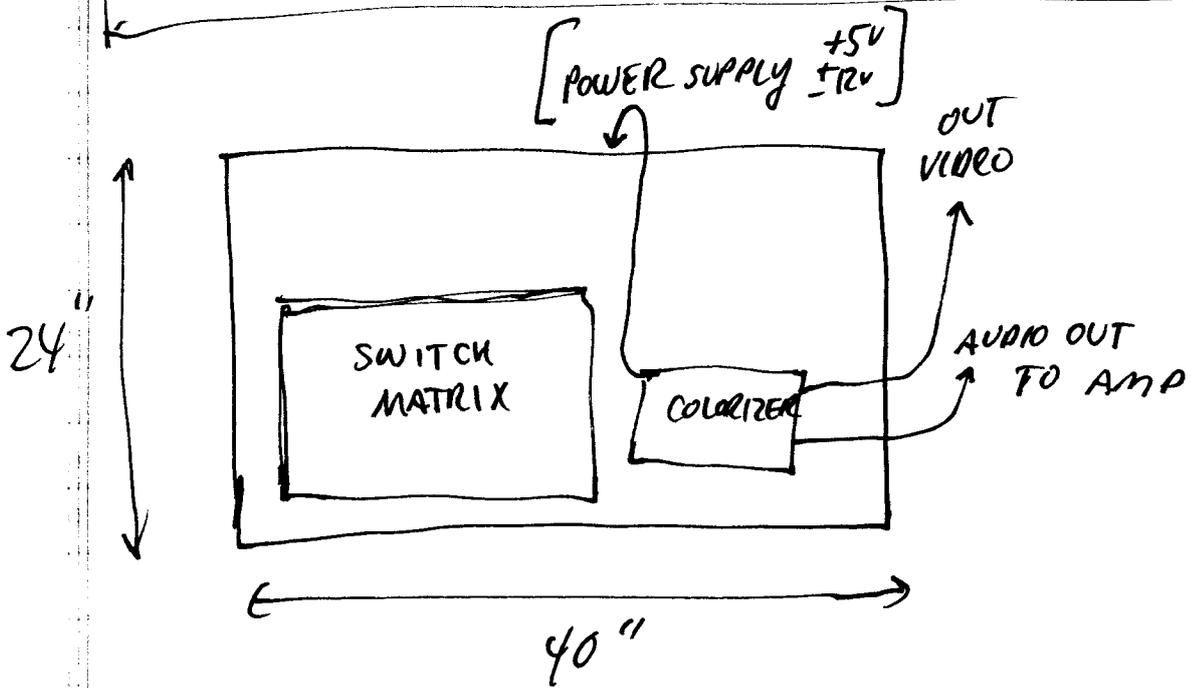
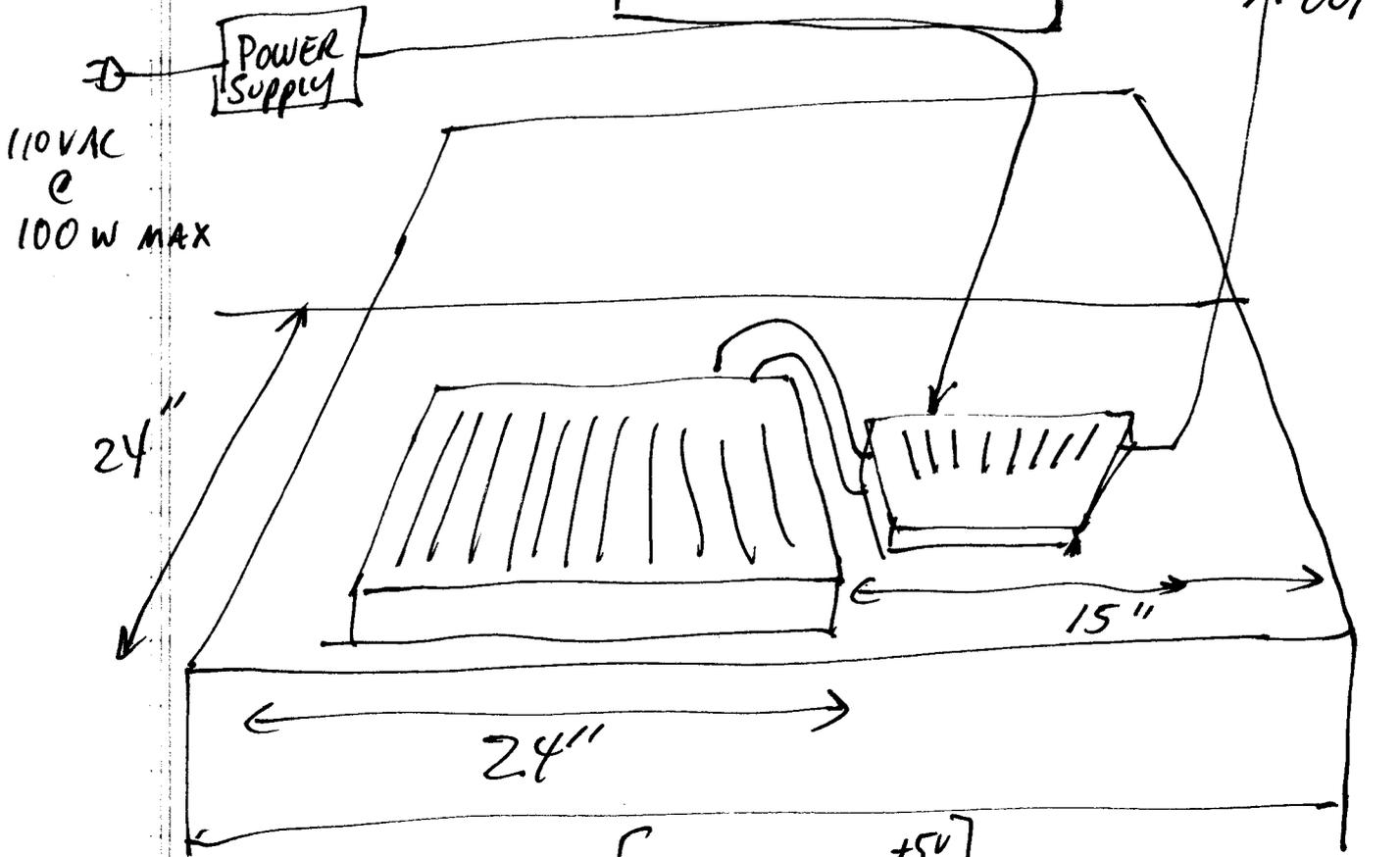
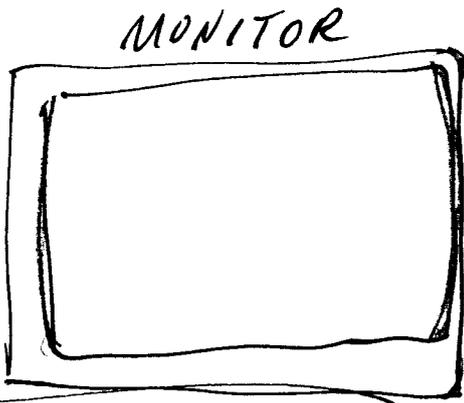


BECK VIDEO
WEAVER for
ARS ELECTRONICA



EXPERIMENTAL TELEVISION CENTER LTD.
180 FRONT ST.
OWEGO, NEW YORK 13827
607-687-1423

OFFICE & FAX
607-687-4341

Hi Malin -

Here is the data about the CV Portapak:

SONY DV-2400 (deck) s/n 5233
SONY DVC-2400 (camera) s/n 15172 with external microphone
SONY TV Zoom lens with cap and case s/n 187620
SONY BC-2400 Battery Charger s/n 5372
2 6 volt RP-6262 batteries

The value of this system is about \$2,000; it is nearly new (and very beautiful...). I shipped it second day air UPS to David Muller on 5/6. It should be there by Friday.

We have the original operator's manuals for the equipment which we can send. I have written a statement about the portapak which Ralph wants to edit.. will fax it soon.

We are working on the tape transfers.

For Steina - Ralph has an IVC but he's not sure what kind of shape it's in...

Let us know What Else...

Sherry

Eichinger oder Knechtl

A - 1010 Wien Franz Josefs Kai 29

tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to - The Vasulkas MaLin Wilson

pages -

received

5.8.92

Dear MaLin Wilson,

Thank you for the information from 5.7.92.

It is very difficult for us if we have no further information about our questions!

One Question about your fax from 5.7.92 :

In the fax from the 3.19.92 you wrote that you have
four Laserdisc *NANOHEATERS*,
five *laser disk information stations* placed in the galleries
and the *ENDOTHEATER* we want to place it in the foyer
Is this Right?

sincerely.

Stefan Brodbeck



THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501
TEL. (505) 471-7181/FAX. (505) 473-0614

May 7, 1992

Stefan Brodbeck, Coordinator
Eichinger oder Knechtl
Fax. 011/43-1-535-40-39

Dear Stefan Brodbeck,

I am writing to you because Woody is in Iowa City working with the technician who is restoring the instruments and building the interfaces. He is very sorry to have been so unresponsive to you, but the deadline pressures here for the catalog are great. Woody will be back in Santa Fe ready to respond to your questions on Monday, May 11th - the day all equipment is scheduled to be shipped to Austria.

As you are aware many of the instruments are fragile. It is our main concern that each machine have suitable support and ventilation, but because of the shortness of our time and the nature of the objects we need a flexible approach to the installation. The technician may not be able to get all machines ready - or the machine may fail. We are working to do as much as possible. We very much agree with you that the stations should be in the center facing the walls. We do not want the laserdisc information stations in the hallway, they need to be integrated into the galleries. The Endotheater space can be solidified - we want to use the room that was closed the day Eichinger and Knechtl met Steina at the museum. Our situation is that there will continue to be last minute changes. Only today we were informed that Stephen Beck will not be coming to Linz.

Please be assured we will provide you with whatever answers are possible upon Woody's return.

Sincerely,



MaLin Wilson
Coordinator

OR JUST ANOTHER INSTRUMENT STATION.
PLEASE, CHECK ON THAT WITH KATHARINA.
I UNDERSTAND, WE ARE GOING TO HAVE
THE CONTINUOUS SEQUENCE OF THE ROOM,
IT IS VERY GOOD FOR THE COMMON
~~CONDUIT~~ CONDUIT INSTALLATION AND
AS I AGREE THE STATION SHOULD
BE IN THE CENTER FACING THE
WALLS. REMEMBER, THERE WILL
BE ALSO ~~LASER~~ LASERDISK STATIONS
IN EVERY ROOM, AT LEAST ONE
OR TWO IN EACH ROOM, TOTAL
OF TEN LASERDISK STATION.

SORRY I HAVE NOT BEEN IN TOUCH
SOONER AND I OWE YOU MORE
DRAWINGS AND SUGGESTIONS.

(2)

FAX COVER SHEET

Sat Apr 18 1992 3:15 pm

To:
Fax #: 15054730614

From:

Fax: 2 pages and a cover page.

Dave Muller, RR 7 Box 6, Iowa City, IA 52240
(319)-335-2076 days, (319)-337-4962 evenings

Saturday, April 18, 1992

Woody Vasulka
The Vasulka's Inc.
Fax Number (505)-473-0614

Dear Woody,

Here are some estimates of power requirements.

PAIK SCAN MODULATOR (a.k.a. the "Wobulator")	500 Watts
MOOG SYNTHESIZER	75 Watts
plus audio amplifier	50 Watts
PUTNEY SYNTHESIZER	75 Watts
plus audio amplifier	50 Watts
CUI QUANTIZER	75 Watts
plus video monitor	150 Watts
CUI DATA CAMERA	150 Watts
plus video monitor	150 Watts
PAIK/ABE SYNTHESIZER	75 Watts
plus video monitor	150 Watts
BROWN FIELD FLIP/FLOP SWITCHER	25 Watts
plus video monitor	150 Watts
SIEGEL DUAL COLORIZER	25 Watts
plus 2 video monitors	300 Watts
BROWN MULTIKEYER	50 Watts
plus video monitor	150 Watts
RUTT/ETRA SCAN PROCESSOR	200 Watts
plus video monitor	150 Watts
plus audio amplifier	50 Watts
JONES 64 x 64 REAL TIME BUFFER	50 Watts
plus video monitor	150 Watts

Dave Muller, RR 7 Box 6, Iowa City, IA 52240
(319)-335-2076 days, (319)-337-4962 evenings

Saturday, April 18, 1992

Woody Vasulka
The Vasulka's Inc.
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plus 2 video monitors	300 Watts
BROWN MULTIKEYER	50 Watts
plus video monitor	150 Watts
RUTT/ETRA SCAN PROCESSOR	200 Watts
plus video monitor	150 Watts
plus audio amplifier	50 Watts
JONES 64 x 64 REAL TIME BUFFER	50 Watts
plus video monitor	150 Watts
MCARTHUR SAID (Spatial and Intensity Digitizer)	50 Watts
plus video monitor	150 Watts
20 Cameras @ 10 Watts	200 Watts
4 Laser Disc Players @ 75 Watts	300 Watts
plus 4 video monitors	600 Watts
	<hr/>
	4075 Watts

I estimated video monitors at 150 Watts each, which is probably high. Also remember lights, which can be 220 Volt types. We should ask for an extra 1000 Watts for a safety cushion, in addition to the equipment I don't have here. For most of the equipment, I estimated power from fuse size or power transformer size. I measured the cameras, and the Laserdiscs had a tag on the back.

THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501
TEL. (505) 471-7181/FAX. (505) 473-0614

FAXED
April 10, 1992

Stefan Brodbeck, Coordinator
Bieinger oder Knechtl
Franz Josef Kai 29
A-1010 Vienna, AUSTRIA
Tel. 011/43-1-535-54-21
Fax. 011/43-1-535-40-39

Dear Stefan Brodbeck:

We were very impressed with your fax of April 1. We are getting photographs of all of the equipment for you and will review the dimensions and weights. I will plan to send you this information next Tuesday.

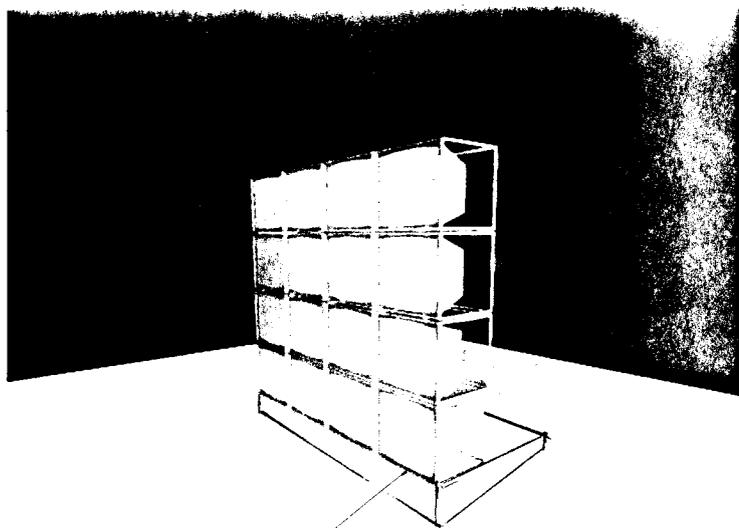
As to the floor plan, we need your help. We cannot read the dimensions on the floor plan that was sent to us.

We are sorry that we could not answer all of your questions this week. We are working on them and hopefully satisfy you next week.

Sincerely,



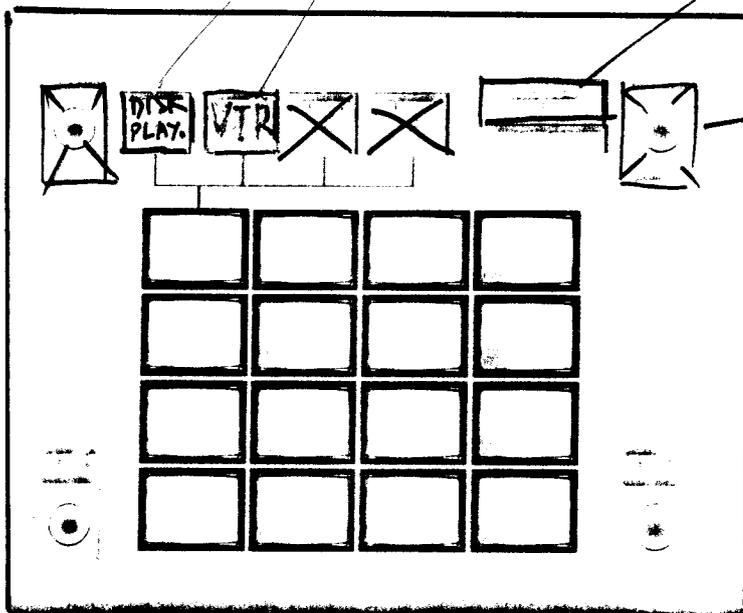
Malcolm Wilson
Coordinator



PEDESTAL
(see next page)

U-MATIC PLAYER
LASERDISK PLAYER (OPTIONAL)

TECH :



AUDIO
AMPL

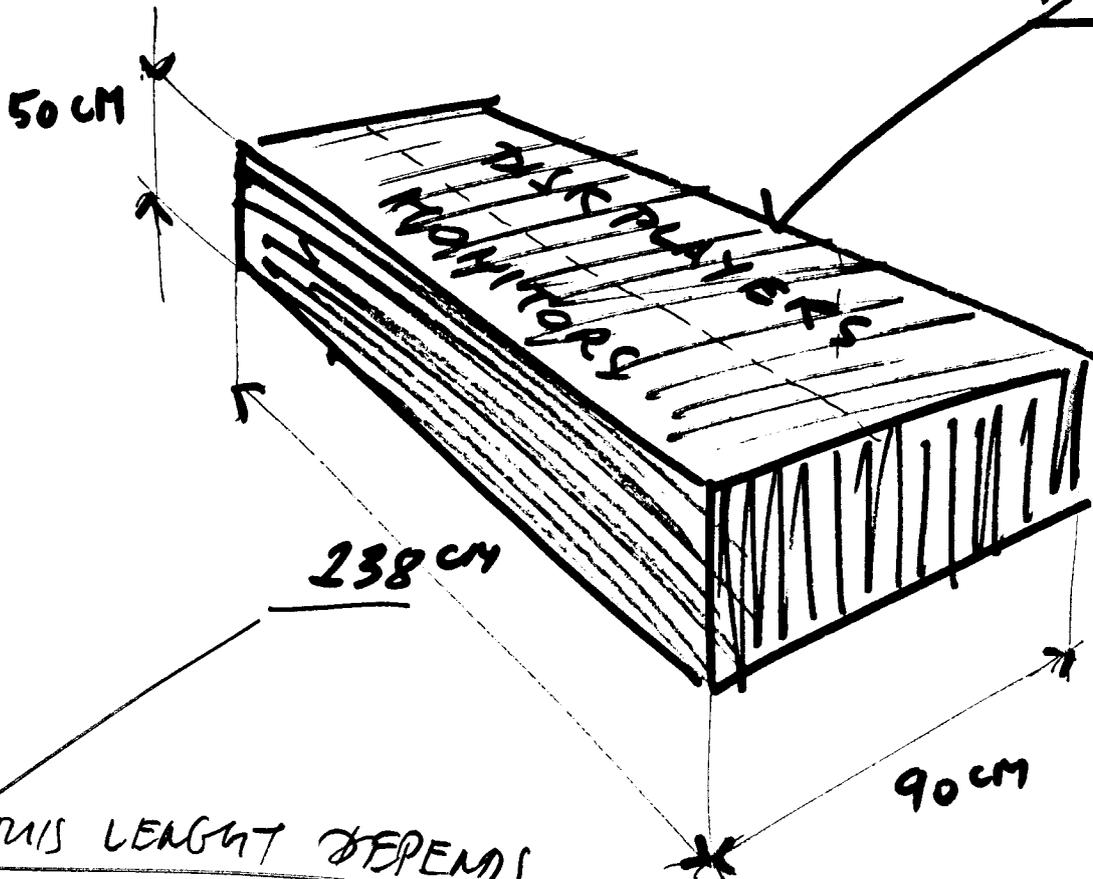
SPEAKER

END OF THEATER

PEDESTAL FOR ENDOTHEATER Matrix

COLOR FLAT GREY

MONITOR
PLATFORM



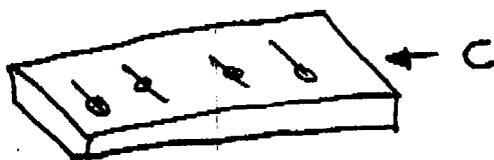
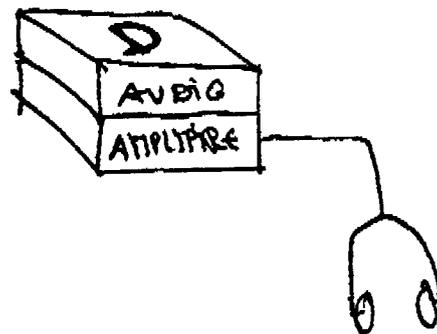
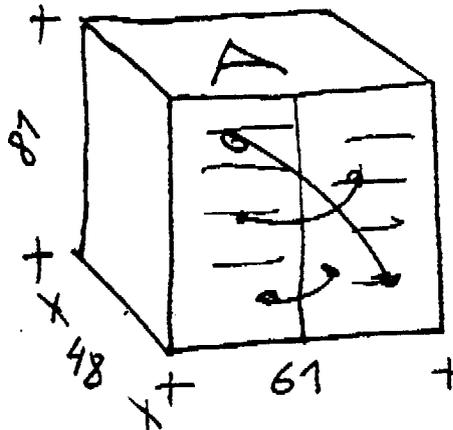
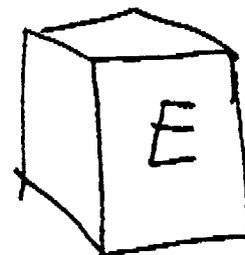
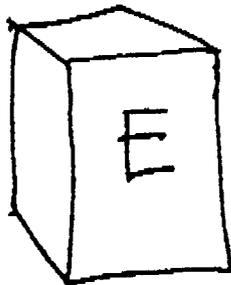
THIS LENGTH DEPENDS
ON THE WIDTH OF
FOUR MONITORS
AVAILABLE

THE VASULKAS INC.
471-7181 FAX: 473-0614
ROUTE 6 BOX 100
SANTA FE NM 87501

(5)

AUDIO

BUCHLA



EQUIPMENT THAT WILL NOT BE SHIPPED FROM IOWA CITY, IOWA

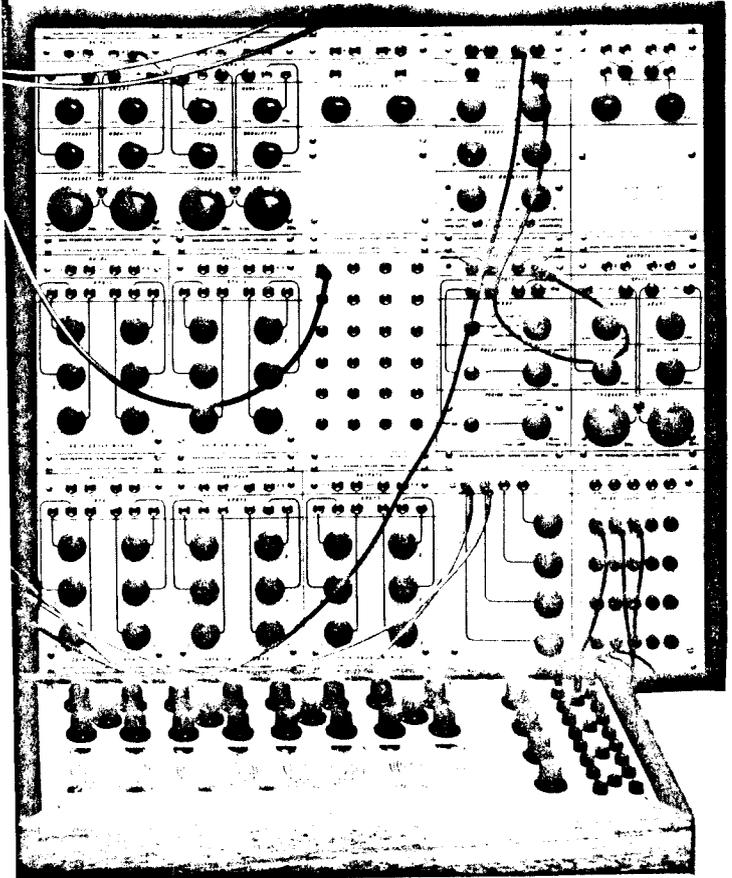
To be arranged by the Vasulkas:

A	BUCHLA SYNTHESIZER	32.0 ⁵⁷	24.0 ⁵⁷	18.0 ⁵⁷	35	12
B	Keyboard - TOUCHSTRIP?	4.0 ⁵⁷	18.0 ⁵⁷	10.0 ²⁵	5	
C	Interface Control Panel Patch Cords				2	
● D	AUDIO AMPLIFIER					
E	LOUD SPEAKER					

New dimensions rec'd 4/13

Synthesizer 36. 36 12 50 lbs

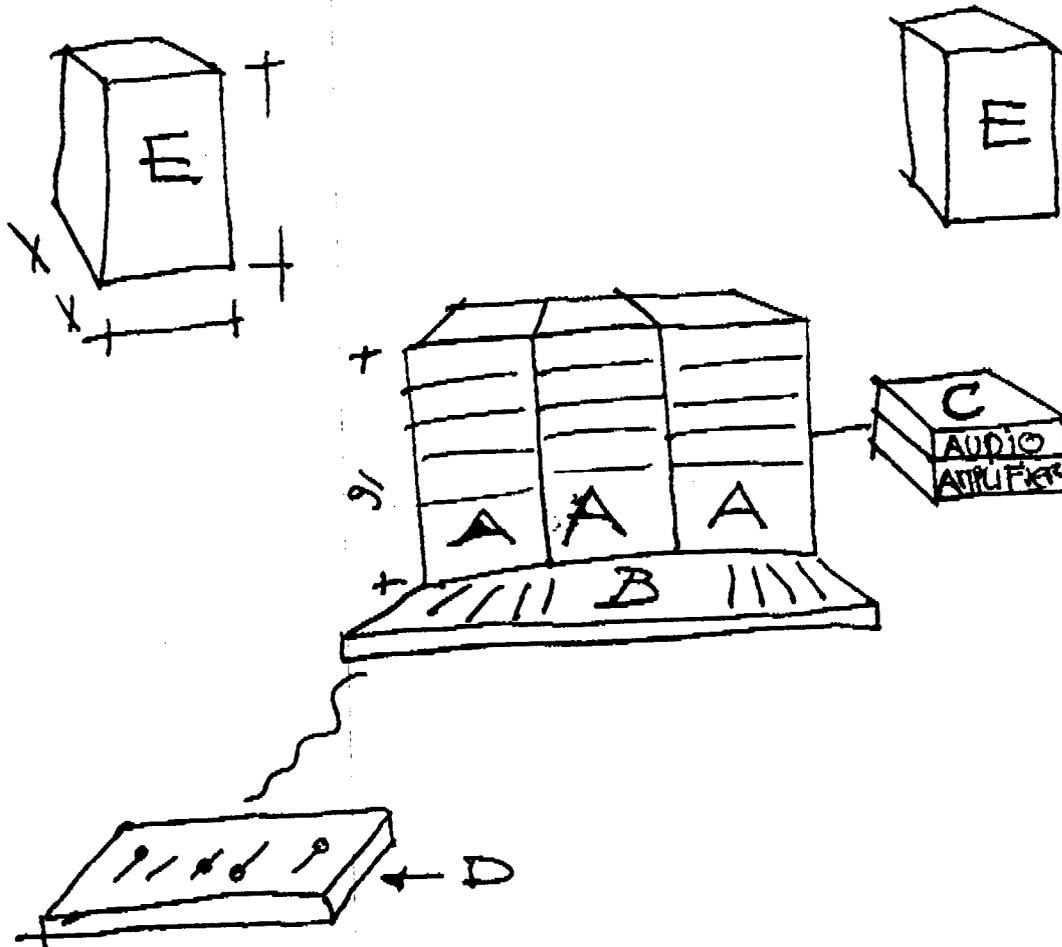
Photo not available. in storage until June.



BUC71A

AUDIO

x MOOG x



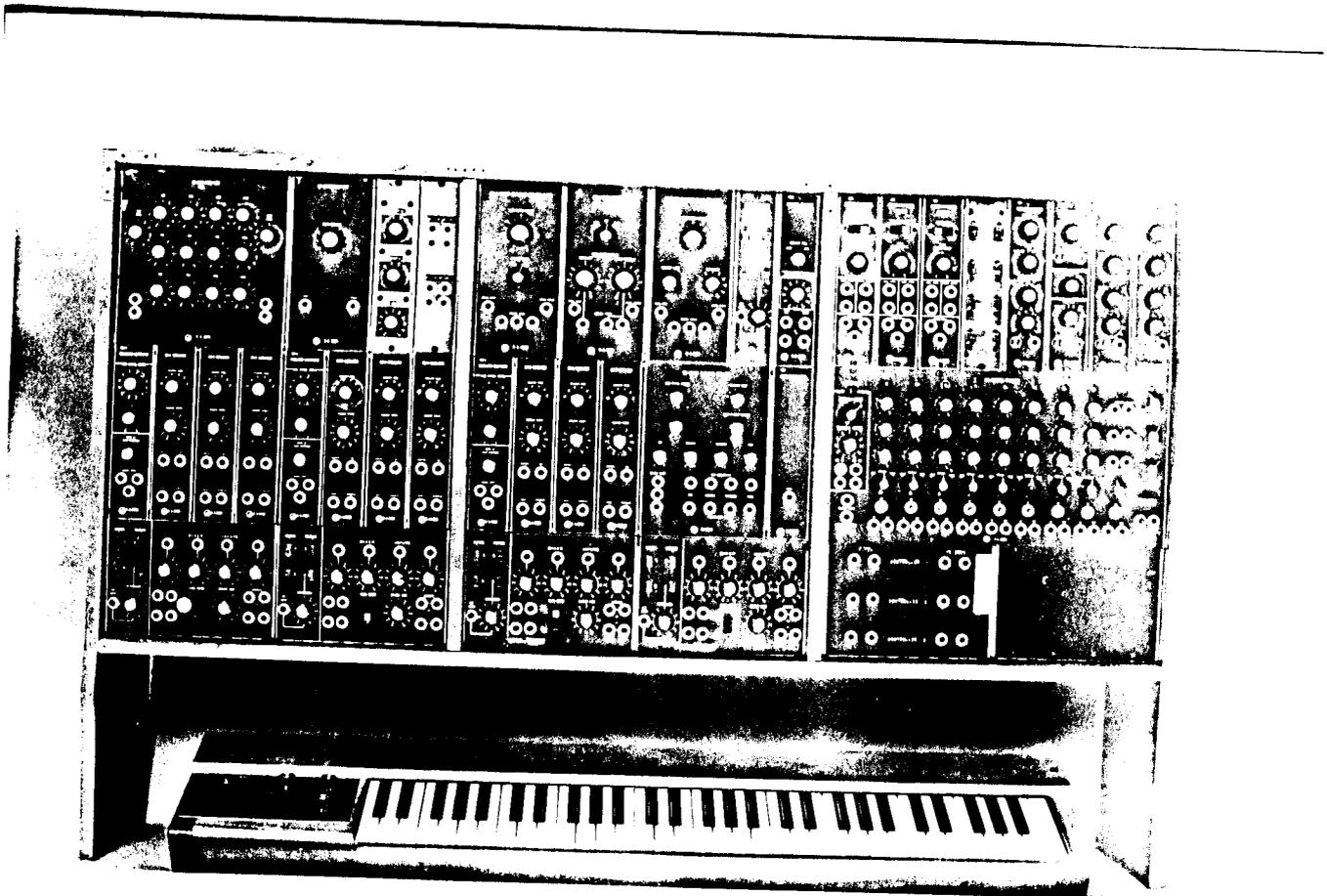
KOMPONENTEN:

H B T k

22,000

MOOG SYNTHESIZER

2	A-3 (Three) Racks with components/ each	36.0	54.0	12.0	25
		36.0	54.0	12.0	25
		36.0	54.0	12.0	25
		4.0	32.0	10.0	8
		12.5	25.0	12.0	20
	B-Keyboard				2
	C-External Power supply				
	D-Interface Control Panel				
	Patch Cords				
	E-LOUDSPEAKER				

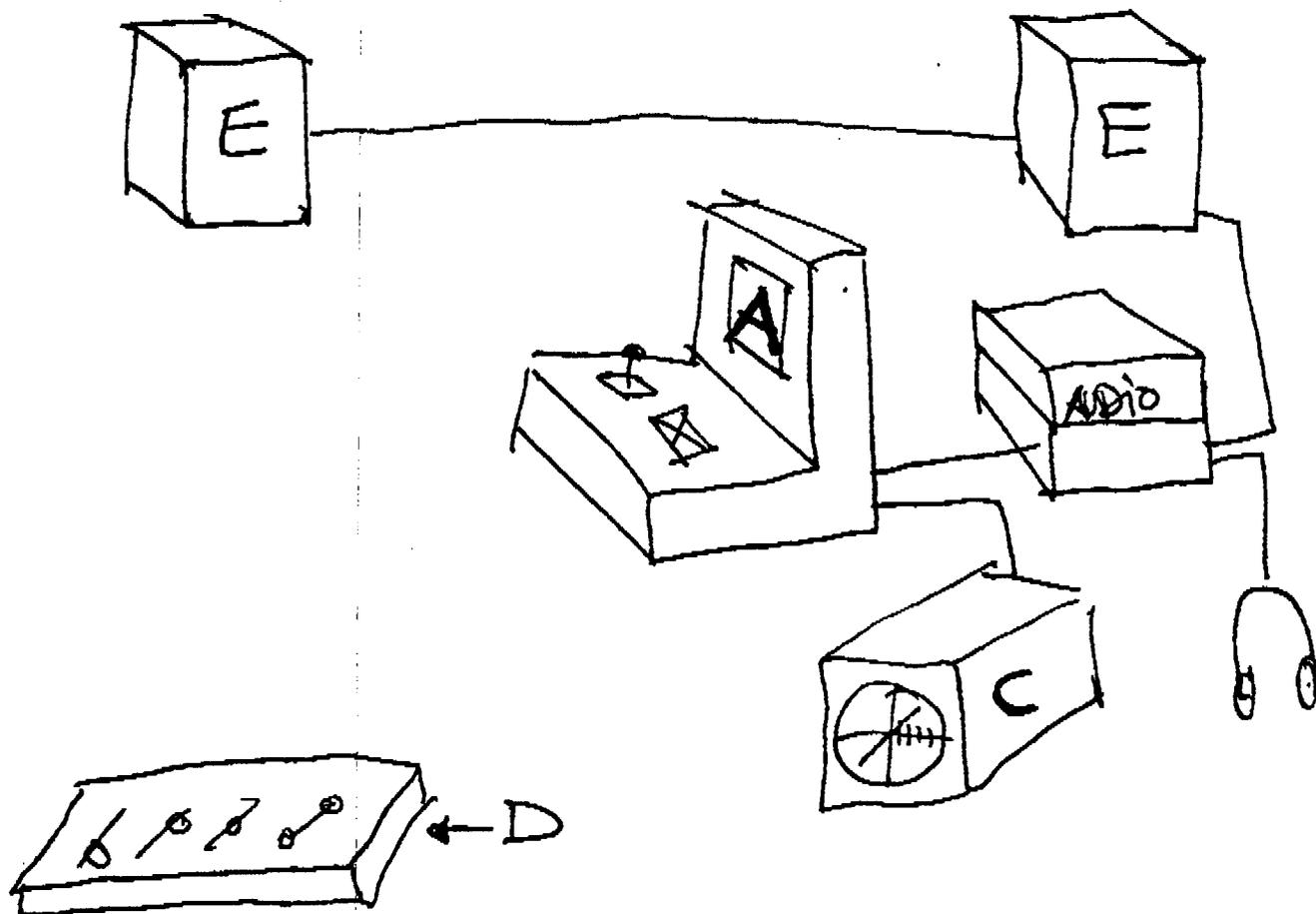


MOOG

AUDIO

PUTNEY

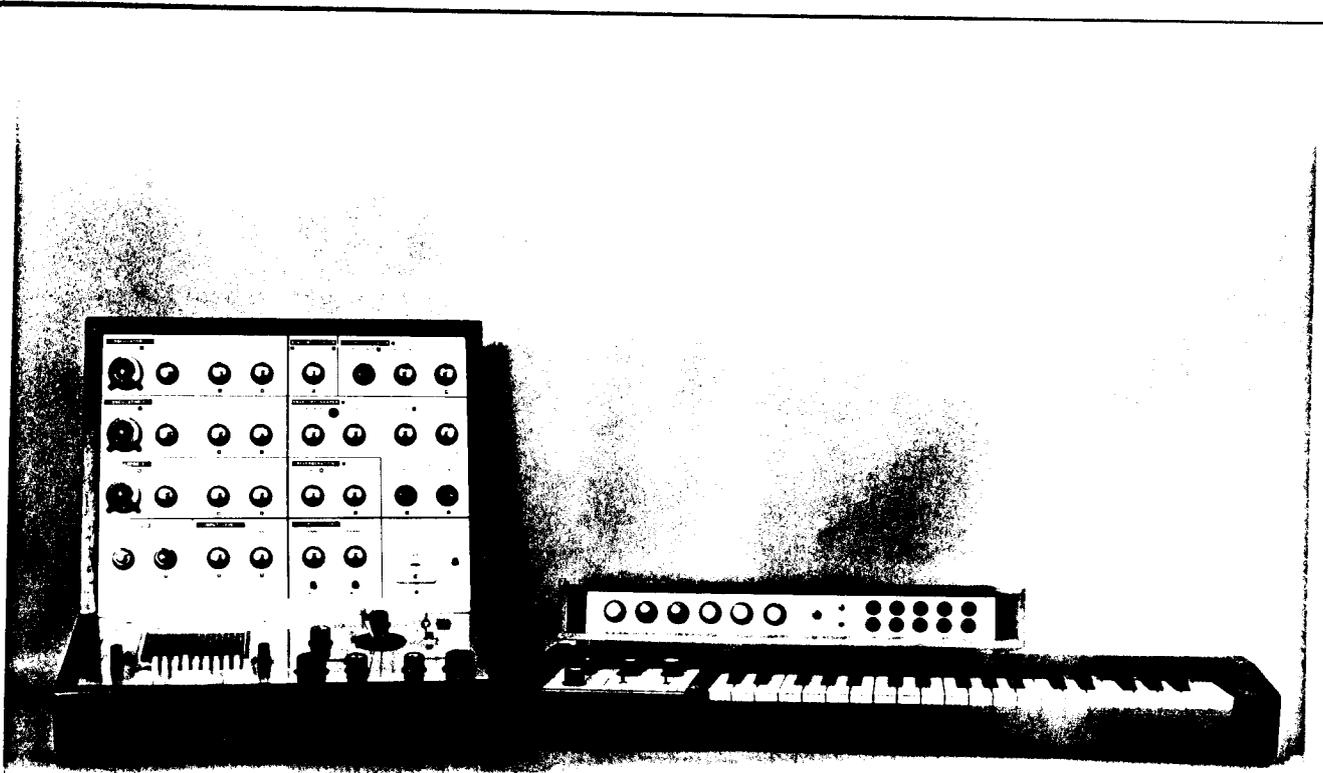
③



PUTNEY SYNTHESIZER

3,500

③ A	Main Unit Synthesizer VCS3a	17.5	17.5	17.5	20
B	Keyboard Synthesizer DK2	3.5	30.0	9.25	11
C	Pitch to Volume 739/3	3.25	20.0	7.5	7
D	Interface Control Panel :				2
E	LOUDSPEAKERS:				



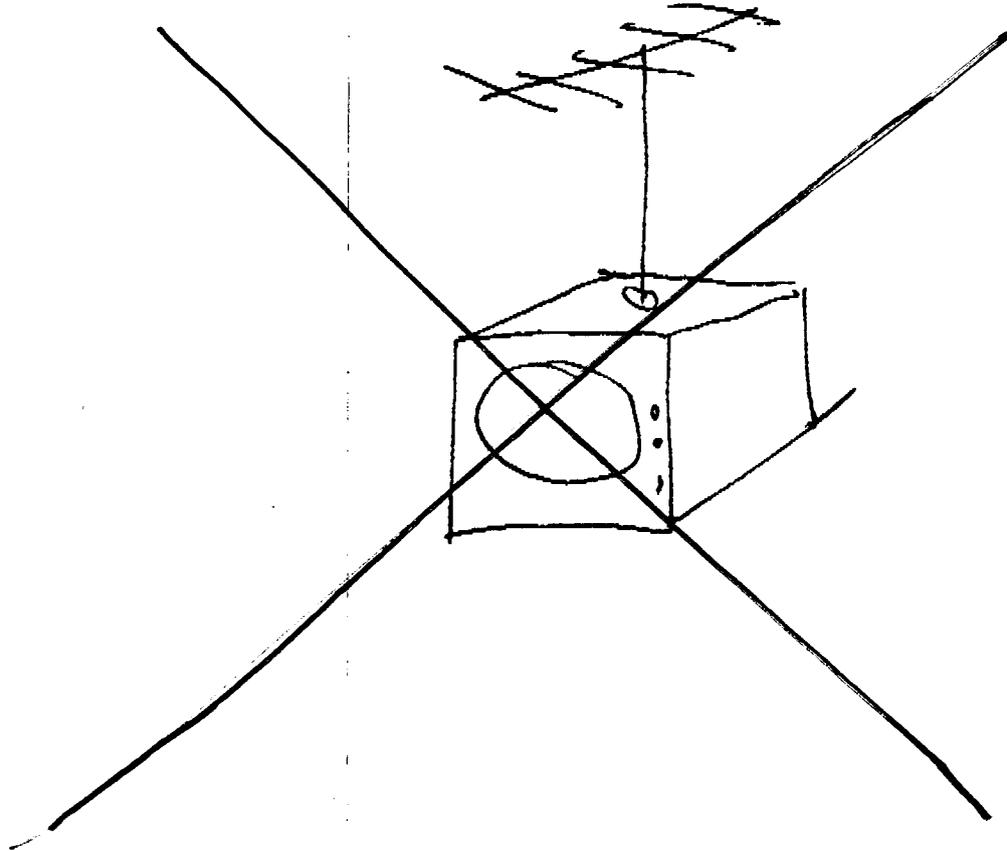
Putney

~~VIDEO~~ ANALOG

TATIBELLINI :

BLACK SPIRAL

→ EVERSON MUSEUM



MODEL : HEIGHT WIDTH DEPTH

NR:

Cancelled. Condition too poor for restoration.

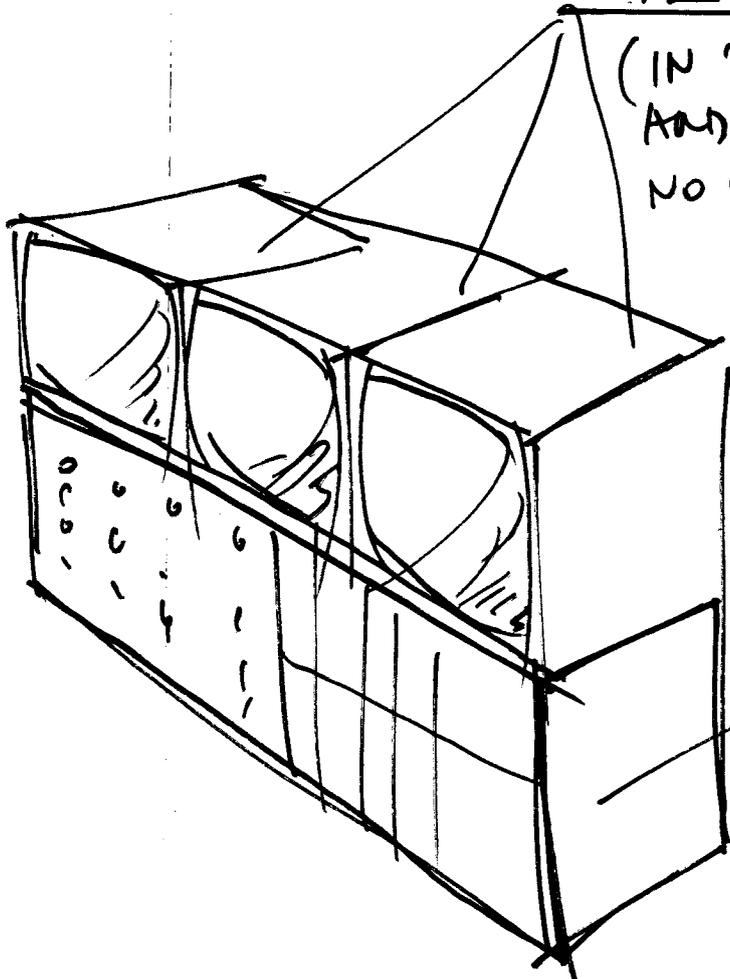
ANALOG
~~MINIATURE~~

HEARN : VIDUUM

5

*XYZ CRT DISPLAY

(IN PROCESS OF SEARCHING FOR
AND COLLECTING)
NO DIMENSIONS AVAILABLE
YET



VIDUUM
(SEE NEXT PAGE)

~~Dimensions Incorrect~~

30.0	48.0	21	18.0	95-98	12,000
12.0	12.0	14.0	36	27	670
12.0	12.0	14.0	36	27	
12.0	12.0	14.0	36	27	

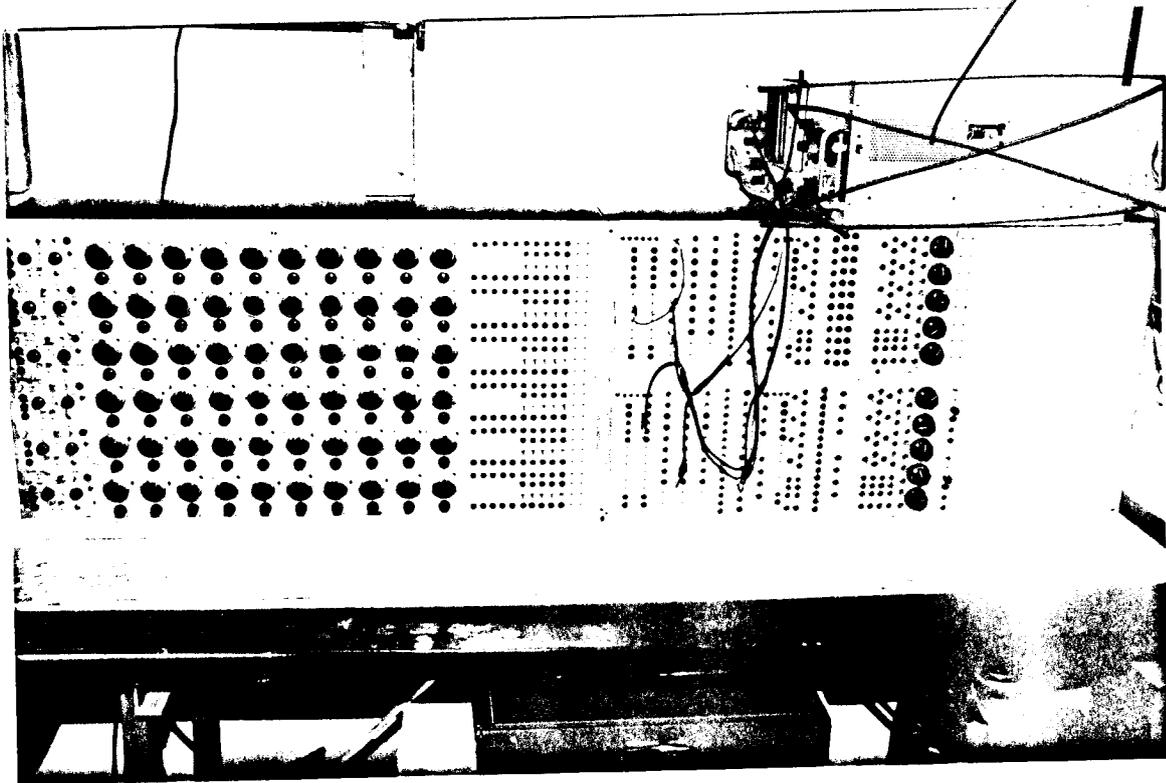
Hearn VIDUUM
3 (Three) "XV" Displays/
Each
Interface Control Panel

NR:

New dimensions: 21 72 10

XYZ* To come

NOT PART
OF THE
INSTRUMENT

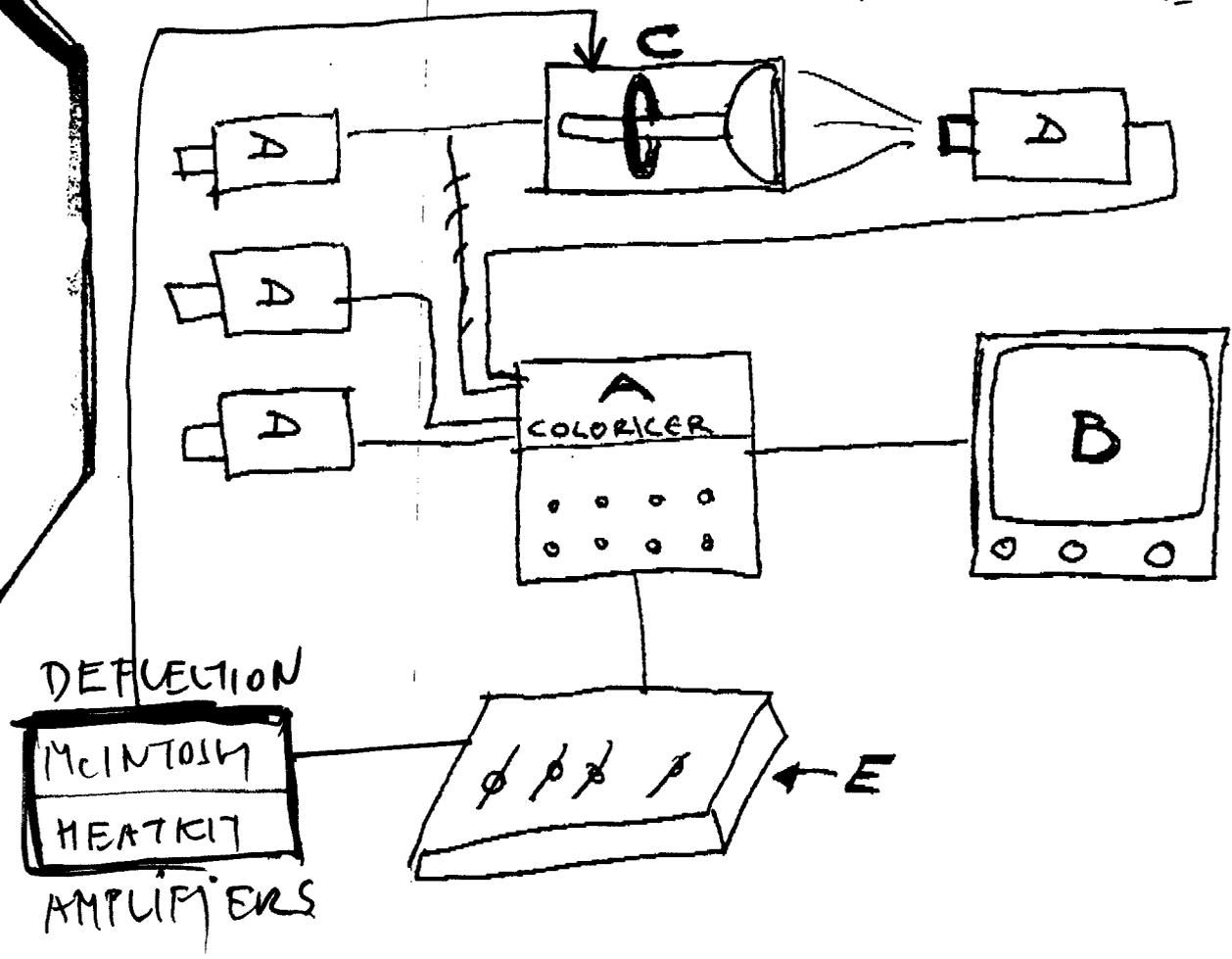


Hearn Vidium

ANALOG
VIDEO:
ETC

* PAIK ABE

SCAN ⑥
COLORIZER / RASTER MODULATOR
NEXT THREE PAGES



A COLORIZER
PAIK/ABK SYNTHESIZER

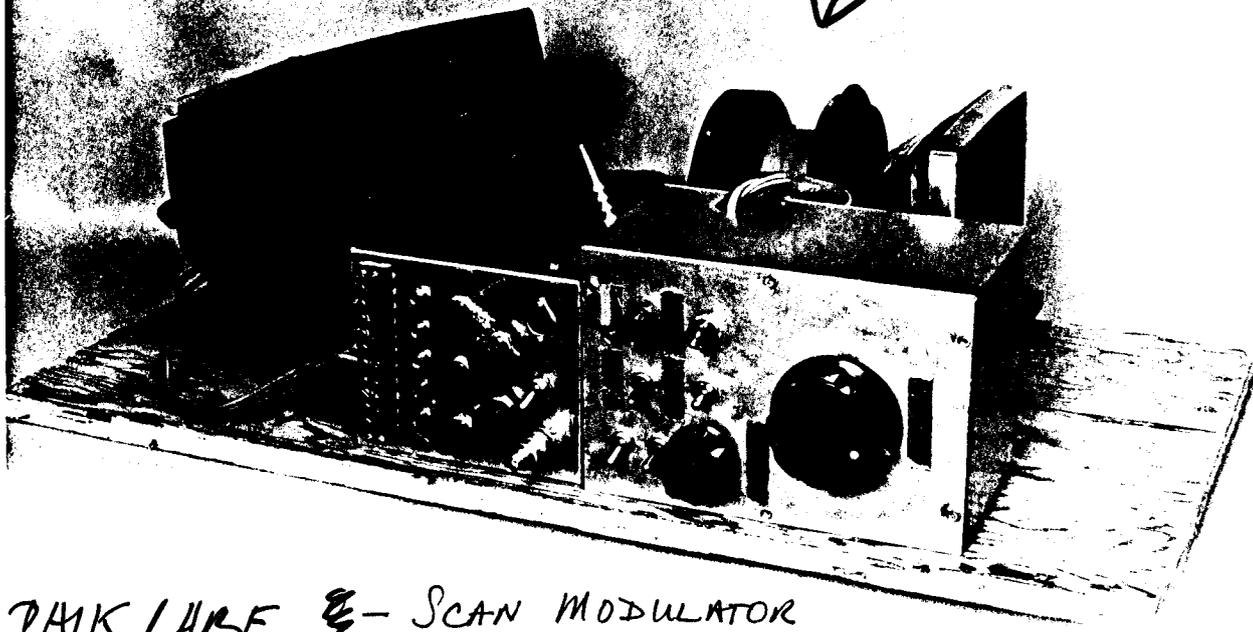
10.5	19.0	12.0	21	15,500
			2	

B - MONITOR
C - SCAN MODULATOR
D - CAMERA
E - INTERFACE CONTROL PANEL

See Dimensions on #17

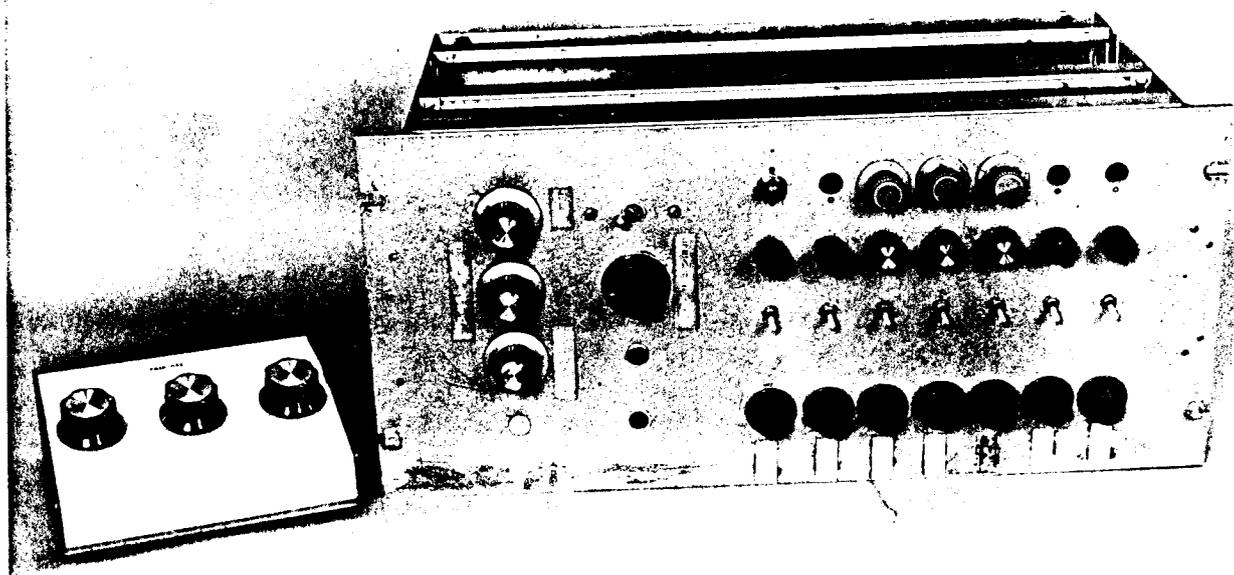
①

SEE DRIVING AMPLIFIERS NEXT PAGE



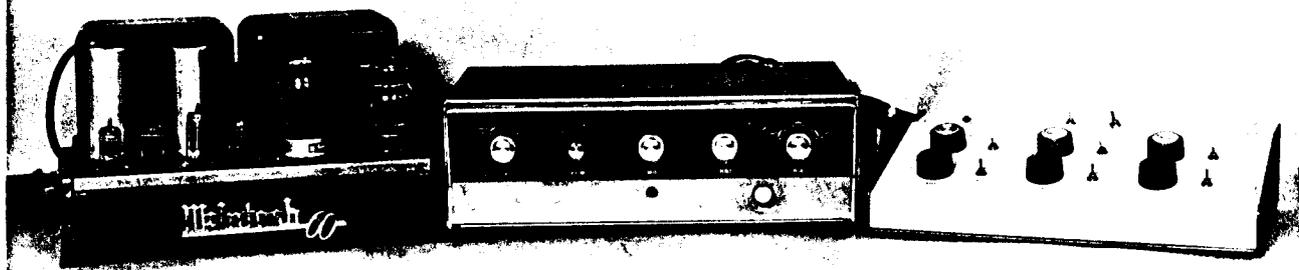
PAIK/ABE - SCAN MODULATOR

PAIK/ABE SYNTHESIZER



A

Paik / Abe (~~Synthesizer~~) COLORIZER
(C)



DRIVING AMPLIFIERS FOR PAIK/ABE
SCAN MODULATOR

PAIK SCAN MODULATOR

77

~~WIPED OUT~~

	Model #	Height	Width	Depth	Weight	IRV#
PAIK SCAN MODULATOR						15,000
(a.k.a. as the "Modulator")						
A	Display	SMC56B	10.0	18.0	29.5	35
B	Control Panel	none	1.5	14.5	10.0	5
C	Heath Kit Amp	MC-60	8.5	14.5	10.5	50
D	Heath Kit Amp	AA151	3.5	16.0	12.0	25
E	Interface Control Panel					2

(B)

VIDEO:

SIEGEL

DUAL COLORIZER

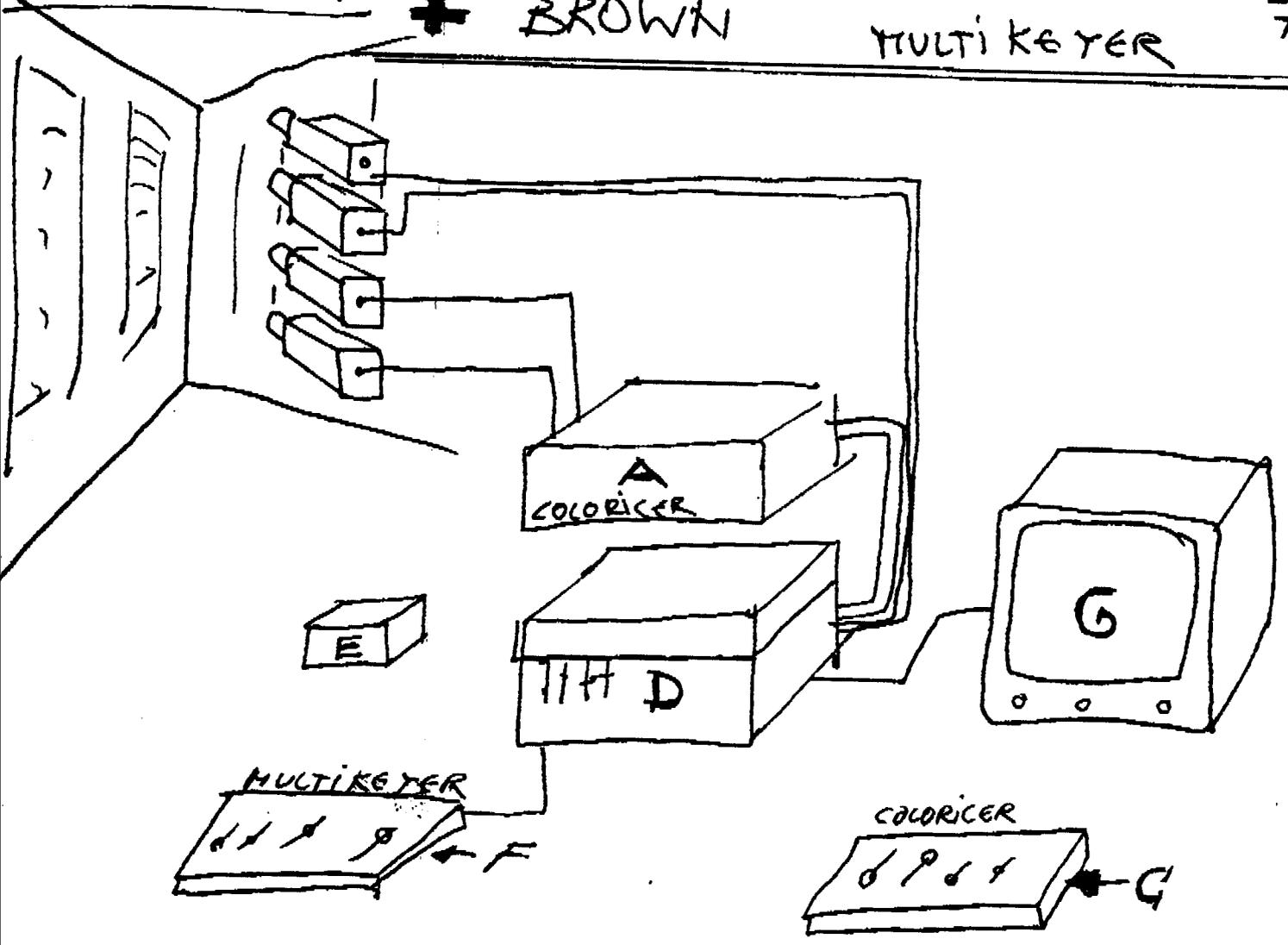
7

THE VASULKAS'

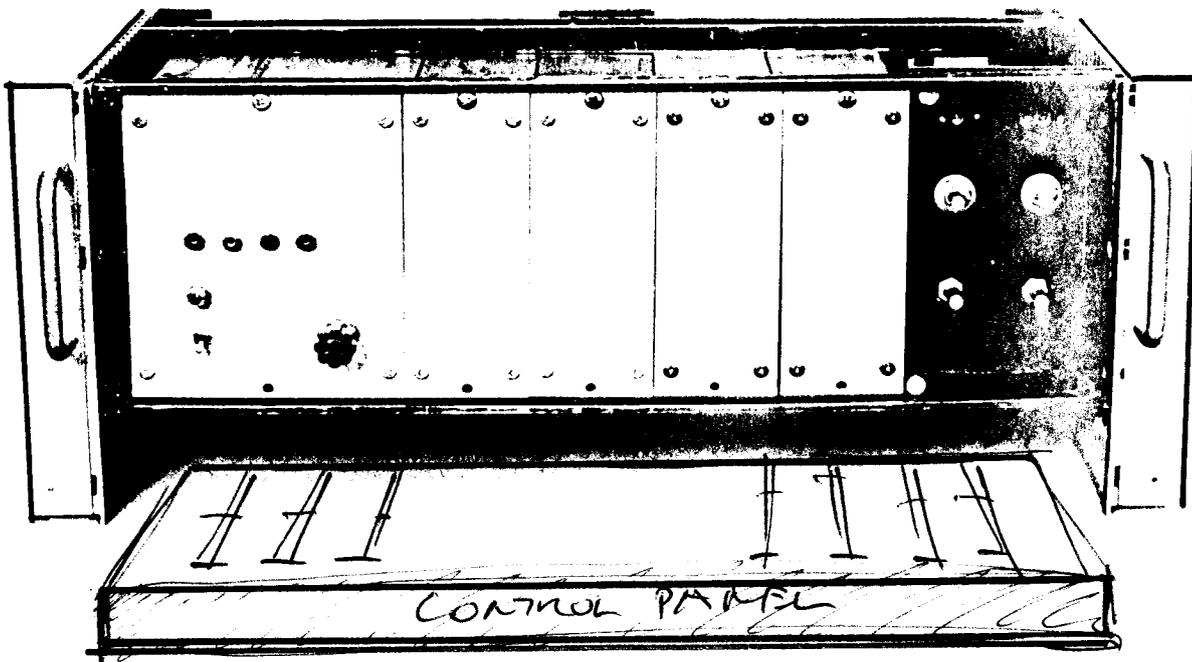
+ BROWN

MULTIKEYER

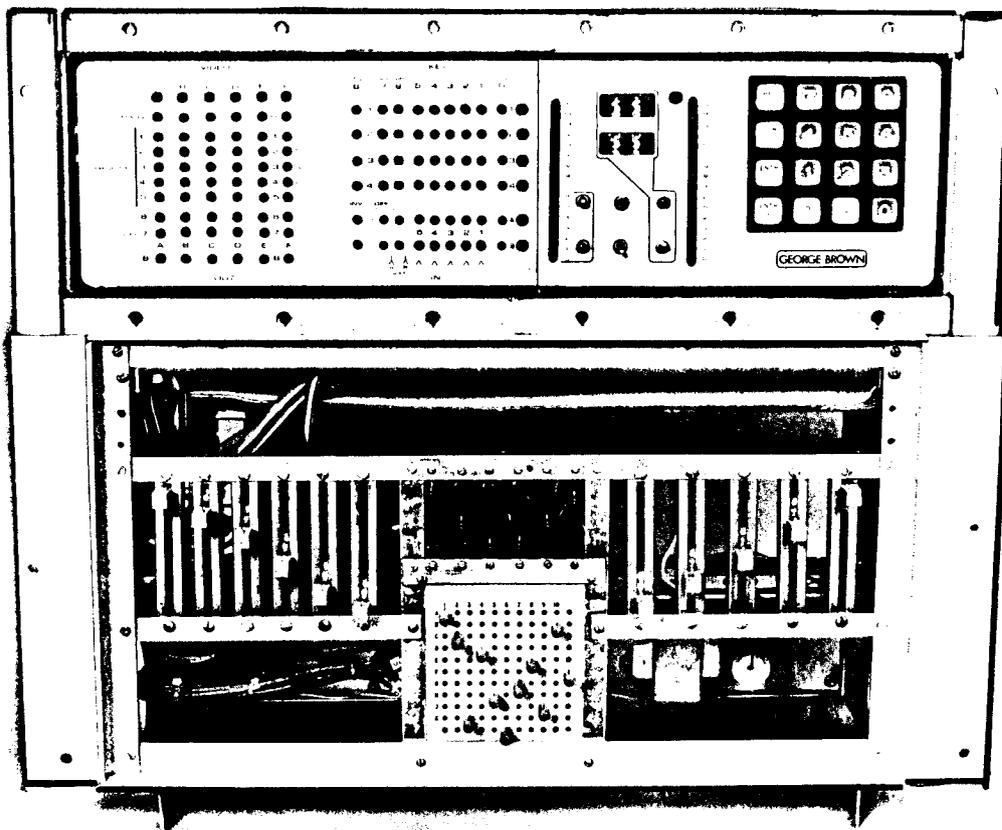
76



A SIEGEL DUAL COLORIZER	8.0 20	19.0 21	12.0 20	9	6,000
B Control Panel	2.0 5	17.0 20	7.0 12	3	
C Interface Control Panel				2	
<hr/>					
D BROWN MULTIKYER	17.0 21	20.0 51	14.0 15	21	8,500
E Power Supply	2.0 5	5.0 13	10.0 22	2	
F Interface Control Panel				2	
G MONITOR				2	



Siegel DUAL COLORIZER



BROWN
← MULTIKEYER

HYBRID

~~HYBRID~~ CLOUD MUSIC

19

INSTRUMENT

~~NO IMAGE YET~~

CLOUD MUSIC, Installation	16.5	24.0	12.0	35	25,000
Music synthesizer	23	11	19	22	35,000
Video analyzer	21	15	19	35	
Audio mixer					
Video camera(s) 1-3					

THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501
TEL. (505) 471-7181/FAX. (505) 473-0614

April 17, 1992

Stefan Brodbeck, Coordinator
Kühnler oder Krechtl
Fax: 011/43-1-525-10-39

Dear Stefan Brodbeck,

Sorry about our delays in responding to you and to an earlier inquiry of March 27. First to answer the earlier questions:

For each video instrument there is a monitor for X Y Z as the final display and one or several cameras as input. Each station (with a few exceptions) should be a modular platform.

About the **Lighting** - Daylight is no benefit to our exhibition.

About the **Gray Scale** - Designated walls should have graphic work that is has many shades of gray, i.e. a rich monochromatic surface with tonal variety that ranges from white through all grades of gray to black. We are assembling visual images now.

Regarding the questions of installation we cannot make a drawing until we know the dimensions of the galleries. Steffi Vasalla will be in Linz on Tuesday, April 21 and will video tape the spaces for us. In the meantime if you could send us the dimensions we can begin to determine where the instruments and installations should be placed.

Wilson to Brodbeck, page 2 of 2, 4/17/92

We are returning your inquiry sheets followed by available photos. All standard equipment - monitors and speakers is being provided by minz. We do not have the size specifications for those.

In all future correspondence we will use the numbering system you have assigned to the instruments. Please note that we are in the process of restoring these devices and some may not be able to be activated. David Muller, the technician is working on them as we write to you. His fax number is 319/333-1753. He will be the resource for technical information. Final selection of the instruments is to be made as soon as possible (before the end of April) based upon the combination of the functionality of the instruments and the space available.

Following are 34 pages.

Sincerely,

A handwritten signature in black ink, appearing to read "Malin Wilson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Malin Wilson

received
3-27-91

Eichinger oder Knechtl

A - 1010 Wien FranzJosefskai 29

tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to -THE VASULKAS INC.

pages -

Vienna, 27.3.1992

Dear Mrs. and Mr. Vasulka!

Dear Mr. Wilson!

Thank you for the first information about your preliminary program for the exhibition in Linz. We are happy, that we have the possibility to work on this exhibition.

At first may be a new information for you:

The exhibition contains beyond your pieces also three instalations by **Peter Weibel, Jeffry Shaw** and **Agnes Hegedus**.

These three objekts need the space of two or three rooms. On that account we have to work on new partition of the showrooms. As soon as we have further informations, we will forward it.

Some questions about your program:

About the Exhibition:

We need further informations about all the hardware you will exhibit in the Landesmuseum.

- 1 - Please send us as soon as possible a detailed list of the equipment you will show at the exhibition.
- 2 - further a detailed list about the equipment which should be prepared by the ARS in Linz.
- 3 - could you please give us utmost exactly specifications regarding the different arrangement and informations about the measurement (size) of each group. - *(The fifteen historical Audio / Video Instruments, the laserdisc Information Station, the Nano- and the Endo theater.)* If possible in form of a drawing and / or scetched into the ground floor.

About the Lighting -

The daylight is coming from the top of nearly each room in a diffuse way through topwindows, so that light reflexions on the screens may be not a big problem.

Is it necessary to shield totally the daylight ?

About the Gray scale requirement -

We need further informations about the walls with textural and / or pictorial surface.

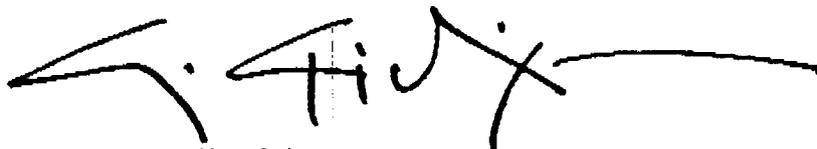
Which walls do you need in that way ? (could you draw this into the floorplan?)

These are first questions.

We hope to determinate the question about the partition of the showrooms next week, so that we can fax you the new informations .

If you need further informations, please contact us anytime.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eichinger oder Knechtl', with a long horizontal line extending to the right.

Eichinger oder Knechtl

FAXED
March 31 92

THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501
TEL. (505) 471-7181/FAX. (505) 473-0614

March 31, 1992

Eichinger oder Knechtl
Franz Josef Kai 29
A-1010 Vienna, AUSTRIA
Tel. 011/43-1-535-54-24
Fax. 011/43-1-535-40-49

Dear Eichinger oder Knechtl,

Thank you for your fax of March 27. We are confused about the allocation of the galleries for the installations of Jeffrey Shaw, Agnes Hegedus and Peter Weibel. Do you know who will do this? Until we know what spaces we are to use it does not make sense for us to plan in more detail.

Regards,



Martin Wilson
Coordinator

Eichinger oder Knechtl

A - 1010 Wien Franz Josefs Kai 29

tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to -THE VASULKAS

pages -19

Vienna ,8.4.1992

received
April 8 1992

Dear Mrs. and Mr. Vasulka

Dear Mr. Wilson

Last week,we have got the list about the inventory of equipment,you sent to Mrs. Gsöllpointner.

But we need further informations about all the hardware you will show in the Landesmuseum.

I have some problems with your list , so I scribbled each configuration and called each element by number.

Could you please have a look at, if it is correct and complete?

(With the declaration about dimensions and weight)

Do you have any consideration to assort the single elements?
It is important for us ,because of the allocation in the floorplan.

About the *ENDO theater*
We need the measurement of the video matrix.

It would be very obliging if you could still answer this week and hope to meet Mrs Vasulka in Linz to talk about all these things .

Sincerely,



Stefan Brodbeck
coordinator

PRELIMINARY PROGRAM FOR EXHIBITION DESIGN

"THE PIONEERS of ELECTRONIC ARTS"

- I. Ideology
- II. Catalogue
- III. Distribution of hardware in Landesmuseum rooms
 - a. Audio/Video Instruments & five Laserdisc Information Stations (Rm. #s 2.1, 2.4, 2.5, 2.6, & 2.9)
 - b. Four Laserdisc Nanotheaters (#'s 2.2, 2.3, 2.11, 2.12) and One Video Endotheater (# 2.10)
- IV. Modular systems for equipment
- V. Lighting & Gray scale requirements
- VI. Security
- VII. Maintenance

I. Ideology - The Audio/Video Instruments

Sound synthesizers came first and were followed by various Audio/Video Instruments created by a generation of artist/designers or artists in close collaboration with engineers. Like so many others during the '60s, most of these individuals lived an alternative life style outside of mainstream institutions with little or no industrial affiliations. They created an independent technological base from which they profoundly influenced the electronic generation of sonic and visual arts.

This exhibition concentrates on a specific class of electronic instruments conceptualized and built during a particular period: mid '60s to mid '70s. These instruments emerged in a time that was politically and socially biased and was characterized by a disillusionment with the "establishment" (particularly the war in Vietnam), and a Utopian vision enhanced by psycho-active drug experiences. The overall design of the exhibition should consider and reflect these elements.

All of the Audio/Video Instruments exhibited are to be presented "live" and as fully functioning as possible. They will be made interactive with auxiliary "interface control panels" designed by the Vasulkas.

"Interface control panels" are needed because the original instruments are fragile and/or too complex. We urge the designers to establish a system that discourages the visitor from directly touching the Audio/Video Instruments.

II. Catalogue

The catalogue will serve as a guide through the exhibition. The catalogue will contain basic information about the Audio/Video Instruments with BarCodes printed in the catalogue. With a light pen at each station and theater the visitor can activate the laserdisc and access sequences of sound and both still and moving images related to the Audio/Video Instruments.

III. Distribution of hardware in the Landesmuseum Rooms

We have received a floor plan of the second floor of the Landesmuseum in Linz, where the exhibition is to be installed. We presume that all galleries from 2.1 through 2.12 with the exception of 2.7 & 2.8 are available for the "PIONEERS" exhibition.

The exhibition has two conceptually different types of information:

- a. Approximately fifteen historical Audio/Video Instruments with five supporting laserdisc Information Stations
- b. "Theaters" - both nano and endo - for the presentation of audio and video art produced on historical instruments to be produced on laserdisc by the Vasulkas.

a. Regarding the galleries with the historical Audio/Video Instruments with the five supporting Laserdisc Information Stations:

Each gallery should have no more than three Audio/Video Instruments, with the instruments grouped according to their purpose and functions - e.g., scan processing, colorizing, keying, etc. In each of the galleries with the Audio/Video Instruments there will be Laserdisc Information Stations. Each of the five Laserdisc Information Stations will be comprised of a laserdisc player with its own video display (monitor), audio system (either small speakers arranged for proper acoustics or earphones), a place for an exhibition catalogue and a barCode light pen to read the BarCodes in the catalogue, and a chair for the museum visitor. The five Laserdisc Information Stations will contain identical discs that provide basic information about the Audio/Video Instruments, their makers and the type of processes used to make music and video art.

We envision the Audio/Video Instruments and five laserdisc Information Stations in Rm. #s 2.1, 2.4, 2.5, 2.6, & 2.9.

N.B. The historical Audio/Video Instruments are of various configurations, sizes, complexity and functioning.

Regarding the Audio Instruments: Three audio synthesizers have been selected for the exhibition. They may be simply installed with amplifier/speaker systems, or they may be coupled with video companions.

Regarding the Video Instruments: Each instrument will be connected to its own video display (monitor), video inputs (from one to six cameras), and interface control panel.

b. Regarding the Four Laserdisc Nanoteaters in Room #'s 2.2, 2.3, 2.11, 2.12, and the one Video Endotheater in Room # 2.10.

The Laserdisc Nanoteaters in the small galleries will have laserdisc players for the different groups of sound and video art programs, each with its own video display (monitor) with a good integral audio system, and a place for the catalogue and BarCode light pen. The Nanoteaters also need chairs for the viewers.

The Endotheater in a larger gallery will offer the visitor all of the programs that are on the laserdiscs - both the laserdisc information Station discs and the four Nanoteater laserdisc programs - to be shown on a regular schedule with a larger scale display - a video matrix, a four by four grid of sixteen stacked monitors.

IV. Modular systems for all equipment

We suggest that the physical design of the equipment supports (whether they are racks, tables, platforms, pedestals) for the historical audio/video instrument components and auxiliary equipment, the Laserdisc Information Stations, and the Theaters be of a modular character to accommodate various sizes and configurations of instruments and supporting equipment that includes video displays (monitors), input devices (one to six cameras per instrument), interface control panels, laserdisc players, light pens, catalogues and chairs for museum visitors.

Electricity must be (110V) and there will be many cables connecting all of the equipment that could be bundled together in large conduits.

As mentioned above the historical Audio/Video Instruments will have anywhere from one to six input devices or cameras and the modular system should be flexible enough to accommodate a varying number of cameras that are set-up to pan.

(N.B. We are currently preparing a list of all the equipment to be shipped from the US with size and weight specifications, and a list of equipment to be supplied by ARS ELECTRONICA.)

V. Lighting & Gray scale requirements

The light conditions in each gallery must be controlled, with no daylight. The surface of each monitor needs to be shielded from light reflections (this can be accomplished with custom designed shields) and the rest of the room (except the "Theaters") needs to be lit so that cameras on the "live" Audio/Video Instruments will have good pick-up.

The walls should have either a rich textural surface and/or a pictorial surface so that they can serve as image sources for the cameras. The walls should be monochromatic and rich in gray scale gradations in order to provide good brightness to color conversion material for colorizing units, which most of the Audio/Video Instruments contain.

The character of the wall images should reflect the historical period. These could be photographs of the counter culture or journalistic images of the war, or test pattern abstractions - technological charts used to calibrate imaging equipment, etc.

VI. Security

Please note that most of the Historical Audio/Video Instruments are hand built, fragile, and unique. A discrete and effective system of unobtrusive protection must be designed to prevent tampering, vandalism and destruction.

VII. Maintenance

Do to the nature of the equipment in the exhibition, we anticipate continuous, daily maintenance will be needed.

Consequently we request that a convenient, accessible workshop area be designated for the use of the Vasulkas and the technicians during the installation period.

FAXED
3-17-92

THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501
TEL. (505) 471-7181/FAX. (505) 473-0614

March 17, 1992

ARS ELECTRONICA
FAX: 011/43(732)783745

Dear Katharina.

Thank you for sending the Aldo Tambellini material. Do you have other original material collected during your visit that we might use on the laserdiscs we are preparing for the exhibition?

Please be assured that we are in agreement with the contract that you faxed on March 11th. We should have the information you requested - sizes, weights and values, and the list for Fadi by tomorrow. We are also sending an addendum of clarifications to the faxed contract which we have signed.

We'll prepare another report on Friday. We tried to send it right away, but the ARS ELECTRONICA fax machine would not receive until Monday.

Regards,



C O N T R A C T

entered into by the Linzer Veranstaltungsgesellschaft mbH, LIVA-Brucknerhaus, Untere Donaulände 7, A-4010 Linz/Austria, represented by Karl Gerbel, managing director, and Wolfgang Lehner, executive manager, and the artists

Vasulkas Inc., represented by Woody & Steina Vasulka, Route 6, Box 100, Santa Fe, NM 87501, USA.

I.

Subject of the contract is

- a) Providing of a concept in substance for an exhibition on the topic "Pioneers of Electronic Arts" at O.Ö. Landesmuseum Francisco Carolinum in the framework of ARS ELECTRONICA 92 in Linz from June 22 thru July 5, 1992.
- b) Selection of the machines to be presented (minimum of 8 machines); these have to be fully in function and must be presented be used by visitors in an interactive way.
- c) The machines have to be packed and prepared for transportation not later than Monday, May 4, 1992 in Iowa.
- d) Preparation of texts and pictures for a catalogue which will be published in cooperation with Peter Weibel and will be produced until June 22, 1992 (opening of the exhibition). This includes essays by Woody and Steina Vasulka, MaLin Wilson, David Dunn and other persons to be designated by the Vasulkas.
- e) Organizing and technical supervision of the exhibition in Landesmuseum from June 9 thru July 9, 1992 (including set up and strike down); this also includes the preparation and packing of the machines for transportation back to the US.
- f) Preparation of material for presentation at Landesmuseum (video tapes, slide-shows, possibly CD-ROM discs)
- g) A lecture on "Pioneers of Electronic Arts" in the week from June 22 thru 27 at Landesmuseum. Date has still to be coordinated with Peter Weibel/LIVA.

II.

a) The presentors guarantee that a total budget of ATS 726.375.-- brutto (i.w. sevenhundredtwentysix thousand threehundredseventyfive Austrian Schilling; that are US\$ 65.000.- netto, current rate 11,175 from February 5th, 1992) will be provided for the project.

All fees, complete overall costs (e.g. per diems, telephone and office costs etc.), production and technical costs as well as transport, travel and hotel costs within the US are to be covered in this amount.

b) Travelling and hotel costs for

David Mueller (flight from Iowa to Austria and v.v., room from June 9 thru July 9, 1992),

Woody & Steina Vasulka (flight from Frankfurt to Austria and v.v., room from June 9 thru July 5, 1992), are not included in the amount mentioned above in II./a.

c) The payment will be payed in rates as follows:

1. rate: Dec 5, 1991	US\$ 5.000,- (rate 11,502)=ATS	57.510,-
2. rate: Feb 14, 1992		ATS 279.375,-
3. rate: March 16, 1992		ATS 277.740,-
4. rate: by bank transfer after deduction of all bills paid by LIVA		ATS 111.750,-

The contract partners bind on holding LIVA harmless against claims of third-party persons.

Linz, March 11, 1992
On behalf of
LINZER VERANSTALTUNGSGES mbH

" Santa Fe, 3-17-92
On behalf of
Vasulkas Inc.

ppa

(Ing. Mag. Wolfgang Lehner)



(Woody & Steina Vasulka)

(Karl Gerbel)

ADDENDUM TO CONTRACT, page 1 of 2

As contractors for the pre-production of the ARS ELECTRONICA "Pioneers" exhibition we are responsible for insurance or shipping charges until the pick-up of the equipment on May 4, 1992. It is our understanding that as of May 4, 1992 ARS ELECTRONICA will arrange for shipping, insurance and customs clearance of the exhibition materials.

Please note, that it is also our understanding that ARS ELECTRONICA - and not the Vasulkas, Inc. - will be responsible for the costs of returning the machines and equipment to their owners.

It is also our understanding that we are not responsible for any of the costs related to the design and execution of the catalogue and installation at the Landesmuseum for galleries 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.9, 2.10, 2.11 & 2.12.

Attached is a list of the machines to date that we have selected and secured for the exhibition and a list of the equipment for shipment from Iowa City, Iowa, USA, on May 4, 1992. Please note that the shipment list is missing the following pieces of equipment.

1. Stephen Beck's DIRECT VIDEO SYNTHESIZER & VIDEO LOOM - From the initial planning phases of the exhibition, ARS ELECTRONICA has been negotiating with Stephen Beck independently regarding his participation in the exhibition and festival. Beck is currently negotiating with Peter Weibel regarding the extent of his participation. The Vasulkas, Inc. has offered Beck 3,000 US\$ from our budget for restoration of his machines. However, because Beck has not finalized his negotiations with Peter Weibel to our knowledge at this date, and because Beck must restore his own machine and is not working on our timetable with our technician we cannot be responsible for arranging that the Beck machines are included in the shipment from Iowa.

2. As per an agreement with Peter Weibel, Phil Morton will participate in the festival, install his own device - the IP (Image Processor) - at the Landesmuseum, and be on hand at the museum during the exhibition, and for the festival symposium at the expense of the festival. Morton, in order to save shipping costs, will carry his IP as excess baggage on his flight to Linz. His proposed arrival in Linz is June 14 so that he can personally install his interactive machine. Shipping the IP as excess baggage represents a savings and the cost will be paid by ARS ELECTRONICA.

3. The BUCHLA SYNTHESIZER, Collection of Michael Czajkovsky of New York City, is kept in permanent storage in Aspen, Colorado, and cannot be accessed until the first week of June. It needs no restoration. The Vasulkas, Inc. will make every attempt to personally carry this significant machine to Linz in time for the installation, but it is obviously not available for the May 1, 1992 bulk shipment from Iowa City. If it must be shipped the expense will be paid by ARS ELECTRONICA.

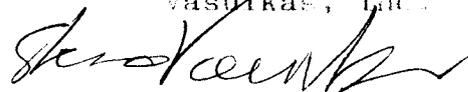
Ten pages of materials will be presented to ARS ELECTRONICA for inclusion in the festival catalogue on April 15, the exhibition catalogue materials will be sent to Peter Weibel.

Linz, Date _____
on behalf of
LINZER VERANSTALTUNGSGES mbH

Ing. Mag. Wolfgang Lehner

Karl Gerbel

Santa Fe March 17, 1992
on behalf of the
Vasulkas, Inc.



Woody/Steina Vasulka



THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501

TEL. (505) 471-7181

FAX. (505) 473-0614

Date: March 13, 1992
To: ARS ELECTRONICA, Peter & Katharina
From: The Vasulkas, Inc.
Re: Weekly Summary, March 8-13

Activities Completed

- Decide that we cannot include BLACK SPIRAL
- Complete list of machines (attached)
- Woody reviews all films of Lee Harrison
- Confirmation of loans to the exhibition:
 - VIDIUM, Sonoma State University, Rohnert Park, California
 - MOOG SYNTHESIZER, Drew University, Madison, New Jersey
 - BUCHLA SYNTHESIZER, Aspen, Colorado
 - CLOUD MUSIC Installation, Estate of Bob Watts, New York
 - 64 x 64 REAL TIME BUFFER, Coll. of Gary Bill
- Negotiate restorations of CLOUD MUSIC with composer David Behrman, and the JONES 64 x 64 REAL TIME BUFFER
- Deposit of 30% on eight more Pioneer LDV220 Laserdisc Barcode machines for installation (two already purchased = Total of ten)
- Full restoration of McArthur SAID
- Transcription of Subotnick and Beck interviews
- Develop schedule (attached)

In progress

- Collection of materials to be sent to Peter
- Review of early tapes, cleaning, transfer, restoration
- Shipping sizes, weights and values for all machines
- David Dunn contextual essay complete up to 1950
- Conceptualization of appropriate exhibition installation-
- Preparation of a complete list of technical equipment and power supply for Fadi

Pending

- Shipment of all machines to David Mueller
- Introduction to exhibition designers
- letter of authorization and clarification of loan the procedures and certificates of insurance
- Catalog preparation

N.B. A number of significant individuals contacted have expressed a desire to be invited to the festival. We would like you to consider inviting.

David Behrman, composer, who was a collaborator on the CLOUD MUSIC installation and is restoring it for the exhibition

Norman Lowrey, composer, Chairman of the Music Department, Drew University. He is responsible for a hand built early MOOG SYNTHESIZER, which he has kept in working condition, and that he is pulling apart his huge MOOG and reassembling representative components.

Katharina:

We should have all of the sizes, eights and values by Tuesday, March 17.

Also, the contract does not mention the return shipping. Obviously although we are preparing everything for pick-up from one location, the machines must be returned by ARS ELECTRONICA to their owners after the exhibition, and we are in no way responsible for this expense.



THE VASULKAS, INC./100 ROUTE 6/SANTA FE, NEW MEXICO 87501
 TEL. (505) 471-7181/FAX. (505) 473-0614

ARS ELECTRONICA EXHIBITION/JUNE 1992
 Inventory for Equipment -
 Dimensions, Weight & Insurance Replacement Values

N.B. All measurements in inches and pounds.

TRV* = Insurance Replacement Value of fully functional equipment
 in US\$.

	Model #	Height	Width	Depth	Weight	TRV*
PAIK SCAN MODULATOR						15,000
(a.k.a. as the "Webulator")						
Display	SMC156B	10.0	18.0	29.5	35	
Control Panel	none	4.5	14.5	10.0	5	
McIntosh Amp	MC-60	8.5	14.5	10.5	50	
Heath Kit Amp	AA151	5.5	16.0	12.0	25	
Interface Control Panel					2	
MOOG SYNTHESIZER						22,000
3 (Three) Racks with						
components/ each						
		36.0	54.0	12.0	25	
		36.0	54.0	12.0	25	
		36.0	54.0	12.0	25	
Keyboard		4.0	32.0	10.0	8	
External Power supply		18.5	25.0	12.0	20	
Interface Control Panel					2	
Patch Cords						
PUTNEY SYNTHESIZER						3,500
Main Unit Synthi	VCS3a	17.5	17.5	17.5	20	
Keyboard Synthi	DK2	3.5	30.0	9.25	11	
Pitch to Volume	739/3	3.25	20.0	7.5	7	
Interface Control Panel					2	

	<u>Model #</u>	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight (RV#)</u>	
CLOUD MUSIC, Installation		16.0	24.0	12.0	35	25,000
Hearn VIDUUM		30.0	48.0	18.0	95	12,000
3 (Three) "XY" Displays/		12.0	12.0	14.0	27	
Each		12.0	12.0	14.0	27	
Interface Control Panel		12.0	12.0	14.0	27	
					2	
CVI (Colorado Video Inc.)						5,000
QUANTIZER		12.0	19.0	12.0	20	
Control Panel		6.0	5.0	12.0	6	
Interface Control Panel					2	
CVI DATA CAMERA		5.0	14.0	10.0	8	6,000
Control Panel		4.0	19.0	12.0	8	
Power Supply		1.0	19.0	15.0	2	
Interface Control Panel					2	
PAIK/ABE SYNTHESIZER		10.5	19.0	12.0	21	15,500
Interface Control Panel					2	
BROWN FIELD FLIP/FLOP SWITCHER						7,500
Interface Control Panel		6.0	19.0	11.0	13	
					2	

	<u>Model #</u>	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>	<u>IRV*</u>
STIEGEL DUAL COLORIZER		8.0	19.0	12.0	9	6,000
Control Panel		2.0	17.0	7.0	3	
Interface Control Panel					2	
BROWN MULTIKEYER		17.0	20.0	14.0	21	8,500
Power Supply		2.0	5.0	10.0	2	
Interface Control Panel					2	
RUTT/ETRA SCAN PROCESSOR						12,000
Control Panel Oscillators		9.0	19.0	15.0	14	
Control Panel Display		9.0	19.0	21.5	22	
Ramps		4.0	19.0	12.0	4	
Audio Interface		5.5	19.0	9.0	6	
Power Supply		9.0	19.0	20.25	35	
Display		9.0	19.0	16.25	24	
Tube 1040AKB4		11.0	3.0	7.0	2	
+Cables						
Interface Control Panel					2	
JONES 64 x 64		7.0	19.0	8.0	5	800
REAL TIME BUFFER						
Interface Control Panel					2	
MCARTHUR SAID (Spatial and Intensity Digitizer)						5,000
Main Unit		20.0	20.0	12.0	25	
Control Panel		5.0	14.0	10.0	8	
Interface Control Panel					2	

Model # Height Width Depth Weight IRV#

MCARTHUR & SCHIER DIGITAL IMAGE GENERATOR					13,000
Image Generator	7.0	19.0	18.0	20	
Power Supply	5.0	19.0	6.0	10	
Host Computer	4.0	19.0	18.0	14	
Disc Drive	5.0	8.0	12.0	6	
Interface Control Panel				2	

*Optional Device:

BECK GRAPHIC OUTLINER	6.0	19.0	9.0	9	500
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EQUIPMENT THAT WILL NOT BE SHEPPED FROM IOWA CITY, IOWA

To be arranged by the Vasulkas:

BUCHLA SYNTHESIZER	32.0	24.0	18.0	35	12,000
Keyboard	4.0	18.0	10.0	5	
Interface Control Panel				2	
Patch Cords					

To be arranged by Steve Beck & Peter Weibel:

BECK DIRECT VIDEO SYNTHESIZER

BECK VIDEO LOOM

To be carried as excess baggage by Phil Morton:

IP (Image Processor)

<u>Model #</u>	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>	<u>IRV*</u>
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AUXILIARY INDUSTRIAL EQUIPMENT/Multiple Units

21 (Twenty-one) PORTABLE CAMERAS: Each \$180					3,780
Each	8.0	6.0	9.5	4	
			Sub-Total Weight	84	

21 (Twenty-one) LENSES: Each \$50					1,050
	5.0	2.0 diameter			
		Sub-Total Weight		21	

5 (Five) CCUs (Camera Control Units): Each \$100					500
	8.0	10.0	3.0	7	
		Sub-Total Weight		20	

CABLES & ODDS & ENDS/ ESTIMATEDLASERDISC EQUIPMENT/Multiple Units

10 (Ten) PIONEER LASERDISC/Boxed					8,000
LD-V2200/ Each	10.0	23.0	22.0	26.5	
		Sub-Total Weight		265	
Total					

AVAILABLE SHIPPING CASES

1 (One) Fiberglass	40.0	31.0	25.0	75	250
2 (Two) Metal, Each 95#	25.0	12.0	36.0	190	
2 (Two) Metal, Each 155#	48.0	44.0	38.0	310	

EQUIPMENT THAT MAY NEED TO BE SENT DEPENDING UPON AVAILABILITY IN LINZ

For the installation of the exhibition and the on-going maintenance during the exhibition the following equipment is necessary.

N.B. This equipment can either be gathered by Fadi in Linz or shipped from the U.S. This will depend upon your recommendation.

NECESSARY TEST EQUIPMENT

OSCILLOSCOPE, analog, 50MHz bandwidth minimum, dual trace, delayed sweep,
with manual

VIDEO SIGNAL GENERATOR

2 (Two) DIGITAL MULTIMETERS, 3 1/2 digits

2 (Two) POWER SUPPLIES, variable with current limiting

VIDEO WAVEFORM MONITOR

2 (Two) VIDEO MONITORS, color, NTSC, 14 inch

LOTS OF PATCH CORDS

OPTIONAL TEST EQUIPMENT

VECTOR SCOPE

DIGITAL STORAGE OSCILLOSCOPE

THE VASULKAS INC.
471-7181 FAX:473-0614
ROUTE 6 BOX 100
SANTA FE NM 87501

THE VASULKAS, INC.
100 ROUTE 6
SANTA FE, NEW MEXICO 87501

TEL. (505) 471-7181

FAX. (505) 473-0614

Date: March 19, 1992
To: ARS ELECTRONICA, Fadi
From: The Vasulkas, Inc.
Re: Equipment for the PIONEERS exhibition to be provided
by the festival on site

Audio:

- 3 (Three) - Good quality dual channel sound distributing systems (Pre-amps, equalizers, power amps [100 W per channel], speakers)
 - 2 (Two) - Average quality single channel sound systems
- Cables, AC distribution
- All European standard

Video:

- 16 (Sixteen) Video display monitors (19" color, NTSC)
[for the Endotheater]
- 15 (Fifteen) Video display monitors (19" color, NTSC)
[for historical instruments]
- 10 (Ten) Video display monitors (17" color, NTSC)
[for Nanotheaters]
- 200
(Two hundred) BNC crimped on (male) connectors
- 2 (Two) BNC crimping tools
- 2,000 Feet 75 OHM video distribution cable

N.B. In addition to the historical instruments and auxiliary equipment on the inventory list, the Vasulkas have secured 10 (Ten) Pioneer Laserdisc players, #LD-V2200 with 10 (ten) BarCode Readers.

EARLY PIONEERS

AUDIO:

BUCHLA
100
SERIES

MILLS COLLEGE

MOOG

ARP

BODE

PUTNEY

ETC

VIDEO:

TAMBELLINI
BLACK
SPIRAL

EVERSON MUSEUM

HEARN
VIDIUM

DAIK/ABE
COLORIZER
RATER
MODULATOR

ETC

SIEGEL
DUAL
COLORIZER

THE VASULKAS

BECK
FIRST
DIRECT VIDEO
SYNTHESIZER

STEVE BECK

BROWN
MULTIPLIER

THE VASULKAS

SANDIN
I-P

PHILL MORTON

RUTT/ETRA
R/E
SCAN
PROCESSOR

ETC

SPECIAL 1
INDUSTRIAL: COLORADO VIDEO
GLEN SOUTHWORTH
QUANTAZER (COLORIZER)

ETC

DIGITAL:

BECK
VIDEO
LOOM

BECK

JONES
VIDEO
BUFFER

HILL

McARTHUR
SCHIER

THE VASULKAS

THE VASULKAS INC.
471-7181 FAX: 473-0614
ROUTE 6 BOX 100
SANTA FE NM 87501

SPECIAL 2
CVI
CAMERA
FEEDBACK

ETC



**SANTA FE
INTERACTIVE**

Project: Ars Electronica Exhibition Proposal
Contact: Woody Vasulka
Deadline: June Opening

1/19/92

Preliminary Ideas

Module 1: Interactive Information System (touch screen)

IDEA: One central station that presents general information on the exhibit as well as a detail database of the Artist and their tools. Any video would need to be provided.

1. Introduction, Categories

- Graphics
- Video
- Audio

2. Artist & Hardware (10-12 showcases)

- Artist
 - Portrait
 - Biography
 - Artist statement (w/audio & images of artist working)
 - Samples of work
- Hardware
 - Product shot
 - Technical specs
 - Features

Estimated Cost: \$15-20K

Module 2: Simulated Interface to Hardware Exhibit

IDEA: Three stations could be used, one for each category of hardware. Each station could consist of a two monitor system (one large monitor is an option). The user interacts directly with the hardware interface simulation on Monitor A. Monitor B displays the results of the user interaction. The stations would be positioned to maximize general audience viewing as well as close proximity to the actual hardware device. The three stations need sufficient distance from each other to avoid viewer congestion and system audio competition (see diagram idea).

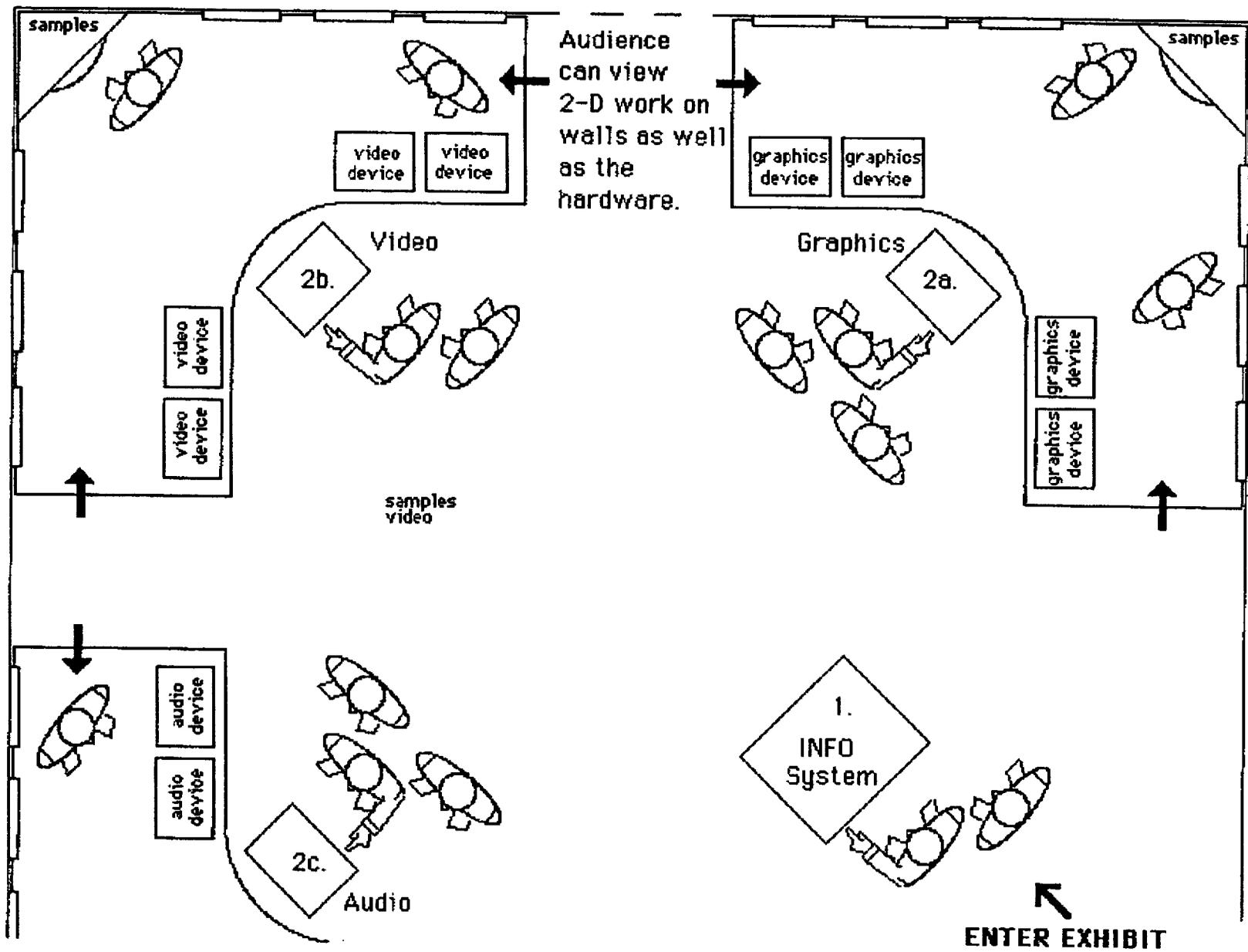
1. Graphics Station (1. Graphics, 2. Audio, 3. Video)

- General Description (needs to integrate with Module 1)
- Menu of 3-4 Hardware Interfaces, simplified (Monitor A)
 - Simplified hardware interface
 - View Demonstration
Canned animated demo of how to operate "The Machine"
 - You Try It!
User controlled
 - Display
 - Source Images/Sound
Several small windows display original source material.
This material may need to be a prepared database if actual images/sounds cannot be achieved in real time from the actual device
 - Final Assembled Image/Sound

Estimated Cost: \$20-40K



SANTA FE INTERACTIVE



ENTER EXHIBIT

SANTA FE INTERACTIVE INC
 1807 SROSA Street SE
 Santa Fe, NM 87501
 TEL 505-982-3738
 APPLELINK 05279

Dear Architects:

(Some notes on the exhibit as things develop...)

Here is a list of equipment scheduled to appear physically at the floor of the exhibit:

- 1) Buchla audio synthesizer
- 2) Moog audio synthesizer
- 3) Vidium
- 4) Putney
- 5) CVI quntizer -
- 6) Video Weaver
- 7) Dual colorizer
- 8) Paik/Abe synthesizer
- 9) Video sequencer
- 10) Multikeyer
- 11) Rutt/Etra
- 12) Jones frame buffer
- 13) SAID
- 14) Digital Image Generator

Installations:

- 1/ Cloud Music
- 2/ Feedbak loop
- 3/ Portapack (passive)
- 4/ IP (with Phill Morton)(still in question)

Other instruments are being listed and described, but are not being presented physically, they are so called "Phantom instruments"

The Portapack is to be seen as an historical object "under glass"

The Station arrangement:

I agree the instruments should be loosely grouped towards the center of the rooms, their displays facing outward. Above the stations I can see a conduit network, distributing electricity and necessary signals for the video

and for both American and European power lines. The outlets must be strictly segregated, maintaining their plug assignments (we will bring out own distribution boxes, twelve in all).

I have to say again that the biggest enemy of video is high a level of daylight in the exhibition space. Years of experience in presenting video under most severe conditions taught us to take extreme precaution. For an extreme case I would ask you to design a hood, able to be put over each monitor with nonreflecting black on the inside. The depth of the hood determines the strength of the image, the deeper the hood, the stronger the image.

Overall presentation:

I prefer presenting the instruments in a rather dramatic fashion. Low hanging light with green shades, point-illuminated worktables, slow-turning cooling fans with shadows, low frequency amplified hums...Never mind, it is ultimately up to you which overall design you will choose.

Summary of the Laserstations and videotape playbacks:

There are four types of video images and programs in this exhibit besides the instrument display monitors:

- 1) Five Infostations containing the material on the instruments listed in the catalog (BarCode related to the catalog)
- 2) Three Nanotheatres containing an extended set of images, relevant to the instruments or the period (BarCode related)
- 3) Two Nanotheaters containing program on music (BarCode related)
- 4) The Endotheater programmed from videotapes.

We suggest, that the Infostations are placed in the same rooms as the instruments exhibited, providing a close factual link to the items on display. They should be placed in the distant corner and they should face the instrument cluster.

The Nanotheaters are location free, they should be placed around the exhibit most conveniently

The Endotheater is programmed noninteractively from a library of tapes provided by The Vasulkas. The programs will be listed in the catalog.

Physically, the Endotheater is a completely darkened room (safety illumination only), in which a 4x4 matrix of monitors is placed in one end of the room. The rest of the space is to seat the audience.

The room has a good sound system, coming from the direction of the matrix.

The description of the laserdisk stations:

All laserdisk stations comprise of:

- 1 - Pioneer LD-V 2200 Laserdisk player
 - 2 - Display TV monitor with sound
 - 3 - BarCode reader
 - 4 - Keypad controller
- Wires
Laserdisk
General Catalog

The most complex problem were it installed here in the US would be the safety of the equipment. The operation of the Laserstation is fortunately remote, through the Pen or the Keypad. Once the Laserdisk is inserted, it should not be unlocked or removed. Practically, the player is hidden in the station away from the public. The access to the Monitor controls should also be banned, leaving only two devices, the Pen and Keypad at the mercy of the public.

The Pen has an imbedded ring into its body to make it more difficult to remove. A flexible steel cable or a string could guard it from easy removal.

It is even more difficult to guard the Keypad. The solution I offer here is to imbed the pad into the table itself barring it from an easy removal. In the same arrangement the occlusion of certain keys must be made to block a few functions of the Keypad, namely shut-down of the Laserplayer and the Disc removal.

The Keypad allows a free and unstructured browsing mode in viewing the program, a mode quite fine with us. We also hope that the Austrian public is much kinder to technology in public places than in the U.S. where the survival is measured in minutes. If this should become a problem a supervision by the staff of the museum will be necessary.

The laserdisk stations must have a generic group identification symbol, probably alpha-numerical symbols as to guide the public to the program associated with it. The

public must find three various disc programs discreetly identified from the catalog by the same symbol.

The installations:

The most problematic installation could be the "Cloud music". The piece requires a camera watching the weather, notably the passage of the clouds. If a change is not continuously performed, the installation could become dull and uninteresting. We may want to discuss another possibility adding to the three-way collaboration of Watts Behrman and Diamond, a possible fourth artist to compose a "prepared" cloud sequence, which could then be projected by a video projector on the ceiling and then picked up by the Cloud camera.

Cloud music will require a 1/2 room space, it produces sound and can share a space with a smaller instrument station cluster or another installation (feedback).

At this moment the I.P. installation is still under discussion. It seems it will be resolved by Phil Morton bringing the instrument with him to Linz. He will also provide the information about his needs.

In reply to your need to identify an exact location of each event:

I see no advantage or necessity for a specific space designation for the instrument stations clusters except for the installations. The instruments' configuration should be done by on location experimentation between the designers and the curators. I understand your anxiety about not knowing the designations ahead of time, but I urge you to make the stations modular, similar in their functionality, and expandable if an auxiliary instrument is added. It should have an arrangement to hold a camera or cameras on a simple pan/tilt head (industrial showroom version) and should have enough space for a public interface box.

Auxiliary equipment:

Some instrument stations have auxiliary equipment associated with their performance. This can be general purpose industrial equipment, for example in Nam June Paik's there is a power amplifier and pre-amplifier in the scan modulating section, others (Mc Arthur/Schier) have a sync generator and color encoder gear. This type of equipment should not dominate the outlook of the station. It could possibly be hidden altogether.

Yours Woody

In Santa Fe, May 12, 1992

→ Press **Search**.

→ When the chapter title appears on the screen, press **Play**.

To see a frame:

→ Press **Chapter/Frame** until "frame" appears on the screen.

→ Press the numbers for the frame you want.

(If you make a mistake, press **Clear** to erase the number.)

→ Press **Search**.

→ When the frame appears on the screen, press **Play** if you want the video to play starting at that frame.

To freeze an image on the screen:

→ Press **Still/Step** at any time during the playing of a video segment.

→ To continue playing the video segment, press **Play**.

To step through frames:

→ Press **Still/Step**

→ Press **Fwd** to move to the next frame or **Rev** to move to the previous frame.

→ Press **Play** to continue the regular playing of the video.

To scan the videodisc at high speed:

→ Hold the **Scan** button down as long as you want the scanning to continue.

Using the Bar Code Reader

With the videodisc in the player on the correct side, press the Play button on the player. After the opening animation, use the bar code reader and the bar codes printed in the Guidebook to play a chapter or set of frames. Here's how to do it:



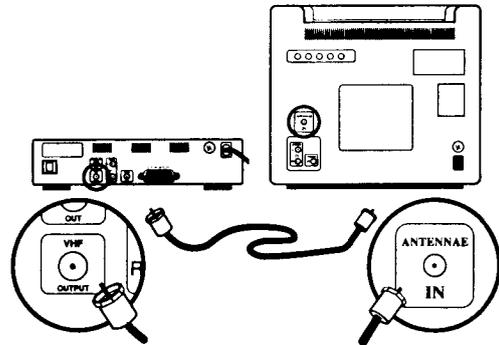
→ Hold the **Read** button down.

→ When you see a red light at the tip of the reader, keep the **Read** button down and drag the tip across the bar code in the book, from left to right, until you hear a beep.

 **Note:** Even if you don't have a stereo video monitor, both language channels (English and Spanish) from the videodisc will still be available.

To use the videodisc player with a television, attach one end of the single-plug cable to the player port labelled "VHF Output" and the other to the cable connector on the television.

If the television you're using doesn't have a jack for the cable, you'll need a cable adaptor (available at any local electronics store). Attach the adaptor to the VHF antenna connectors on the television, and plug the cable from the videodisc player into the adaptor.



Using it...

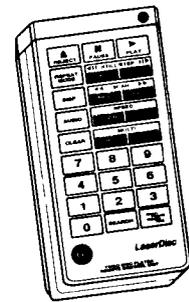
Different areas of the videodisc can be accessed by using a remote control, bar code reader, or computer that's connected to the videodisc player.

This *Guidebook* lists all the materials on the videodisc, by *chapter* (a division of the information on a videodisc, similar to a "track" on a record album) and by *frame number*.

Use the remote control or bar code reader to access specific chapters and/or frames of the videodisc.

Using the Remote Control

With the videodisc in the player on the correct side, press the Play button on the player. After the opening animation, use the remote control for the following procedures:



To see a chapter:

- Press **Chapter/Frame** until "chapter" appears on the screen.
- Press the numbers for the chapter you want.

(If you make a mistake, press **Clear** to erase the number.)

Eichinger oder Knechtl

A - 1010 Wien Franz Josefs Kai 29
tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to - The Vasulkas

pages -

30.4.1992

Dear Steina and Woody Vasulka,

Now we are able to sent to you the devinitiv floorplan from the *ars electronica* in Linz.

Your contribution will be exhibit in **room 2.1 2.4 2.5 2.6 2.7** ,
The **NANO THEATERS** will be in the **GANG** placed in the Windows
as discussed. *consider*

We hope, you agree with this situation and you can get more specific .

We need as fast as possibile the exact arrangement for each room
with specifications so that we can devellop the design.

If you need further information from us at this point, please contact us.

Sincerely,

Eichinger oder Knechtl
Stefan Brodbeck

Eichinger oder Knechtl

A - 1010 Wien Franz Josefs Kai 29

tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to - The Vasulkas

pages -

6.5.1992

Dear Steina and Woody Vasulka,

I hope you recieved my fax from 30. 4.92

We realy need the informations about the exact arrangement of the instruments in each room, because our work can't go on at that point!

Please sent the information as soon as possibile.

About the ENDO THEATER :

We can place it in the foyer of the museum , we discused in Linz with Steina.

Grüße aus Wien

eichinger oder knechtl

Coordinator
Stefan Brodbeck



Eichinger oder Knechtl

A - 1010 Wien Franz Josefs Kai 29
tel - 0043 - 1 - 535 54 24 fax - 0043 - 1 - 535 40 39

to - The Vasulkas

pages -

Hallo,

received
7.5.92

Could you please fax the **spezifikation** of the **interface controle pannel**.
Does they have all the **same** specification?
(What's about the floorplan ?)

Sincerely,



Eichinger oder Knechtl
Stefan Brodbeck

ARS
electronica

TELEFAX

DATE: 7/5/92

CONC.:

PAGES: 1 (INCL. THIS PAGE)

To: Woody & Steina Vasullia
001 (505) 473-0614

received
5.7.92

Dear Woody and Steina,

we would need a short description "How to use" of each of the presented machines. We want to fix these descriptions beside each installation so that visitors know, what to do with the machine. There also should be one or two sentences on the inventor and his/her intention.

Kindest regards

Katharina
Katharina

is it possible until may 20²

ARS
electronica

received
5/5/92

TELEFAX

DATE: 5.5.1992

CONC: ARS ELECTRONICA

PAGES: 1 (INCL. THIS PAGE)

TO: VASULKA INC.
OOA (555) 4730 614

Dear Stevie, Woody,
I hope you are alright & doing well.

Question: ENDO THEATRE

16 NTSC MONITORS 27"

SPECIFY THE IMAGE SHOWN ON THE WALL.

16 IMAGES (SAME IMAGE ON EACH MONITOR?)

↓ A SINGLE IMAGE ? OR ? OR ?

↓ (VERY EXPENSIVE)

NOT EXPENSIVE

↓ Please send a fax
LIKE IN APP0

Greetings Wolfgang

AUDIO:

BUCHLA
100
SERIES

HILLS COLLEGE
M. MOWLI
Czajkovsky

MOOG

Drew University

ARP

BODE

PUTNEY

ETC

VIDEO:

TAMBELLINI
BLACK
SPIRAL

EVERSON MUSEUM

HEARN
VIDIUM

DAIK/ABE
COLORIZER
RATER
MODULATOR

ETC

SIEGEL
DUAL
COLORIZER

THE VASULKAS

BECK
FIRST
DIRECT VIDEO
SYNTHESIZER

STEVE BECK

BROWN
MULTIKEYER

THE VASULKAS

SANDIN
I-P

PHILL MORTON

RUTT/ETRA
R/E
SCAN
PROCESSOR

ETC

SPECIAL 1
INDUSTRIAL : COLORADO VIDEO
GLEN SOUTHWORTH
QUANTAZER (COLORIZER)

ETC

DIGITAL:

BECK
VIDEO
LOOM

BECK

JONES
VIDEO
BUFFER

HILL

McARTHUR
SCHIER

THE VASULKAS

THE VASULKAS INC.
471-7181 FAX: 473-0614
ROUTE 6 BOX 100
SANTA FE NM 87501

SPECIAL 2
CVI
CAMERA
FEEDBACK

ETC

Dear Peter,

In our telephone talk we suggested \$10,000. to be withheld as a last payment. ATS 194.215. is more like \$17,400. LIVA should recognize, that we will have to scale down the show of those 7,400, unless you can find some temporary loan with a payment guaranty at the close of "Ars Electronica". Additionally, the schedule of payment comes short of CA. \$18,000.00, as:

ATS 581.000 = \$52.000 OR:
ATS 726.375 = \$65.000

Also, what are the bills LIVA EXPECTS TO PAY in such an excessive amount (ATS 194.215)?

AND Finally: Why is everything we agree with you so different from LIVA's?

Frustrations! Frustrations!

Love to you from us both,

Stein

2-16, DEAR P. - I SENT THIS TO VIENNA, WHERE THE PEOPLE IN FRANKFURT SAID YOU WERE. DID YOU GET IT? STEIN

ANALOG

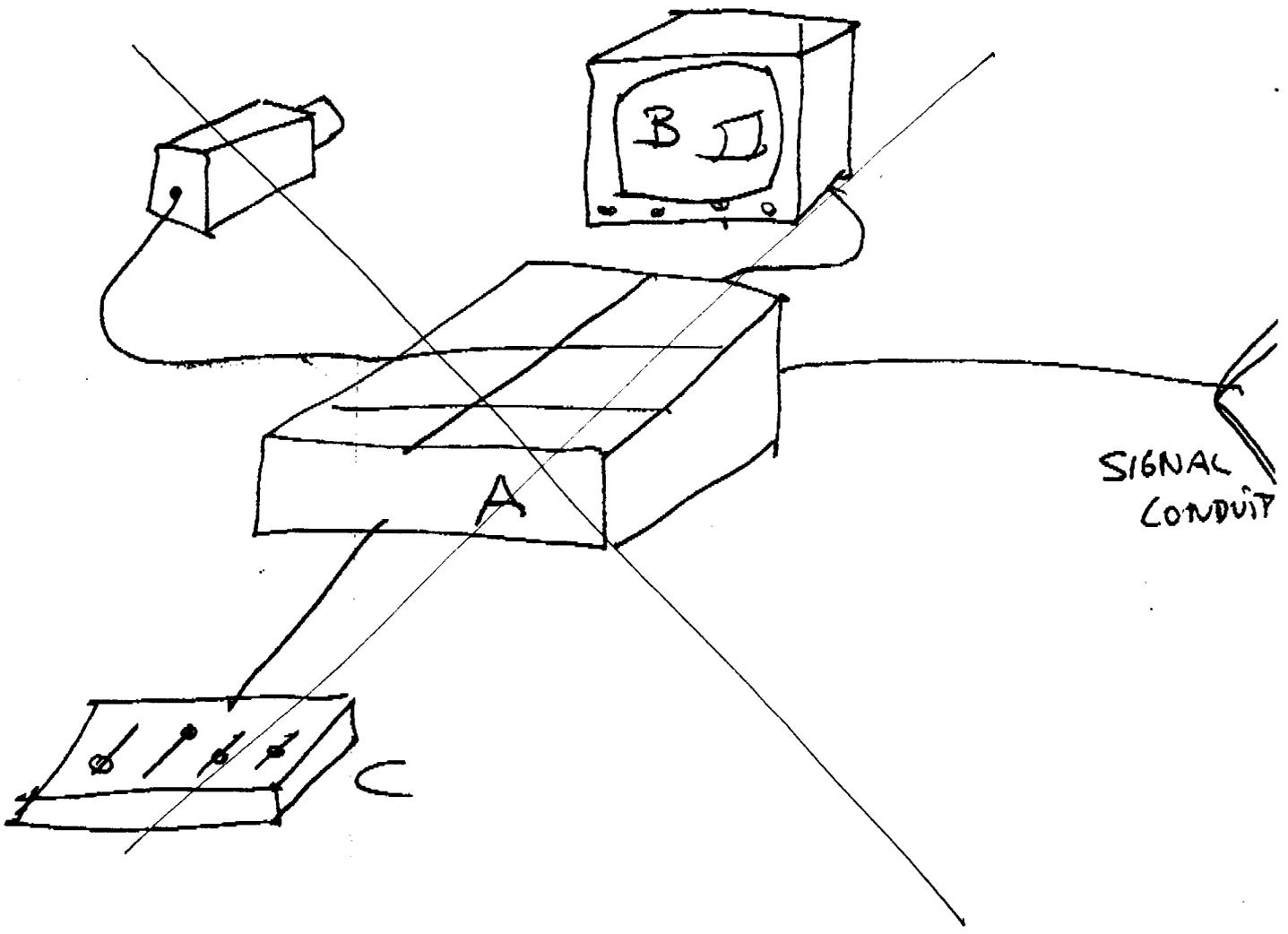
VIDEO :

BECK

FIRST DIRECT VIDEO SYNTHESIZER

8

STEVE BECK :



To be arranged by Steve Beck & Peter Weibel:
BECK DIRECT VIDEO SYNTHESIZER

A
B
C

Cancelled.

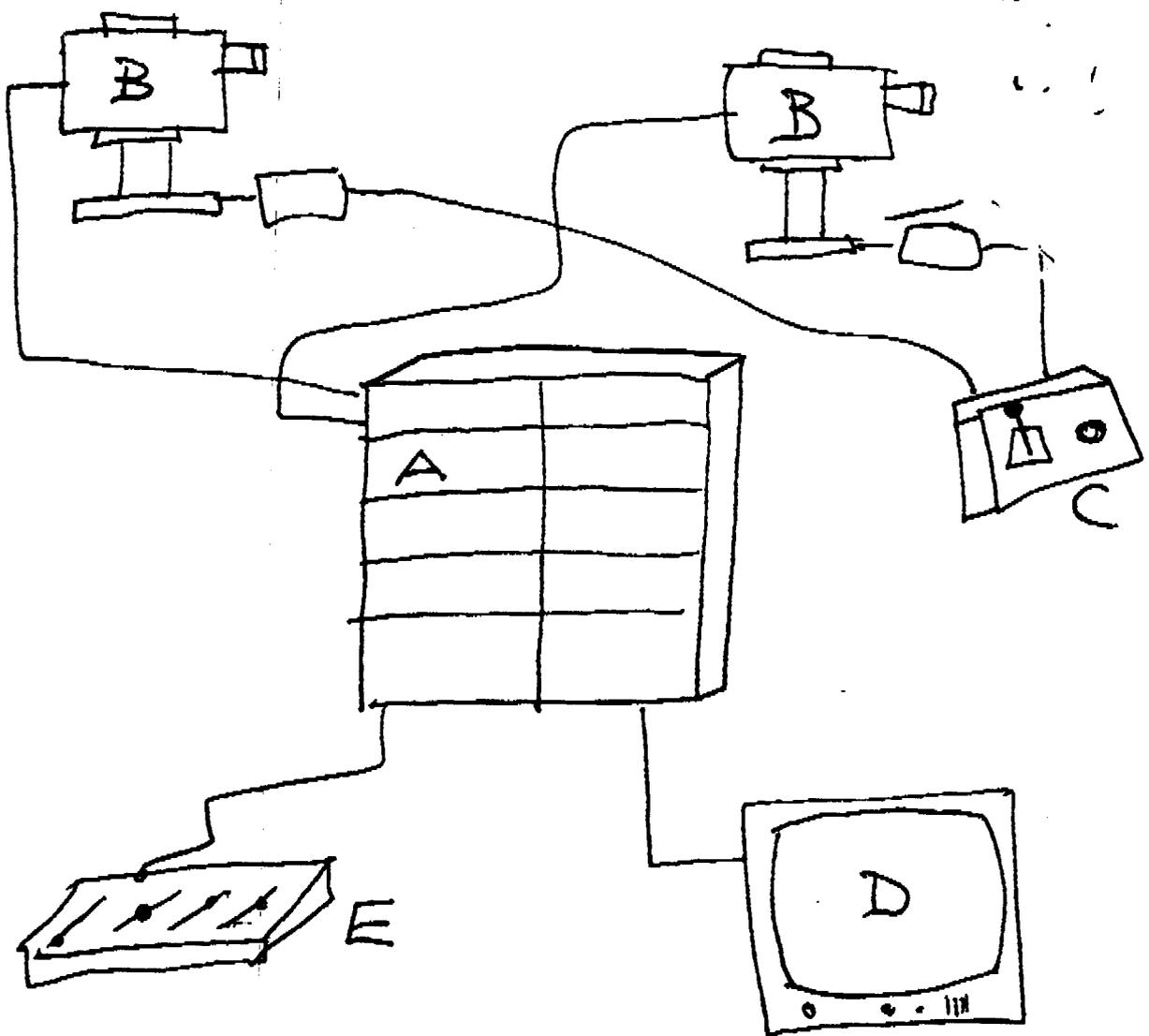
Can not be restored for exhibition

ANALOG

VIDEO:

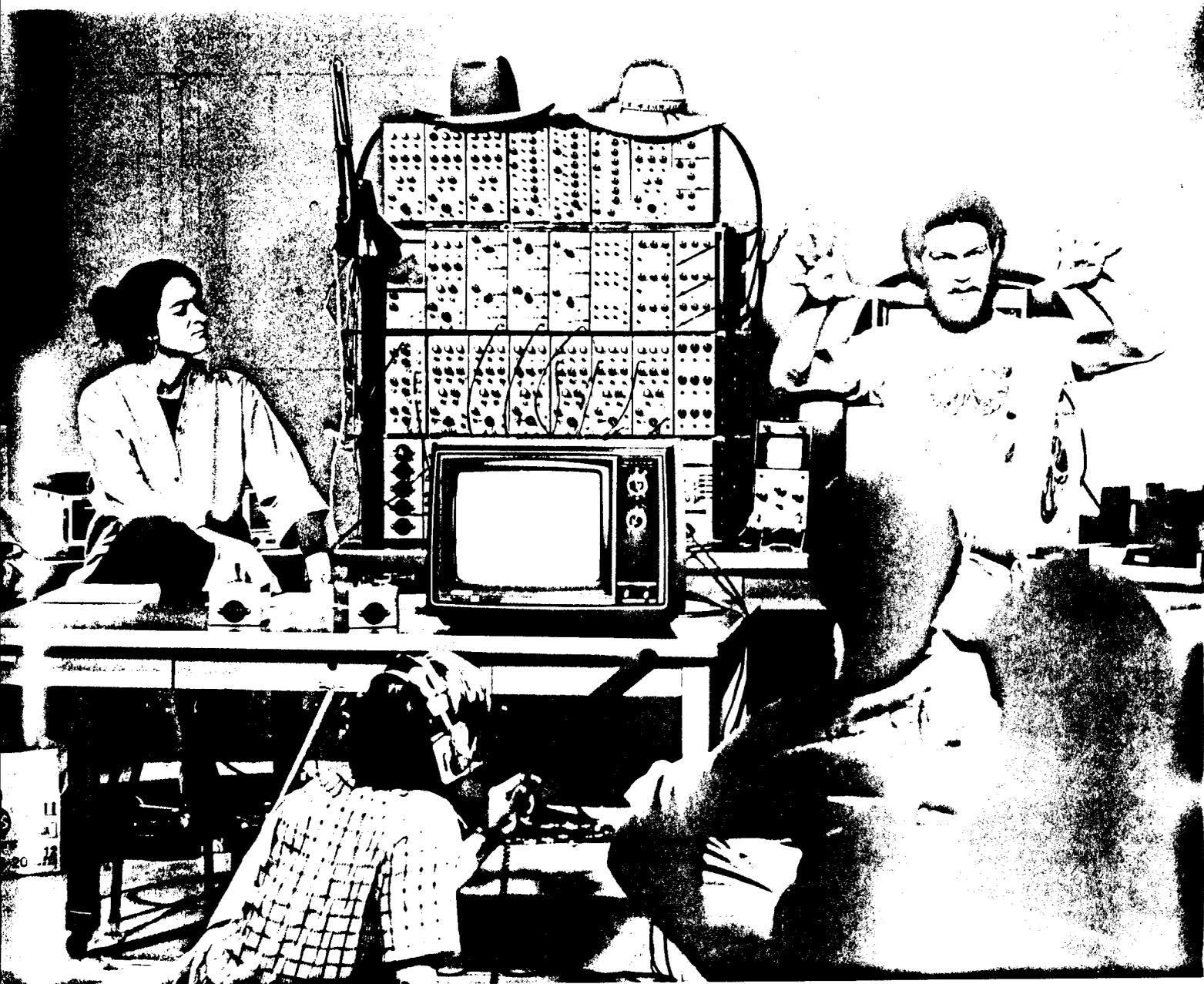
SANDIN I-P IMAGE PROCESSOR

PHIL MORTON



MODEL	H	W	D	WEIGHT
A				
B				
C				
D				
E PUBLIC INTERFACE				
...				

Need to
send later
A.S.A.P



Sandini IP

113. The SANDIN CP should be seen as an installation work by Phil Morton who will bring the CP to Linn as excess baggage and install it himself. Mr. Morton should return from a trip next week and we will see if he has any specifications to communicate to you.

10

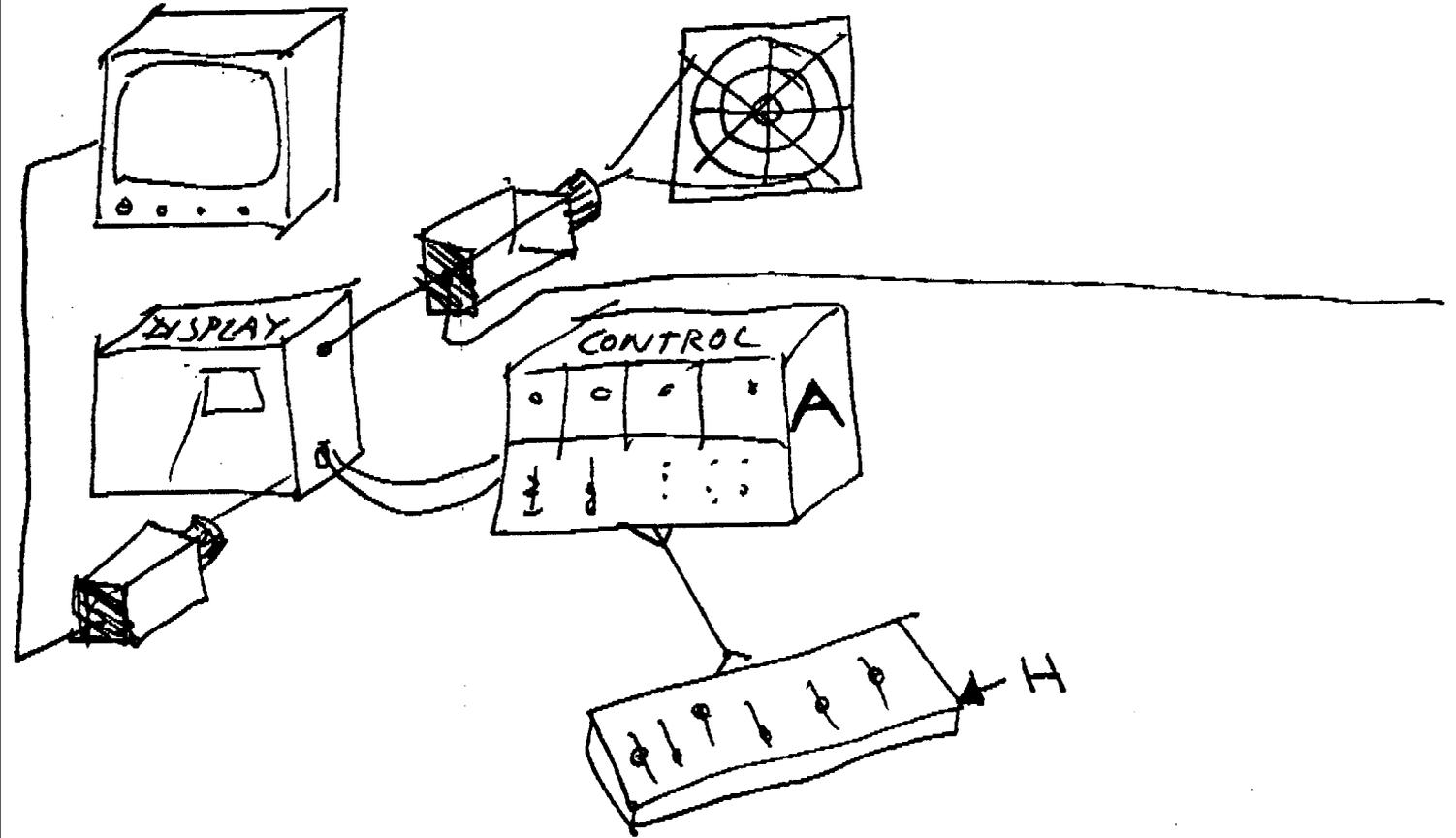
ANALOG

RUTT/ETRA

SCAN PROCESSOR

VIDEO

ETC

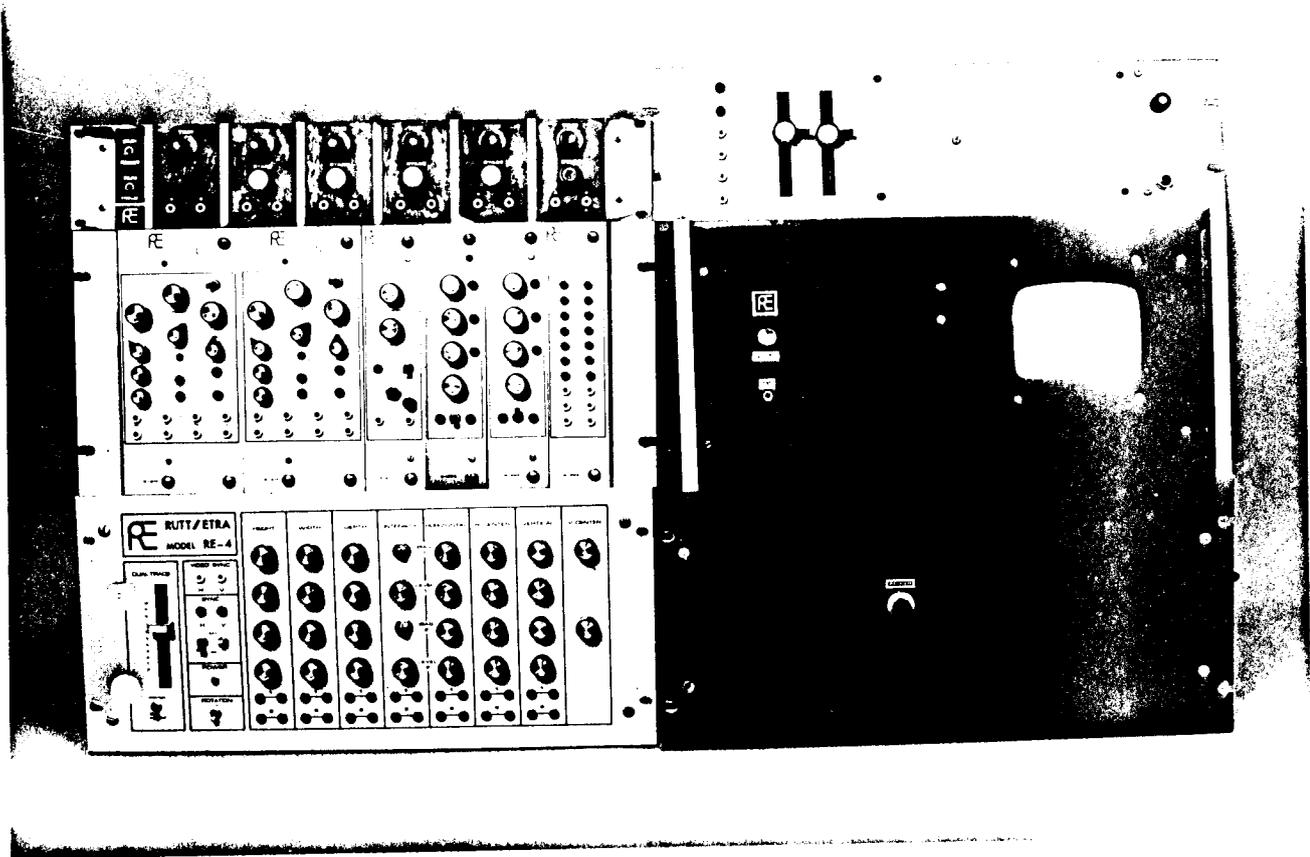


RUTT/ETRA SCAN PROCESSOR

12,000

A	Control Panel Oscillators	9.0	19.0	15.0	14
B	Control Panel Display	9.0	19.0	21.5	22
C	Ramp	4.0	19.0	12.0	4
D	Audio Interface	5.5	19.0	9.0	6
E	Power Supply	9.0	19.0	20.25	35
F	Display	9.0	19.0	16.25	24
G	Tube: 1040AKB4	11.0	8.0	7.0	2
	+Cables				
H	Interface Control Panel				2

I CAMERA (2x)



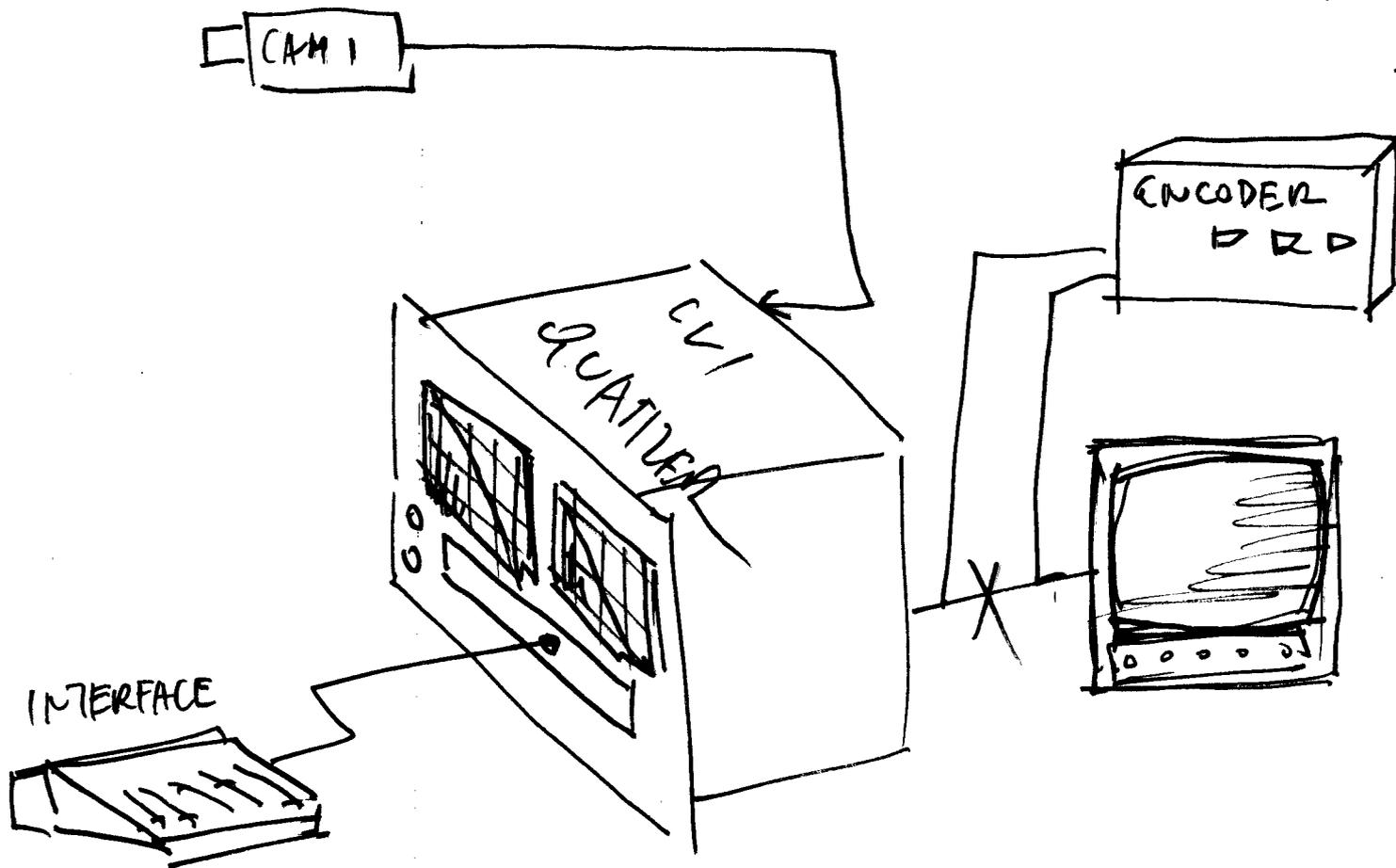
Rutt / Extra

ANALOG
VIDEOS

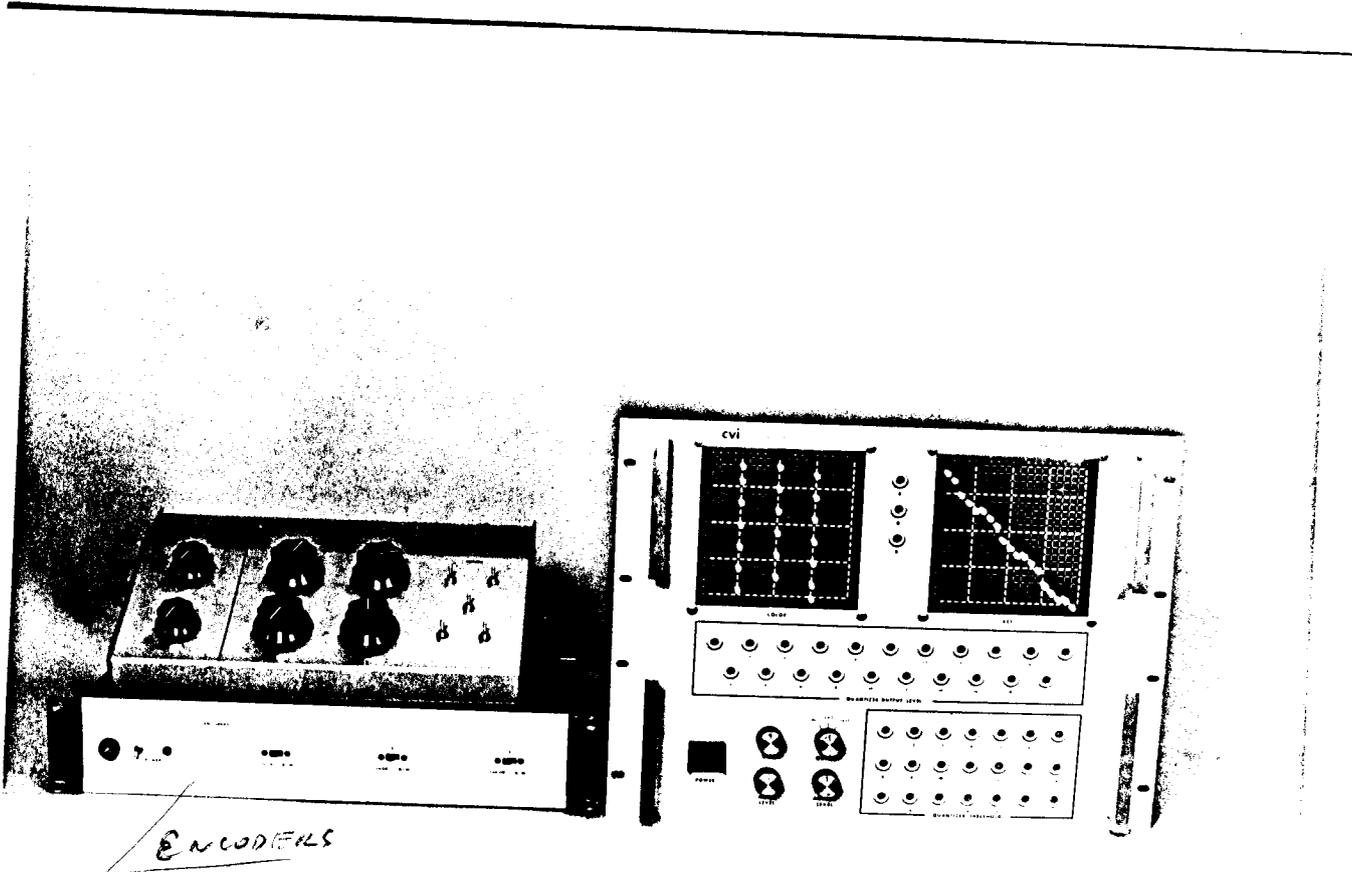
INDUSTRIAL: COLORADO VIDEO GEN SOUTH WORTH

17

QUANTIZER



	CVI (Colorado Video Inc.)				5.00
A	QUANTIZER	12.0 30	19.0 48	12.0 30	20 ~ 28
B	Control Panel	6.0 12	6.0 12	12.0 30	6
C	Interface Control Panel				2



CVI Quantizer

NOT INFO YET

BECK VIDEO LOOM

~~To be carried as excess baggage by Phil Hartman
IR (Image Processor)~~

WR:

Dimensions

Mr. Beck's VIDEO LOOM should be seen as an installation work by Mr. Beck who will bring the instrument to Linn as excess baggage and install it himself. Mr. Beck has only this week recovered his machine and we will see if he has any specifications to communicate to you.

CANCELLED

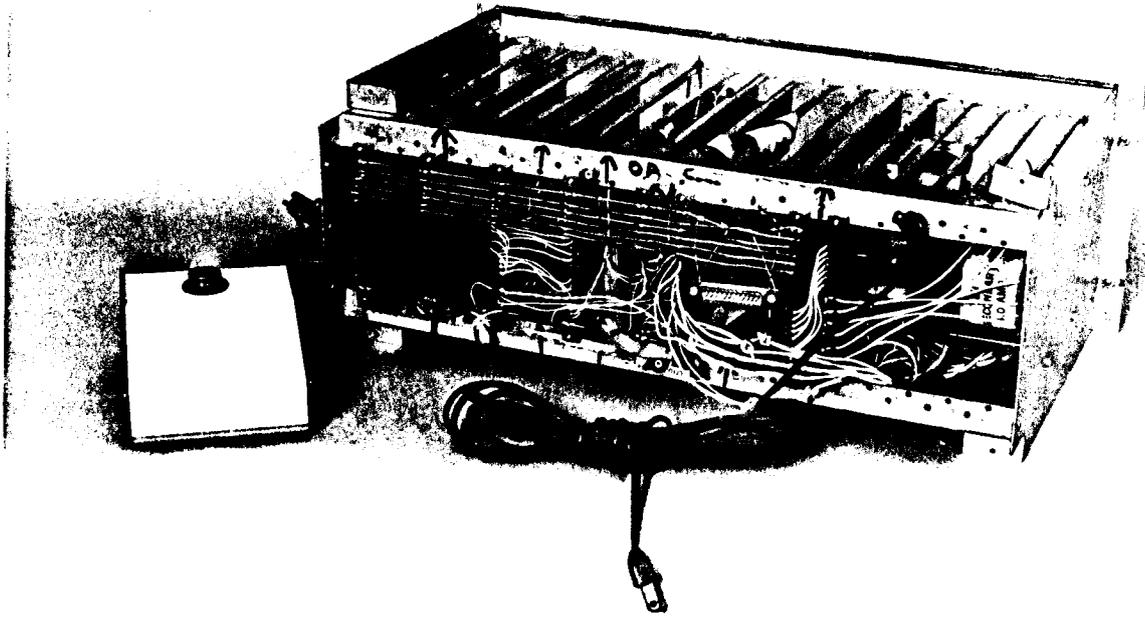
WIDTH

A	JONES 64 x 74	7.0	19.0	8.0	5
B	REAL TIME BUFFER				
C	Interface Control Panel				2

DAVID JONES:

"THE JONES ~~BUFFER~~ FRAME BUFFER"

DAVID JONES:



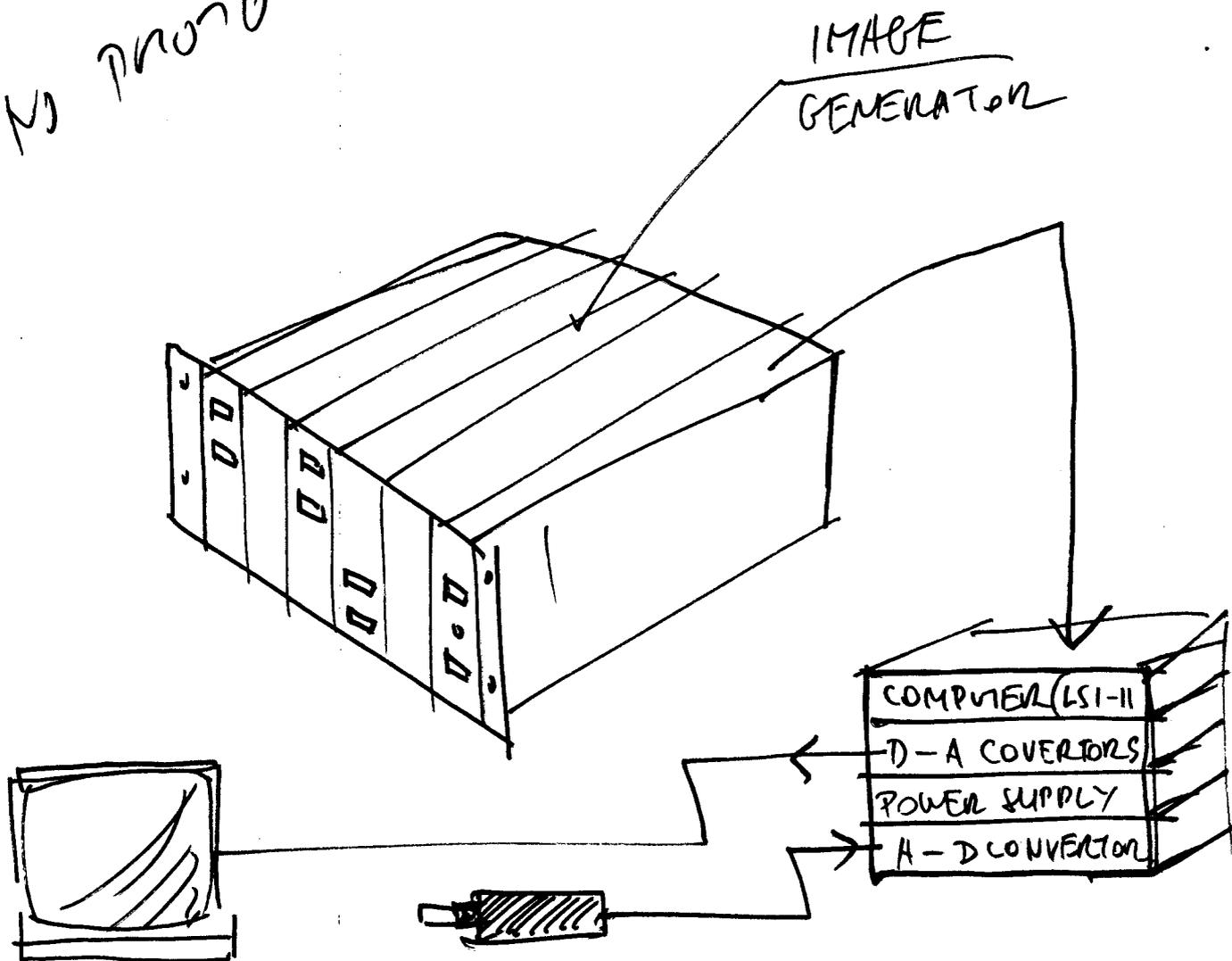
"THE JONES FRAME BUFFER"

DIGITAL INSTRUMENT

MCARTHUR + SCHIER

79

NO PHOTO YET



MCARTHUR & SCHIER DIGITAL IMAGE GENERATOR

13,000

A	Image Generator	7.0	19.0	18.0	20
B	Power Supply	5.0	19.0	6.0	10
C	Host Computer	4.0	19.0	18.0	14
D	Disc Drive	5.0	8.0	12.0	6
E	Interface Control Panel				2

*Optional Device:

BECK GRAPHIC OUTLINER

6.0	19.0	9.0	9
-----	------	-----	---

50

~~DIGITAL~~

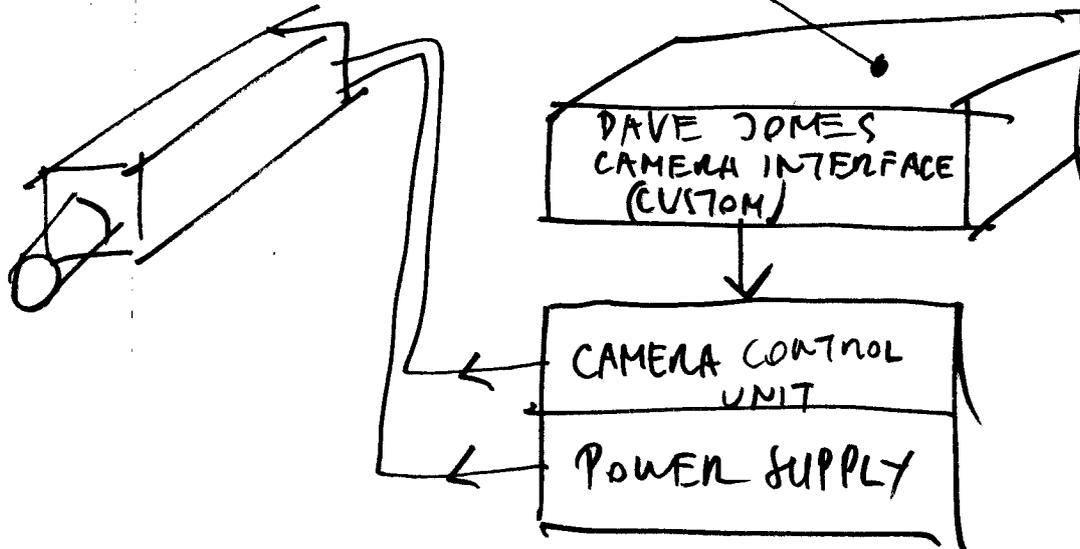
SPECIAL II CVI

~~CAMERA FEEDBACK~~ (15)

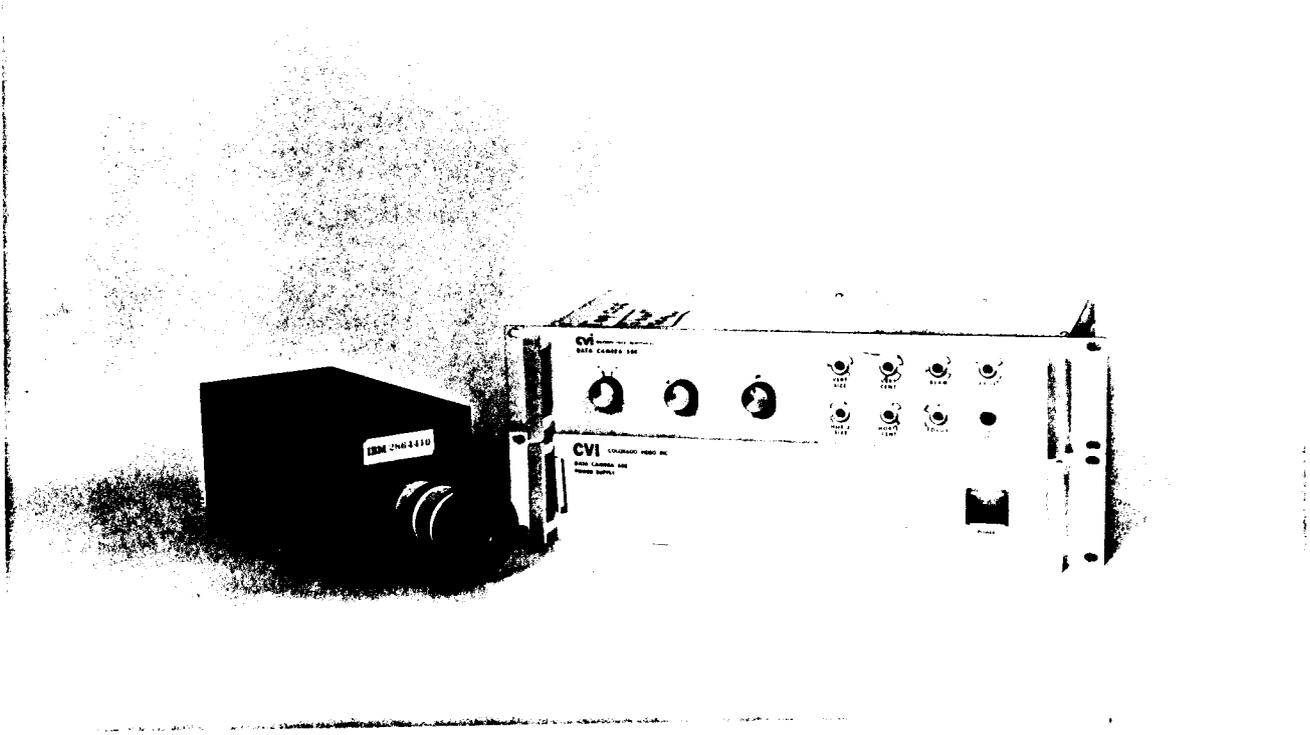
ANALOG INSTRUMENT

DATA CAMERA

DATA NOT YET
AVAILABLE



A B C D	CVI DATA CAMERA	5.0	14.0	10.0	8	6,000
	Control Panel	4.0	19.0	12.0	8	
	Power Supply	4.0	19.0	15.0	12	
	Interface Control Panel				2	

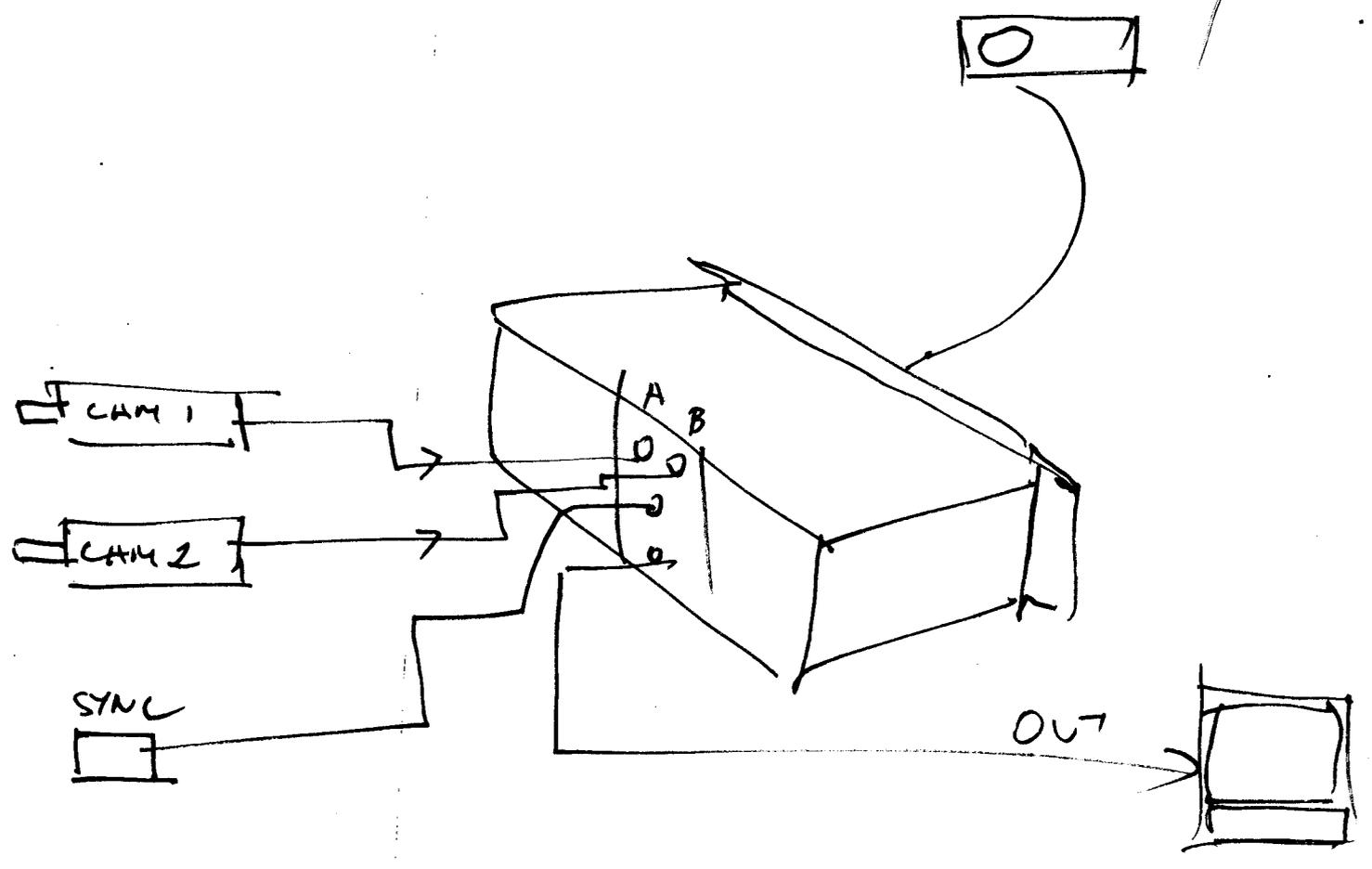


CVI Data Camera

BROWN FIELD FLIP/FLOP SWITCHER 48

DIGITAL INSTRUMENT

INTERFACE



BROWN FIELD FLIP/FLOP SWITCHER

Interface Control Panel

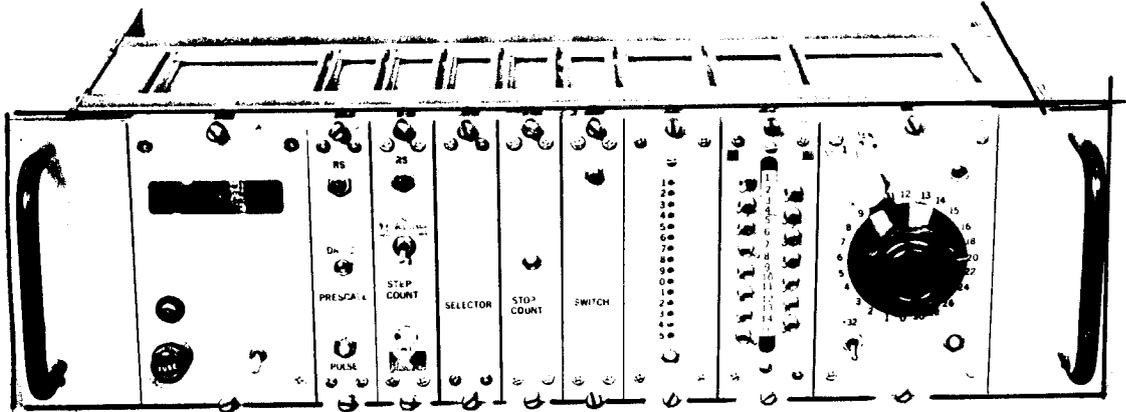
6.0 75

19.0 42

11.0 28

13
2

7,50



Brown FIELD FLIP/FLOP SWITCHER