materials. In some cases the barcodes within the text provide access to visual and aural illustrations (on laserdisc) that are structurally intrinsic to the catalog text. In other circumstances they access materials which are supplementary and/or technical. Given its dual function, the catalog has been designed as both an interactive guide to the exhibition and as a stand alone collection of historical documents.

The first section of the catalog provides essential reading intended to provide an historical framework for the exhibition. The barcodes are generally correlated quite tightly to the information on laserdisc to provide a continuous reading experience.

—David Dunn, editor







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PIONEERS OF ELECTRONIC ART

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Artistic Director PETER WEIBEL

Curators WOODY VASULKA and STEINA VASULKA

Editor DAVID DUNN

# ARS ELECTRONICA 1992

This catalog has been published on the occasion of the exhibition:

EIGENWELT DER APPARATEWELT PIONIERE DER ELEKTRONISCHEN KUNST

June 22 - July 5, 1992

Oberösterreichisches Landmuseum Francisco Carolinum, Linz

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# ARS ELECTRONICA

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Exhibition Designers: Eichinger oder Knechtl, Vienna, Austria

Cover: Rutt/Etra Scan Processor prototype, circa 1972. Collection of the Experimental Television Center, Ltd. & The State University of New York, Binghamton. Donated by Barbara Buckner. Photo: Dennis Dunda.

Frontispiece: Left to right, front row, Wendy Clarke, Jean-Pierre Boyer; Second row, Taka Imura, Woody Vasulka, Nam June Paik, Gerald O'Grady; Third row, Bill Viola, Ed Emshwiller, Kit Galloway, Steina Vasulka; Back, Walter Wright.

### ACKNOW LEDGEMENTS

This exhibition and catalog were initiated and realized because of the enthusiasm and support of Peter Weibel, Artistic Director. We are also completely indebted to Ralph Hocking and Sherry Miller Hocking of the Experimental Television Center, Binghamton, for their extraordinary generosity in the assembly of the majority of the hardware and their careful attention to the myriad details of both hardware and archival information. Their professionalism and humor have been an inspiration and a pleasure.

Of course, we are especially grateful for the special efforts and cooperation of those inventors who personally excavated their past by agreeing to be interviewed, and by digging up schematics, photos, and dormant documents and, in many cases, by resuscitating their own machines. Thank you Stephen Beck, David Behrman, Don Buchla, Bob Diamond, Bill Etra, Lee Harrison, Bill Hearn, David Jones, Don McArthur, Nam June Paik, Steve Rutt, Dan Sandin, Jeff Schier, Eric Siegel, Glen Southworth, and Aldo Tambellini. We deeply regret that during this process we were never able to locate Shuya Abe and George Brown.

We also wish to acknowledge Steve Anderson, Michael Czajkovsky, Gary Hill, Norman Lowrey, and Sara Seagull for their extra efforts and assistance in lending significant audio/video instruments to the exhibition.

In addition to the subject of the interviews transcribed for this catalog, we acknowledge the following authors, editors and publications of the writings we have selected to print and reprint for this catalog:

- Arn, Robert. "The form and sense of video," artscanada (October 1973): 15-24.
- Beck, Stephen. "Image Processing and Video Synthesis." Lapis Technologies, Alameda, California. Typescript. 1975
- Colorado Video, Inc. "Instruments for Video Art." Boulder, Colorado. Undated.
- Crutchfield, James P. "Space-Time Dynamics in Video Feedback." *Physica* 10D (1984). North-Holland, Amsterdam: Elsevier Science Publishers, North Holland Physics Publishing Division.
- DeWitt, Tom. Proposal for a video synthesizer. Typescript. 1975
- Gill, Johanna Branson. "Video: State of the Art." Working Papers. New York: The Rockefeller Foundation, 1976.
- Harrison, Lee. Notes for an Animation Device, 1961. Photocopy.
- McArthur, Donald E. Introduction from "A Computer Based Video System," 1977. Typescript.
- Miller Hocking, Sherry and Richard Brewster. Chronology of the Experimental Television Center (1992), and *Image Processing Manual*. Typescript. Owego, New York: Experimental Television Center, 1978-1986.
- Paik, Nam June. "Binghamton Letter" to "Dear Friends at Radical Software." 8 January 1972. Binghamton, New York: Experimental Television Center.
- Rosebush, Judson. "The Moog Synthesizer: An Interview with Its Inventor." *Syracuse New Times* (February 17, 1972).
- Sandin, Daniel J. and Phil Morton. "Distribution Religion." Chicago: University of Illinois at Chicago Circle, ca. 1972.
- Tambellini, Aldo. Statement on BLACK SPIRAL. Flier for exhibition *TV* as a Creative Medium (May 17 June 14, 1969). New York: Howard Wise Gallery.
- Yalkut, Jud. Excerpts from "PART THREE: OPEN CIR-CUITS: The New Video Abstractionists" from unpublished book manuscript ELECTRONIC ZEN: The Alternate Video Generation, 1984.

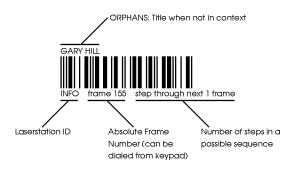


# ABOUT THE BARCODES:

THE LIGHT PEN TOOL ITSELF IS CLUMSY, hard to hold for long without getting a severe pain in your wrist. You are to drag it over the barcode in the proper time intervals and speed, in the rhythm of the tango or the carrioca. At each "beep" you have succeeded.... If you don't hear the beep, you can repeat the action going backwards or forwards. Keep on, please, don't get embarrassed.

THERE ARE THREE KINDS of laserdiscs which are accessible from the catalog:

THE FIRST GROUP is found in laserstations labelled INFOSTATION, probably up to five of them located throughout this exhibit. These contain about two hundred Still images and up to twenty short Moving image segments, all related to the history and the performance of the Instruments described in the catalog. You will find the barcodes correlated to them in two sections of the catalog: The Instruments and in Video: The State of the Artarticle. Watch for a small label under the barcode itself, a tiny text shows INFO for orientation.









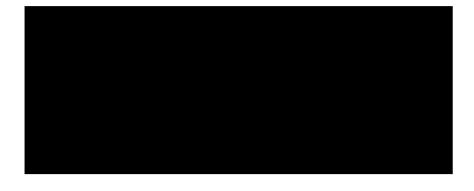
THE SECOND GROUP of laserdisc stations is visibly labeled MUSIC and they are located in quiet museum spaces. There will be at least two of them and they will hold Still images and Moving sections with actual samples of sounds, assembled by David Dunn to accompany his article in the catalog. All of the barcodes in the article entitled A History of Electronic Music Pioneers, are correlated to the MUSIC laserdisc.

THE THIRD GROUP of laserdisc stations are labeled NANO-(THEATERS) A, B, and C. They all have an identical Still image section as the Infostation, which means that you can access these stills from all stations except MUSIC. However, the Moving images on all discs are different. Even though you can also program the discs independently from the catalog by using the summary of all barcode information available at the stations, most of the disc information is available from within the catalog. For example, in the case of the Light Music in the Soviet Union article, the catalog will show a barcode labeled NANO informing of a stack of still pictures sitting there.

NOW, IF YOU ARE BORED by all of this, there is a keypad at each laserdisc station with a generic command set of instructions on their face. Just feel free to browse.

BY THE WAY, there is a space named ENDO-THEATER in this exhibit. It is programmed to play tapes selected by Steina: no keypads, no barcodes. —W.V.







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