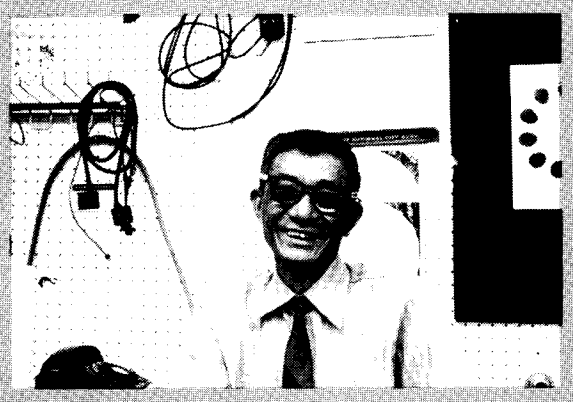
Video Tools

SUMMER '72

$1.00



"Video Tools" VOL. I, No. 1

CTL Electronics was founded four years ago in New York City by C.T. Lui. Lui had previously worked in the design of video systems, and had extensive experience in electronic component, circuit and systems design.

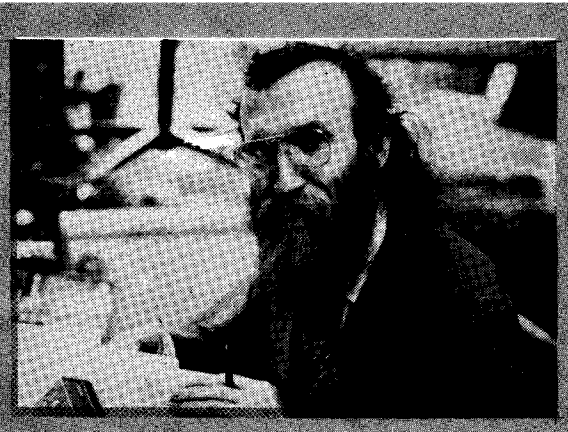
Not only does Lui set high standards for servicing equipment, but he also designed and produced a series of new video designs. Among the designs are the CTL Colorizer, Gen Lock, Wireless Camera, and Keying System.

New video designs are under development. A Publications Group has been established to print new information about the rapidly expanding video technology. "Video Tools" is our first publication.

The Egg Store is a production and editing facility developed by CTL Electronics and Frank Cavestani. It offers an environment for experimenting in the arts and technology of video production. CTL has also opened a branch in Washington, D. C.

It is a credit to Lui that this publication was produced. It was a learning experience for all of us.

Clockwise from top left: C.T. Lui; Howard Mandel; Frank Cavestani; Nancy Levco; John Brumage; Lui & Cyril Griffin; Aramis Fernandez; Rodger Janpol; Su'qui Verde; Vilai Chuarphanich; Frank; Paula Jaffe & Lynda Rodolitz; Jagat Ramdin; Janet Griffin & Jimi Griffin (drawing); Shridhar Bapat; Raphael Garcia; Lynda; Paula (Arline Dreiblatt in back); Cy; Captain Lui.



thanks to everyone we know in video

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publisher: griffin

"Video Tools" is a publication of
CTL Electronics, Inc.
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New York, N. Y. 10007

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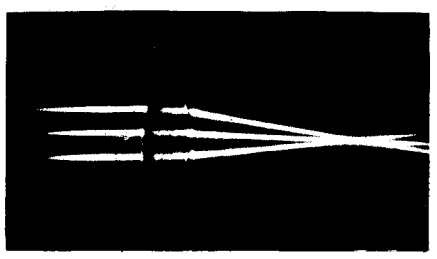
Cameras



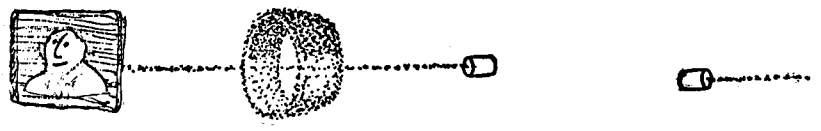
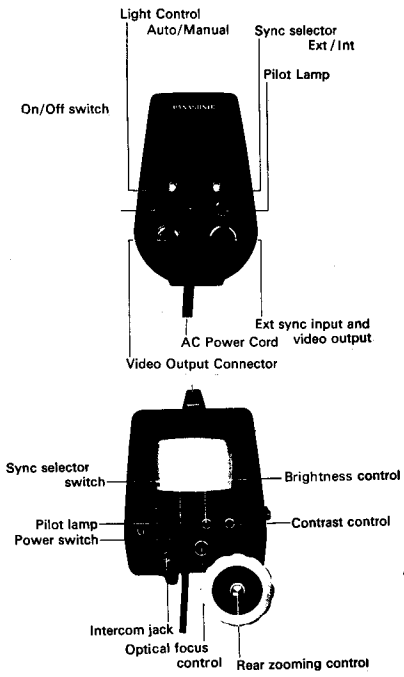
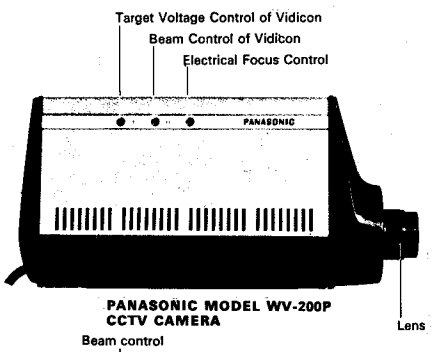


Image intensifier camera. Provides usable pictures with as little as .0002 footcandles faceplate illumination. Includes motorized zoom lens, automatic iris and AGC. 600 line resolution. Industrial line locked 2:1 industrial sync generator meets RS-330 EIA specifications.
WESTINGHOUSE LOW LIGHT CAMERA ST-705 $9,390.00

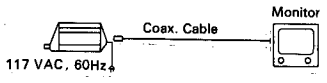
(camera not shown)

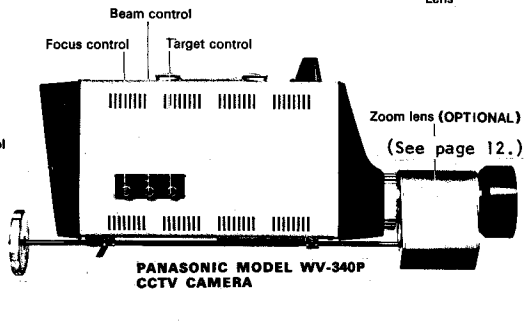




PANASONIC MODEL WV-200P
CCTV CAMERA

PANASONIC

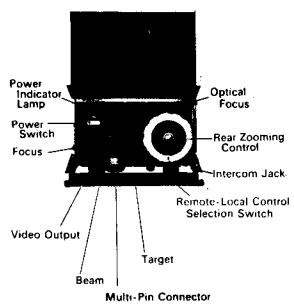


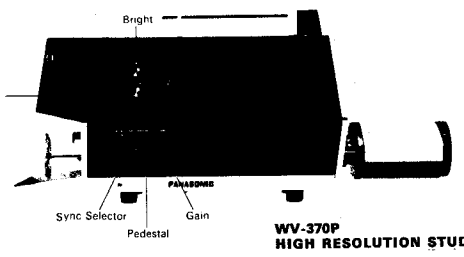


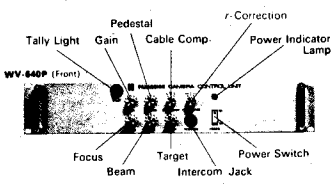
PANASONIC MODEL WV-340P
CCTV CAMERA

MINI CCTV

WV-4KP Mini CCTV System $350.00
The WV-4KP Mini CCTV System is composed of two essential components, the Mini Camera and the Mini Monitor. As many as three Mini Cameras may be employed with one Mini Monitor. The camera-monitor connection cable contains lines for an intercom circuit which further enhances the unit's capabilities.





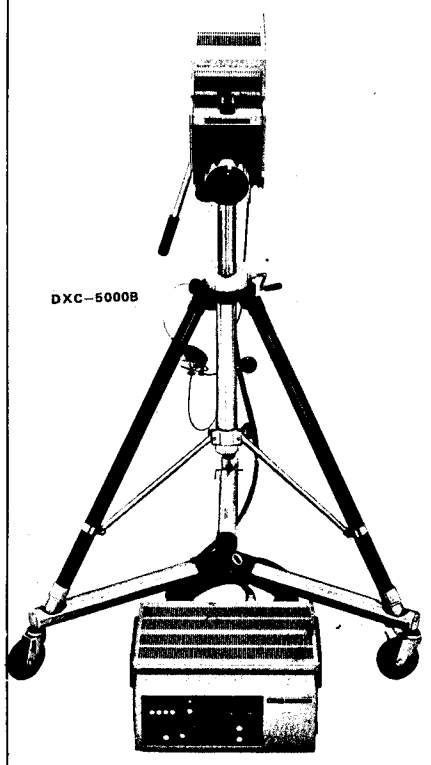


WV-370P
HIGH RESOLUTION STUDIO CAMERA

	Weight	Dimensions	View Finder	Horizontal Resolution	Vidicon Tube	Lens	Special Features	List Price
Panasonic WV-200 P	4 lbs.	3-1/4"w x 5-9/16"h x 10"d	no	550	2/3"	F1.6 - 16mm. C Mount (no iris)	comes with 20 ft. coax cable	$ 230.00
Panasonic WV-240 P (not shown)	4 lbs.	3-1/4"w x 5-9/16"h x 10"d		550	2/3"	F1.6 - 16mm. C Mount (no iris)	comes with coax cable, coax coupler, type C8 - use with VEC series cable	$ 350.00
Panasonic WV-250 P (not shown)	4 lbs.	3-9/16"w x 5-19/32"h x 10-5/16"d		400	2/3"	F1.6 - 16mm. C Mount	comes with 20 ft. coax cable, coax coupler, type C8 - use with VEC series cable	$ 450.00
Panasonic WV-340 P	12 lbs.	5-1/2"w x 6-1/3"h x 14-1/2"d	4.5"	550	2/3"	F1.6 - 16mm. C Mount (no iris)	4.5" viewfinder - comes with coax cable - use with 10-G series cable	$ 525.00
Panasonic WV-360 P (not shown)	14 lbs.	7"w x 7-1/2"h x 14-1/2"d	6"	550	2/3"	F1.6 - 16mm. C Mount (no iris)	6" viewfinder - comes with coax cable - use with 10-G series cable	$ 675.00
Panasonic Studio Camera WV-370 P	35 lbs.	7-1/2"w x 12-1/2"h x 21-1/4"d		700	1"	zoom lens model F 1Z-8 (with zooming shaft)	comes with camera control unit WV-640P, 25' camera cable, zoom control rod, 4 pin plug for power supply & tally light	$2,300.00
Sony AVC-3000	5 lbs.	3-3/4"w x 3-3/4"h x 9-7/8"d		400	2/3"	F1.8 - 16mm. C Mount	UHF connector for video signal output - auto light-level compensator	$ 285.00
Sony AVC-3200 DX	7 lbs.	4-3/16"w x 4-3/4"h x 13-1/4"d	4"	400	2/3"	zoom lens VCL-16B F2.0 - 16-64mm.	comes with 16 ft. camera cable, carrying case, tripod, microphone with extension cord	$ 775.00
Sony AVC-3210 DX	7 lbs.	4-3/16"w x 4-3/4"h x 13-1/4"d	4"	400	2/3"	zoom lens VCL-16B F2.0 - 16-64-mm.	comes with carrying case, tripod, microphone with extension cord	$ 850.00
Sony AVC-3400 (not shown)	6 lbs.	2-13/16"w x 5"h x 15-1/16"d	1"	400	2/3"	zoom lens F/2 - 16-64mm. C Mount	built in microphone requires CMA II except with AV 3400	$ 725.00
Sony Studio Camera AVC-4200 A not shown	14 lbs.	6"w x 11-1/8"h x 14-3/4"d	4"	450	2/3"	without lens	built in 2:1 interlace sync generator - C-Mount for choice of lens	$ 780.00
Sony AVC-4600 (not shown)	18 lbs.	17-7/16"w x 3-1/2"h x 13-13/16"d		650	1"	without lens	comes with C-Mount adapter - optional single rod control for zoom	$1,250.00
Sony Color DXc-5000 B	8 lbs.	16-5/16"w x 2-7/18"h x 10"d	4"	450	1"	F/2 - 16.5-95mm. (6X) with built in zoom	red, green, blue & NTSC color output - external gain & pedestal control	$8,500.00
Sony Color DXC-5020 (not shown)	8 lbs.	6-9/16"w x 10-7/8"h x 20-1/2"d	4"	450	1"	without lens	interchangeable lenses - NTSC color output	$11,000.00
Akai VC-110 S (not shown)	5 lbs.	3"w x 4-1/2"h x 7-1/4"d		400	2/3"	zoom lens F1.8 - 9-54mm.	built in microphone - optical viewfinder	$ 559.95
Akai VC-115 (not shown)				400	2/3"	lens optional	requires VCA-600 adapter except with Akai portable	

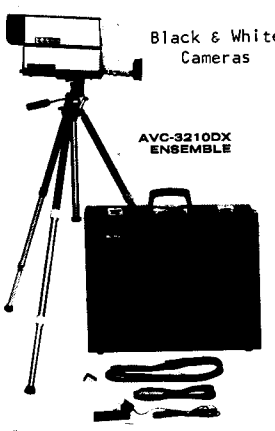
Sony

COLOR CAMERA
MODEL **DXC-5000B**

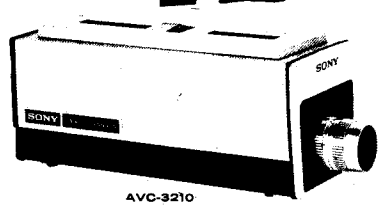


DXC-5000B

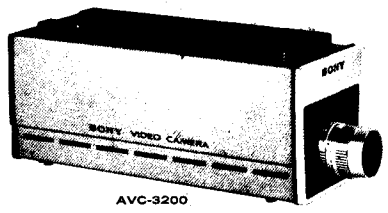
Black & White Cameras



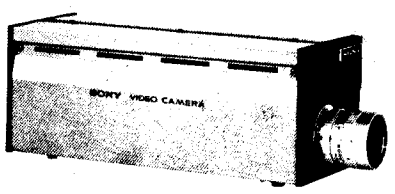
AVC-3210DX ENSEMBLE



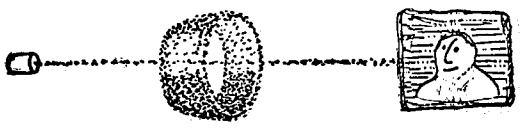
AVC-3210

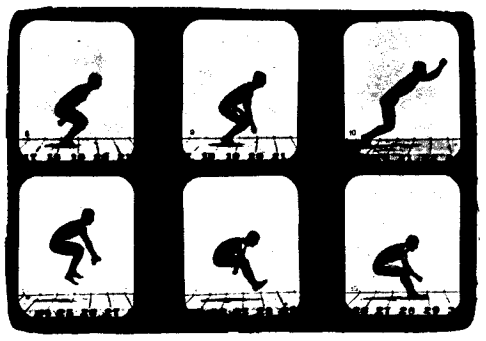


AVC-3200



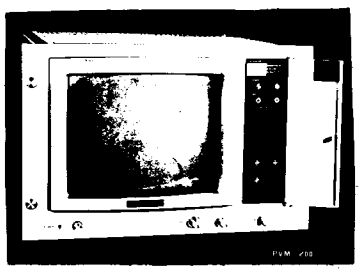
AVC-3000



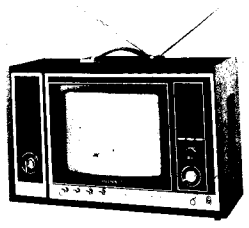


Monitors

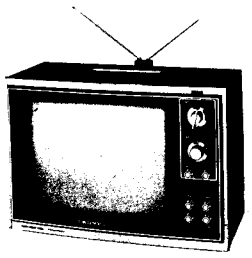
Sony COLOR TRINITRON



PVM-1200 TRINITRON

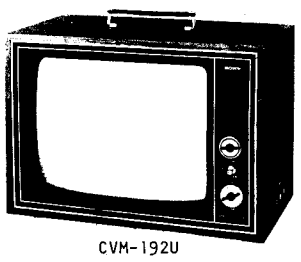


CVM-1200UA TRINITRON



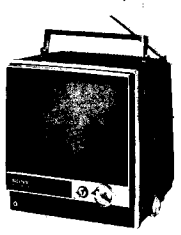
CVM-1710 TRINITRON

Black & White Monitors



CVM-192U

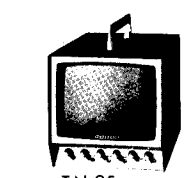
CVM-112



CVM-920U

PVM-400

PANASONIC



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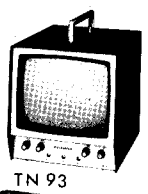
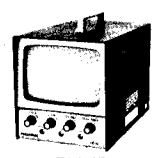
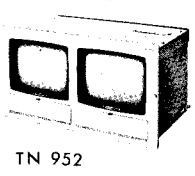


TN 93



TN 63

TR 910M



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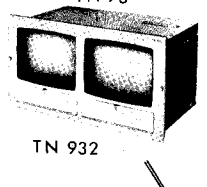

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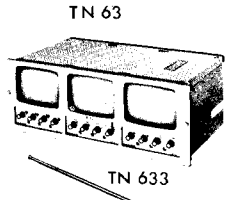
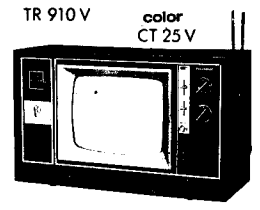
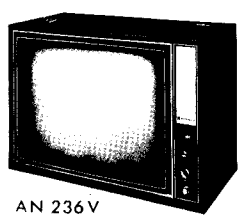


TN 633

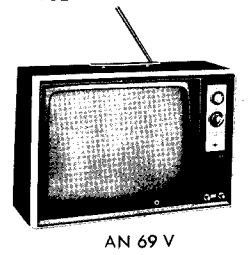
TR 910V

color CT 25V





AN 236V



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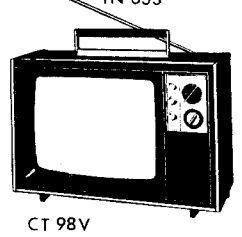
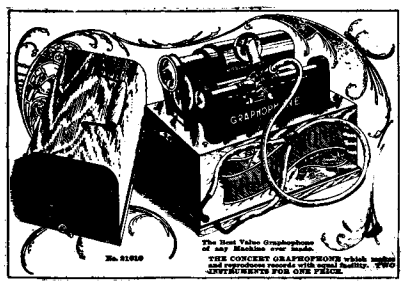


CT 98V

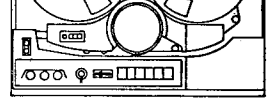
Model	Screen Size Diag.	Video Connector	Audio Connector	Approx. Dimensions	Approx. Weight	Horizontal Resolution	Tuner (Receiver)	Special Features & Standard Accessories	List Price
Sony CVM-112	11"	coax & 8 pin	mini & 8 pin	11-7/8"w x 11-5/8"h x 13-1/2"d	16 lbs.		X	earphone - loop antenna - 8 pin connecting cable	$ 255.00
Sony CVM-192U	18"	coax & 8 pin	XLR & 8 pin	22-3/4"w x 17-1/2"h x 13-1/2"d	50 lbs.		X	8 pin connecting cable	$ 300.00
Sony CVM-920U	8"	coax & 8 pin	mini & 8 pin	9"w x 10"h x 8-5/8"d	10 lbs.		X	earphone - external antenna connector - 8 pin connecting cable	$ 225.00
Sony CVM-1200UA	12" COLOR	coax & 8 pin	mini & 8 pin	22"w x 14-3/16"h x 15-7/8"d	48 lbs.		X	8 pin connecting cable	$ 595.00
Sony CVM-1710	17" COLOR	coax & 8 pin	mini & 8 pin	21-13/16"w x 15-11/16"h x 20-1/16"d	68 lbs.		X	8 pin connecting cable (10 ft.)	$ 850.00
Sony PVM-400	(4) 4"	coax	no	19"w x 5-1/4"h x 12-1/2"d				rack mountable	$ 750.00
Sony PVM-1200	color 12"	coax	no	19"w x 12-13/64"h x 16-11/32"d	57 lbs.	280		rack mountable - under scanning switch	$ 800.00
Panasonic AN-69V	19"	coax & 8 pin	RCA & 8 pin	22-3/8"w x 16-1/8"h x 14-5/8"d	36 lbs.	600	X	black metal cabinet finish	$ 275.00
Panasonic AN-236M	22"	coax	no	27-7/8"w x 19-13/16"h x 15-3/4"d	62 lbs.	600		wood finish	$ 300.00
Panasonic AN-236V	22"	8 pin	RCA & 8 pin	27-7/8"w x 20"h x 16-5/16"d	48 lbs.	600	X	wood finish	$ 350.00
Panasonic CT-25V	color 12"	coax & 8 pin	RCA & 8 pin	23"w x 14-1/4"h x 15-3/4"d	47 lbs.		X	black vinylclad wood cabinet	$ 550.00
Panasonic CT-98V	color 19"	8 pin	RCA & 8 pin	24-1/2"w x 19-1/2"h x 20"d	78 lbs.		X	walnut veneer	$ 650.00
Panasonic TN-63	6"	coax	no	6"w x 7-3/4"h x 11-1/4d	10 lbs.	600		rack mountable	$ 195.00
Panasonic TN-93	8"	coax	no	8"w x 9-3/4"h x 15-3/8"d	18 lbs.	800 center 600 corner		rack mountable	$ 240.00
Panasonic TN-95	8"	coax & 8 pin	RCA & 8 pin	8"w x 9-3/4"h x 15-3/8"d	20 lbs.	800 center 600 corner		rack mountable - under scanning switch	$ 295.00
Panasonic TN-633	(3) 6"	coax	no	19" racksize 19"w x 7"h x 11-1/4"d	34 lbs.	600		rack mountable	$ 575.00
Panasonic TN-932	(2) 8"	coax	no	19" racksize 19"w x 10-1/2"h x 15-3/8"d	38 lbs.	800 center 600 corner		rack mountable	$ 480.00
Panasonic TN-952	(2) 8"	coax	RCA & 8 pin	19" racksize 19"w x 10-1/2"h x 15-3/8"d	45 lbs.	800 center 600 corner		rack mountable - under scanning switch	$ 590.00
Panasonic TR-513V *(NOT SHOWN)*	12"	8 pin	8 pin	17"w x 12-1/4"h x 11-1/2"d	22 lbs.	400		leather grain finish - diecast handle	$ 220.00
Panasonic TR-910M	8"	coax	no	9-5/8"w x 9-5/8"h x 9"d	15 lbs.	450		black cabinet finish with silver trim - diecast handle	$ 140.00
Panasonic TR-910V	8"	8 pin	8 pin	9-5/8"w x 9-5/8"h x 9"d	15 lbs.	400	X	black cabinet finish with silver trim - diecast handle	$ 170.00

Tape Systems

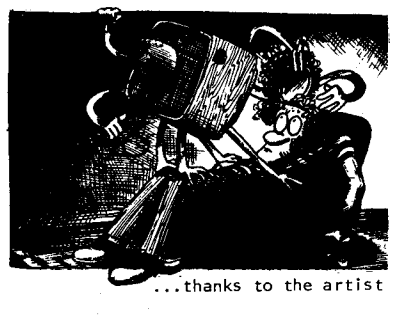


VTR's

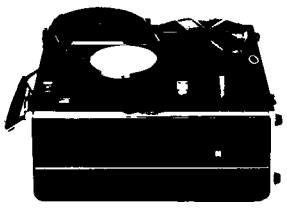
Sony AV-3600



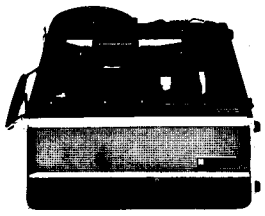
TYPICAL VIDEOTAPE RECORDER LAYOUT. Closely resembles audio tape recorder in arrangement of feed and take-up spools and tape transport. At centre is helical scanning assembly; below, press buttons for record, stop, play, etc. To left, tape tension and tracking controls.



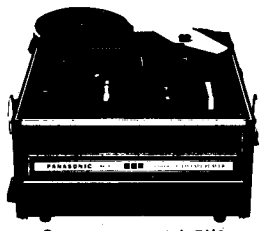
...thanks to the artist



Panasonic NV-3020

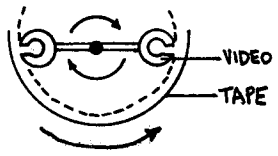


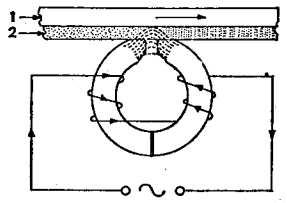
Panasonic NV-3120
Color VTR



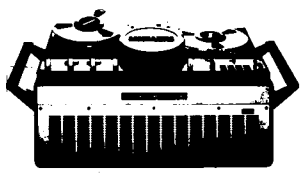
Panasonic NV-3110
Color VTR

Helical scan. One or two rotating heads are mounted on a large diameter drum, which turns at a high speed. Around the drum the tape is wound helically, but it travels slower than the periphery of the drum. Because of the helical wind, the track pattern on the tape is at an angle to the edge of the tape. Thus, though the tape is transported at a relatively low speed, the head-to-tape speed is relatively high. This more sophisticated arrangement is employed in closed-circuit and educational VTRs.





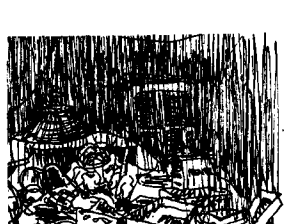
RING-TYPE RECORDING HEAD. Coil of wire to which audio or video signal is applied is wound on a ring core of magnetic material, broken by a very short gap, here greatly exaggerated for clarity. The tape with its coating, 2, on base, 1, contacts the head and thus closes the gap. Hence the magnetic field penetrates the coating, producing a magnetic pattern proportional to the coil current. Conversely, a recorded tape passed over the same head excites a voltage in the coil. If the tape speed remains the same, this voltage faithfully follows the waveform of the recording current.

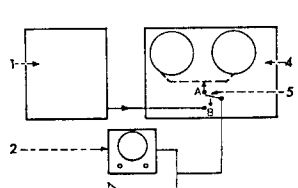


Panasonic NV-504
Solenoid 1" VTR

Panasonic ½" B/W NV-3040
Solenoid operated VTR
coming summer '72

Solenoids are electromagnets. In most VTR's the force of buttons pushed moves the wheels and levers inside the machine. In a solenoid-operated machine all movement in the deck is selected by the magnetic force of the solenoid. Therefore it is possible to have a remote-control machine whereby button→wire→solenoid controls the moving parts.



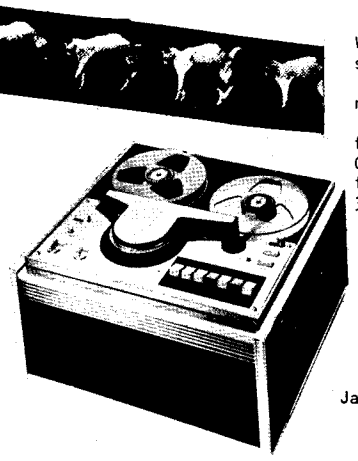


ELECTRONIC EDITING: REHEARSAL AND TRANSFER. Output of first VTR, 1, goes to switch, 5, on second VTR, 4. To rehearse, output of 4 passes to picture monitor, 2, and loudspeaker, 3, with switch in position A. When the cued edit point is reached, switch goes from A to B, thus transferring monitor to VTR, 1. If editing point is found satisfactory, machine is switched to transfer mode; when edit point is again reached, VTR, 4, starts recording, thus adding the new scene to previous scenes already on this tape. In this way, an edited reel is built up on VTR, 4, without any cutting of tape.

The Time Machine

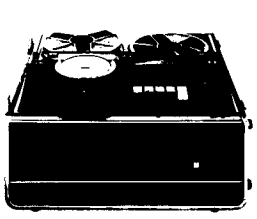
"There is no difference between Time and any of the three dimensions of Space except that our consciousness moves along it," said the Time Traveler. "Upon that Machine I intend to explore Time."

-- H. G. Wells
The Time Machine

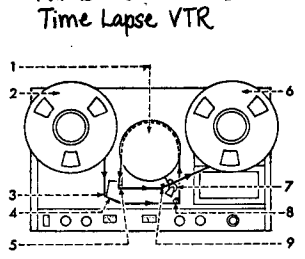


Javelin

With the Javelin Master 400-X (EIAJ 1 Standard) you can shape time. Record up to 7 hours on a single tape (2400' tape at 1-1/16 IPS). Then you can play back at normal speed or accelerate time and play the tape back in 1 hour. Or stop time. Or slow time to "flicker-free" playback through an exclusive 4 head video system. Or rearrange time through the insert & assemble edit function. Or analyze time frame by frame, 300 lines by 300 lines.



Panasonic NV-8020
Time Lapse VTR



TYPICAL HELICAL-SCAN VIDEOTAPE RECORDER LAYOUT. Tape unwinds from feed reel, 2, and passes round tape tension arm, 3, over video erase head, 4, and entrance guide, 8, to helical scanning assembly, 1. After recording, tape leaves by exit guide, 5, passes over auxiliary head stack, 9, pulled by capstan and pinch roller, 7, and is wound up on take-up reel, 6.

Diagrams from The Focal Encyclopedia of Film and Television Techniques. (See "Books.")

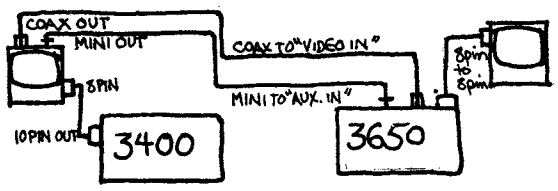
	Tape Width	Weight	Dimensions	EIAJ Standard	Horizontal Resolution	Power Consumption	Special Features	List Price
Sony AV-3600	1/2"	33 lbs.	15-3/4"w x 9-3/16"h x 13-3/16"d	1	300	60 w.	audio dub - stop action - auto end of tape shut off	$ 795.00
Panasonic NV-3020	1/2"	33 lbs.	15-5/8"w x 8-5/8"h x 15-3/8"d	1	300	60 w.	audio dub - stop action - auto end of tape shut off	$ 795.00
Panasonic Color NV-3120	1/2"	40 lbs.	15-7/8"w x 8-7/8"h x 17-1/8"d	1	300 B&W 240 color	75 w.	audio dub - stop action	$1,250.00
Panasonic Player NV-3010 (NOT SHOWN)	1/2"	28 lbs.	14-11/16"w x 6-3/4"h x 13-13/16"d	1	300	60 w.	auto end of tape shut off	$ 575.00
Panasonic Color-Player NV-3110	1/2"	31 lbs.	14-1/16"w x 8-3/4"h x 13-17/32"d	1	300 B&W 240 color	65 w.	auto end of tape shut off	$ 875.00
Panasonic NV-504	1"	97 lbs.	29-3/8"w x 12-1/3"h x 15-3/8"d	no	450	260 w.	slow motion & stop action - solenoid operated - adaptable to color - adaptable to 2nd audio channel	$3,950.00
Panasonic Time Lapse NV-8020	1/2"	59 lbs.	17-1/4"w x 10-5/8"h x 17"d	no	260	115 w.	6, 12, 24, & 48 hour settings - stop action - set to 6 or 12 hrs. - full audio capacity	$1,750.00
Javelin Time Lapse X-400	1/2"	58 lbs.	18-1/2"w x 10-1/4"h x 17"d	1	300	95 w.	slow motion & stop action - insert edit - end of frame edit - records for 7 hrs. - independent audio erasure & recording	$1,9[illegible]

Editing Systems

Video Testimonial

I had worked with my 3400 for nine months and had amassed a pile of tapes. I felt the need to select and connect. Very simplistic process. Deceptively simple. I bought an AV-3650,a length of audio line and coax cable (perhaps this last was the most startling purchase, coax cable like the pros).

With a burst of energy I connected:



When I first set up the Porta-Pak system at home, nothing happened. All that I tried, failed. I called CTL, Lui told me the AC supply was off. So when I tried my first edit and in playback got no image and no sound, I with the telephoned help of video friends at CTL checked all the connections and recabled the system, all to no avail. I knew in my heart of hearts that when I arrived at Lui's with my 3650 in hand, a humiliating, stupid mistake would be found.

So far I've found out from friends and trials that if the tape is recorded with good contrast and attention is paid to sound, it's best to leave those dials on AGC. If manual, the video level averages in the center of the blue panel. A too high video level gives a burned out effect to the picture.

It's possible to get 2 tracks of sound on the master, i.e. a voice over or music, without losing the original track. A card, a dollar bill over the erase head will do it. The audio track on the original (somehow) compensates for the new information. The results are usually good. TRIAL FOR PERFECTION IS THE WAY.

Once the cue points are found - in and out on the two machines - and after the adjustments have been made for timing, you can put the 3400 on still frame and the 3650 on pause/still. The heads are running; it gives you a head start to stability, and it's also a smoother, more precise motion to release still to forward (especially on the 3400) than to go from stop to forward. Don't leave the machine on still for too long. It's bad for the heads and the oxide coating on the tape.

A technical fine point from Woody Vasulka:
Record a half minute or so of black (lens closed) to have leader with complete organized signal. Then comes title, record and black at tail.

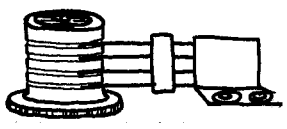
Time passes, I align and edit-record, playback on the 3650. The edited tape looks like this:

The line of noise is consistent (in the same place, etched evenly across). The by now routine set of phone calls to CTL found this out for us:

A) Any given position of the head as it contacts the tape reproduces a constant portion of the scanned image.

B) The video signal is carried from the heads to 2 sets of 4 wire brushes to the amplifier system; the brushes form the contact point between the moving parts and the non-moving parts of the machine below.

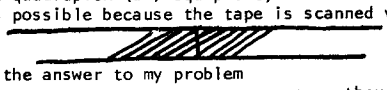
C) Each of the brushes moves in a slip ring or groove and any given position of the brushes reproduces a constant portion of the scanned image. If there is any dust, etc., on the brush or in the groove, it will interrupt the signal or cause noise in the corresponding part of the picture.



D) To correct it, remove the head assembly's outer plastic cover and the metal plate underneath. Clean the brushes with a swab or Q-tip. Get a Phillips head screwdriver, and a set of jeweler's screwdrivers as well. The metal plate over the heads is held in place by 2 Phillips screws; a proper size screwdriver at home might have saved me a trip to the late night hardware store with an intaglio print of the screw.

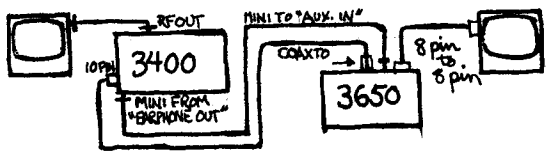
I digress this time to ask a question:
Does this mean that if you crease the tape and have to splice it physically, it's possible to find the frame line and get a predictable cut?

The answer to your question coming from CT Lui is no -- on helical scan equipment. The frames are recorded at a given angle on the tape; therefore a vertical splice cuts through more than one frame, producing a vertical wipe. On quadraplex (2") equipment, this kind of splice is possible because the tape is scanned vertically.

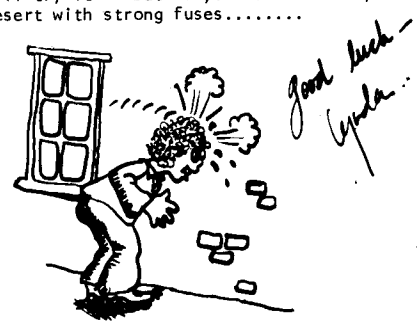


That was the answer to my problem or so we thought.

ADDENDUM:
Sometimes the missing line of video is caused by dirty brushes. Sometimes, however, it is caused by a faulty house. RF generated by a neighbor's vacuum cleaner or DC fan could cause the disturbance; a certain very large new building could cause the disturbance. Too long coax cables can pick up the extraneous TV or radio signals, thereby acting as antennae. I could either move or use shorter connecting cables. Another possibility is to recable the editing system according to a suggestion by Woody Vasulka.

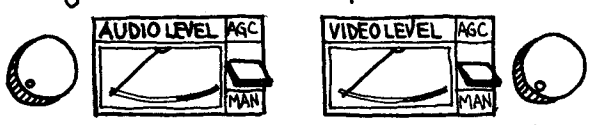


Woody says the 10 pin to coax cable can be made easily. I'll try it -- but if you hear of an apartment in the desert with strong fuses.....



PUZZLE PAGE

Can you find the error in this picture?



...for answer-turn page upside down

answer: the audio and video levels are on manual gain control and are turned to 0 - zero audio and zero video, just what I got.

SCORING:

If you've only worked with a Porta-Pak where the audio and video level gain is controlled automatically (AGC), turn knobs to the right -- that's all.

If you've worked with a 3650 before and you knew the answer, join the CTL engineers in a good laugh on me.

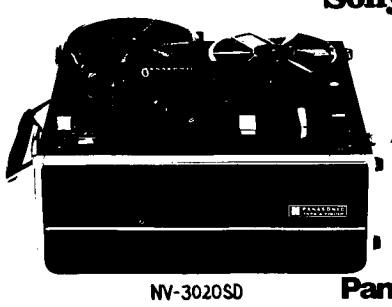
If you haven't worked with a 3650 but knew the answer instinctively -- I don't want to hear.

1/2" VIDEO TAPE RECORDERS

AV-3650

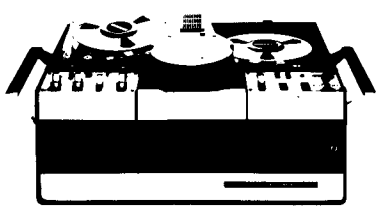
1" VIDEO TAPE RECORDERS

Sony EV-320F



NV-3020SD

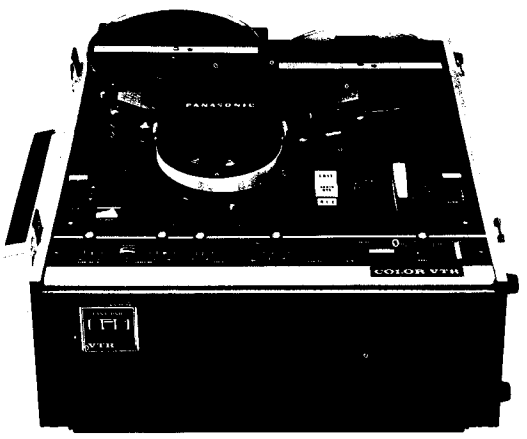
Panasonic



NV-505

Q. What mechanism makes it possible to edit?
A. Capstan-servo

The vertical sync pulse controls the motor speed of the capstan. It pulls the tape along exactly in sync with the incoming picture. If there's variation in the incoming sync, the motor will follow that variance so that when the edit button is pushed the old and the new video match up and there is no rollover.



NV-3130
Panasonic's 1/2" Color Editing Deck--- coming summer 1972

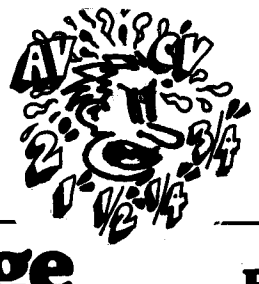
	Tape Width	Weight	Dimensions	Recording Time	Horizontal Resolution	EIAJ Standard	Special Features	List Price
Sony EV-320F	1"	86 lbs.	18-3/4"w x 10-1/4"h x 19-1/4"d	60 min.	300	no	2 channels on audio - slow motion & stop action - adaptable to color - solenoid operated	$4,900.00
Panasonic NV-505	1"	120 lbs.	30-3/8"w x 11-3/4"h x 16-3/4"d	67 min.	450	no	2 channels on audio - adaptable to color	$5,000.00
Sony AV-3650	1/2"	42 lbs.	17-5/16"w x 9-5/16"h x 15-11/16"d	60 min.	300	1	audio dub - stop action - auto end of tape shut off	$1,150.00
Panasonic NV-3020SD	1/2"	36 lbs.	15-5/8"w x 8-5/8"h x 15-3/8"d	63 min.	300	1	audio dub - stop action & slow motion in playback - auto end of tape shut off	$1,050.00
Panasonic Color NV-3130	1/2"	46 lbs.	15-7/8"w x 6-1/4"h X 16-3/4"d	63 min.	300 B&W 240 color	1	stop action & slow motion in playback - drop out compensator	$1,550.00

Drop out Compensator (Delay Line Circuitry) - Drop out is caused by missing oxide, grease, or a burn on the tape. A drop out compensator will detect the distortion and bypass it. For example, a one line drop out compensator has a one line delay in playback; if a line has drop out, the machine does not allow that line to go through. It will scan (repeat) the previous line again.

The Standardization Saga

by Mark Brownstone

One of the most frustrating aspects of the new video technology has been the lack of compatability between one manufacturer's VTR and the next, As soon as one standard is established, a new technology comes along and everyone's hardware is either obsolete or incompatible all over again. Well, that's future shock for you.



The EIAJ Type 1 Standard
(1/2" reel-to-reel)

Between 1969 and 1970 the Electronics Industries Association of Japan (EIAJ), which consists of the Japanese manufacturers plus several companies in Europe and the U. S., agreed on standards for the manufacture of 1/2" VTR's,accessories, and tape. Virtually all 1/2" reel-to-reel equipment now being manufactured meets the type 1 standard. This means that a tape recorded on any type 1 VTR (black & white or color) should be playable on any other type 1 VTR. In some cases, one manufacturer's camera can be used with another's VTR.

The EIAJ Type 2 Standard
(1/2" cartridge)

A 1/2" standard for video cartridge recorder-players has recently been agreed upon by the EIAJ. The manufacturers who have "agreed to agree" include Sony, Matsushita (Panasonic), Japan Victor, West Germany's Grundig and Telefunken, and the Phillips Corporation of the U. S. and the Netherlands (Norelco).

Basically, this standard conforms to the type 1 tape and signal formats. The new addition is a standard design for an interchangeable cassette package. Since the tape format remains the same, interchangeability between the cartridge reel and the type 1 open reel is maintained.

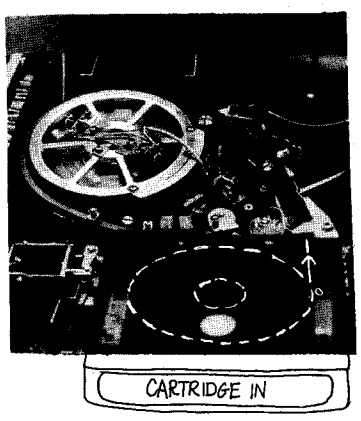
Unfortunately all of the standardizing takes time. A 1/2" standard for cartridges was proposed in early 1970. It finally materialized in mid-1972. In the meantime incompatible systems have been produced. My recommendation would be to stick with the standard, 1/2 inch.

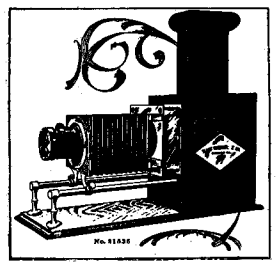
Cartridge

PANASONIC EQUIPMENT·COMING WINTER

CARTRIDGE

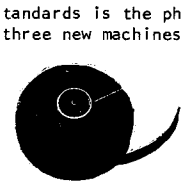
NV-5120, Color Cartridge
VTR and playback

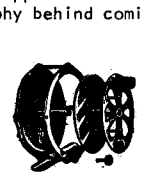




George Vaughn, a Panasonic representative, says:

"With 60,000 1/2" (EIAJ Standardized) machines in the country and approximately 30,000 to be added this year, it makes sense to make the standard 1/2". In order to use the new Panasonic cartridge machine you don't have to throw away your 1/2" tape, and none of your systems become obsolete. A full line approach following the EIAJ standards is the philosophy behind coming out with these three new machines."

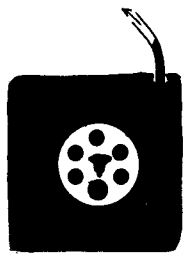


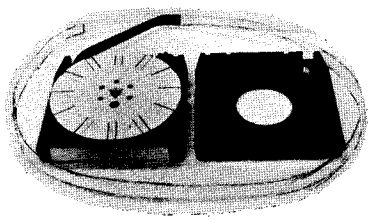


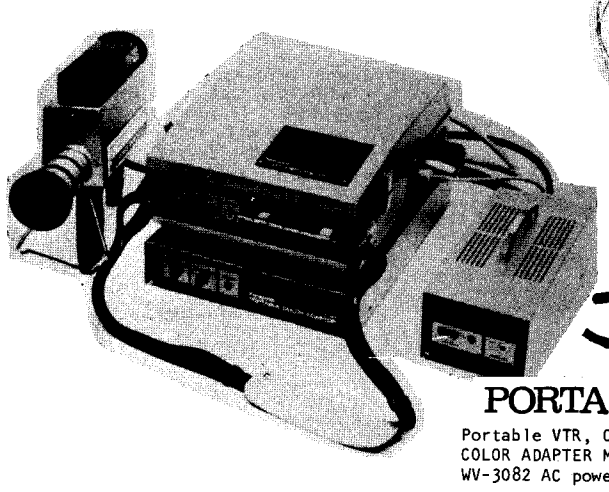
Leo Yam, Instructor and Director of the Television Studio at Columbia University, says:

"I played with the Panasonic in Minnesota and it's great. I work with professors and they don't like anything mechanical. This way they can stick the cartridge in and their minds can go on to intellectual pursuits."

The cartridge is approximately 4" x 41/2" x 3/4". The "box" opens and the reel is removeable. You can load the cartridge with any tape, recorded on any EIAJ type 1 standard system (i.e. Sony Porta-Pak, etc.) This works by using the cartridge reel to take up the tape, and attaching plastic (EIAJ standardized) leader to the end of the tape. You then place the reel into the cartridge ("box") and go -

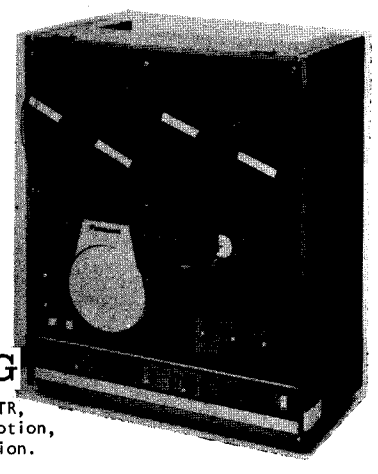






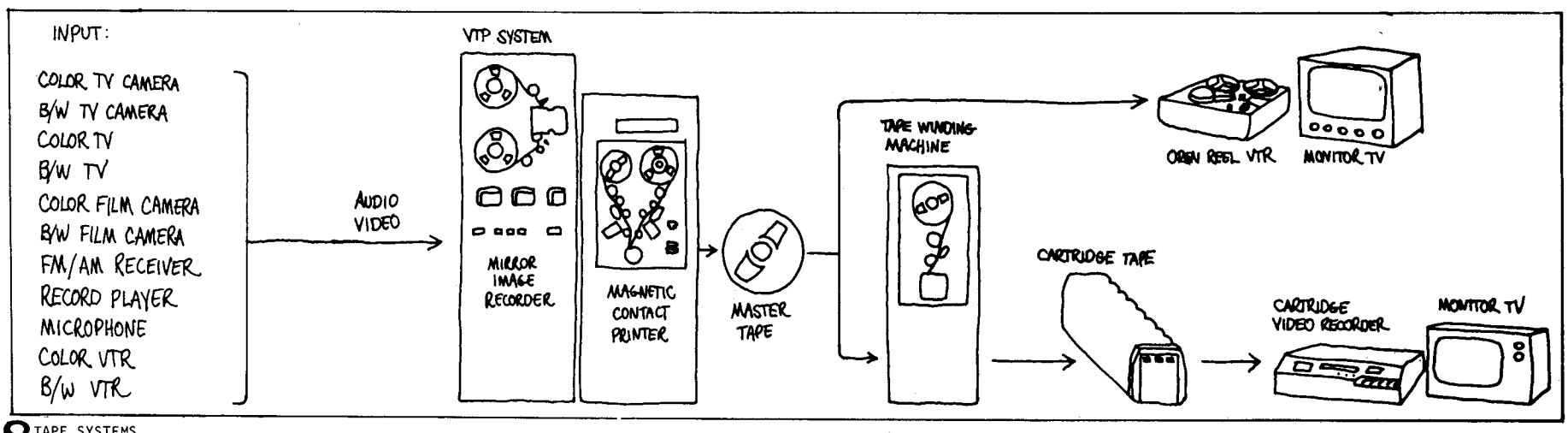
PORTABLE

Portable VTR, Camera and
COLOR ADAPTER Model NV-3082,
WV-3082 AC power adapter



EDITING

NV-3150 Color VTR,
Editing, Slow Motion,
Solenoid Operation.



SONY

SONY

SONY

Color VIDEOCASSETTE Recorder

NTSC color record/playback capability. Single cable connection to any conventional color or monochrome TV receiver

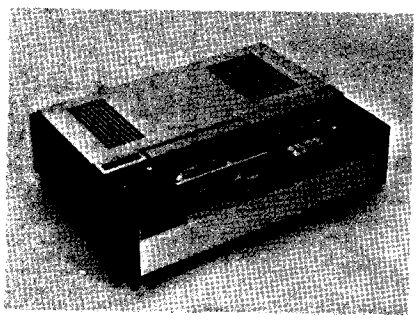
Videocassette can be stopped and removed at any time without rewinding, reinserted later to resume recording or playback.

2 audio tracks provide high quality stereophonic sound or bi-lingual messages.

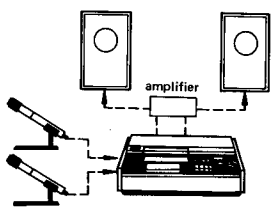
High resolution color or monochrome picture

Full systems capability. Signals can be recorded from or fed to conventional CCTV or video systems.

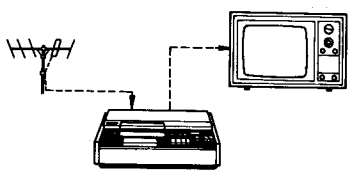
With an accessory distribution amplifier, one Videocassette can feed as many TV receivers as may be required.



VO-1600 RECORDER
List $1,395.00



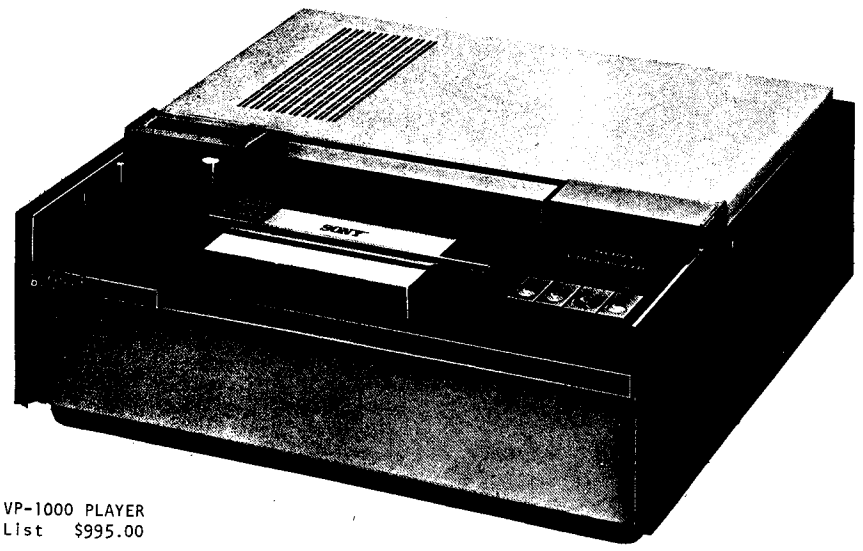
■ 2-track audio recording and reproduction
——— stereo or bilingual ———



■ Recording TV programs off-the-air while monitoring

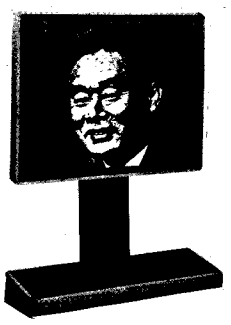
(See page 13 for cassette accessories.)

VIDEOCASSETTE Player



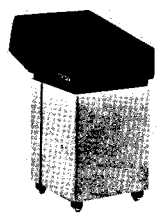
VP-1000 PLAYER
List $995.00

Color Video Projection System

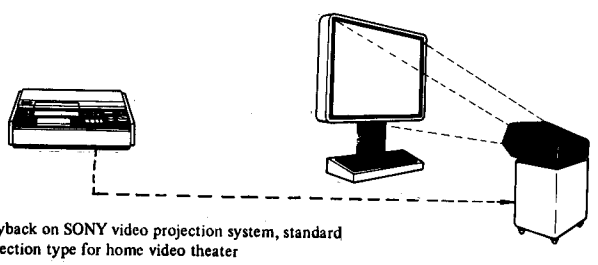


Had a good look at the Sony color video projector. It is really good quality, better than 8mm (which is very popular in Japan, and 40-50 people can comfortably watch the special highly-reflective screen (which cuts down on the viewing angle).

--Mike Goldberg

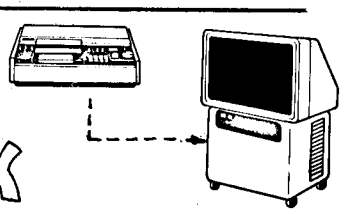


Sony Color Projector.
Available next winter.
Price about $2,400.



■ Playback on SONY video projection system, standard reflection type for home video theater

■ Playback on SONY video rear-projection system for open spaces

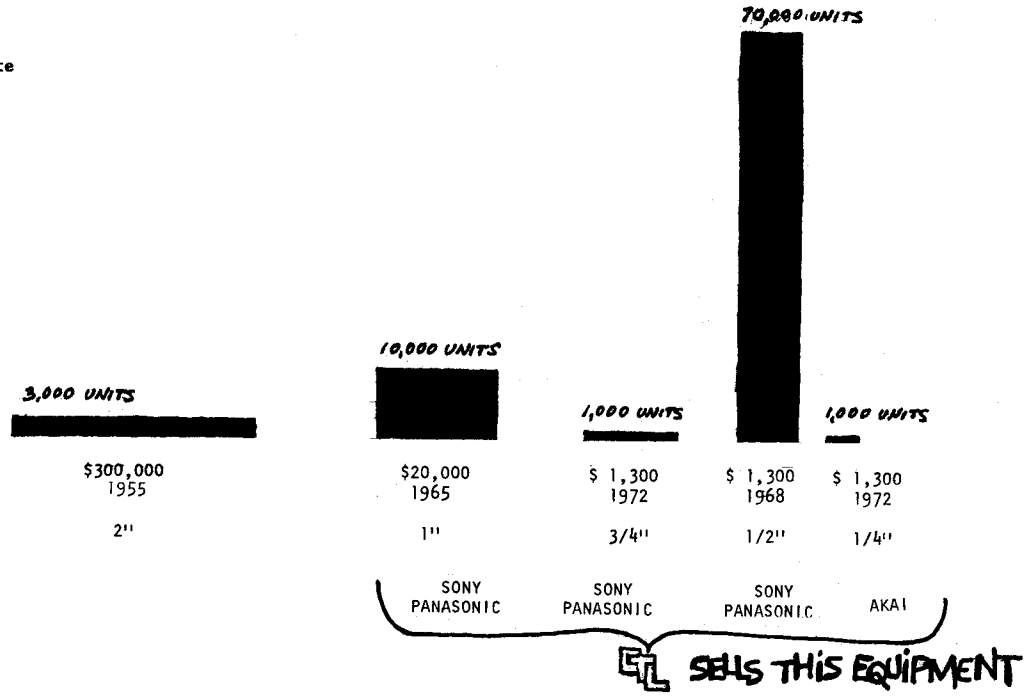


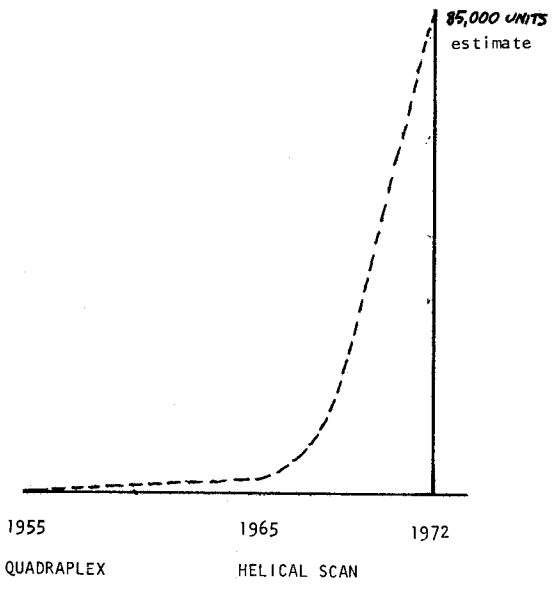
CTL VIDEO JUKE BOX

Lui says:
"The CTL Video Juke Box now in the research stage will help speed up the creation of a software market in the entertainment field. The changer mechanism and interface can be used with existing time-sharing systems for videotape libraries, programmed instruction courses, and mass storage."

CTL RESEARCH AND DEVELOPMENT

V.T.R. UNITS CURRENTLY IN USE — U.S.A.

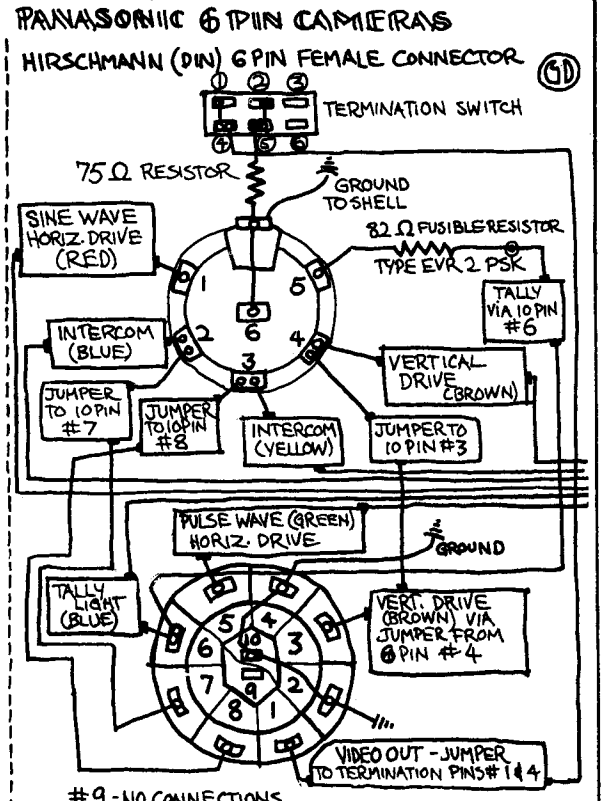




Panasonic VY-922

BACK PANEL WIRING CHANGES FOR USE WITH SONY CAMERAS

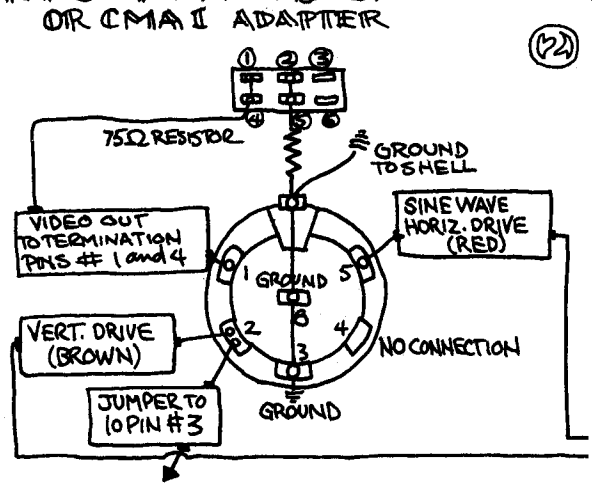
FACTORY WIRED FOR PANASONIC 6 PIN CAMERAS



#9 - NO CONNECTIONS
#10 GROUND to 10 PIN #2 & 4

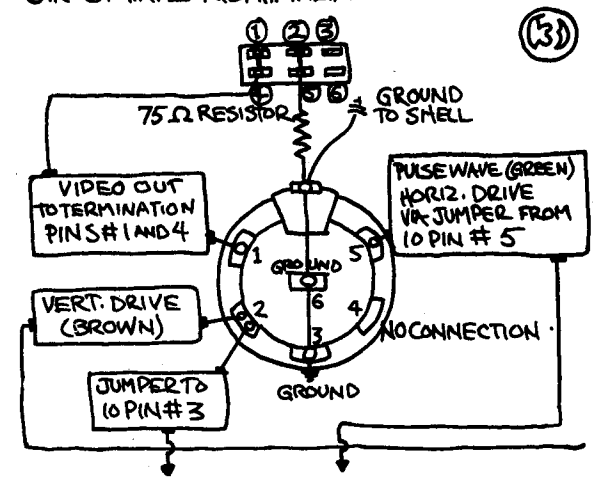
10 PIN FEMALE CONNECTOR FOR PANASONIC WV340P and WV360P CAMERAS

FOR SONY CAMERAS - CV OR CMA I ADAPTER



1. Remove 82 ohm fusible resistor between pin # 5 and the 10 pin connector #6.
2. Remove blue intercom tip lead and the jumper from pin #2.
3. Remove the other end of jumper from 10 pin connector pin #7 and connect blue intercom tip.
4. Remove yellow intercom sleeve lead and the jumper from pin #3.
5. Remove the other end of jumper from pin #8 and connect yellow intercom sleeve lead.
6. Move the red sine wave horizontal drive wire from pin #1 to pin #5.
7. Move the brown vertical drive wire and the jumper (from 10 pin connector pin #3) from pin #4 to pin #2.
8. Add a bare wire jumper from pin #3 to pin #6 and the shell pin.
9. Add a jumper for the video signal from pin #1 to the termination switch pins #1 & 4. The termination switch pins #1 & 4 already has a jumper from pin #1 of the 10 pin.

FOR SONY CAMERAS - AV OR CMA 2 ADAPTER



1. Remove 82 ohm fusible resistor between pin #5 and the 10 pin connector #6.
2. Remove blue intercom tip lead and the jumper from pin #2.
3. Remove the other end of jumper from 10 pin connector pin #7 and connect blue intercom tip.
4. Remove yellow intercom sleeve lead and the jumper from pin #3.
5. Remove the other end of jumper from pin #8 and connect yellow intercom sleeve lead.
6. Remove the red sine wave horizontal drive wire from pin #1 and tape the end.
7. Add a jumper between pin #5 and the 10 pin connector #5. Leave the green pulse wave horizontal drive wire connected to the 10 pin connector #5 when you add the jumper. If you have it, use green wire for the jumper to make future changes easier.
8. Move the brown vertical drive wire and the jumper (from 10 pin connector pin #3) from pin #4 to pin #2.
9. Add a bare wire jumper from pin #3 to pin #6 and the shell pin.
10. Add a jumper for the video signal from pin #1 to the termination switch pins #1 & 4. The termination switch pins #1 & 4 already has a jumper from pin #1 of the 10 pin.

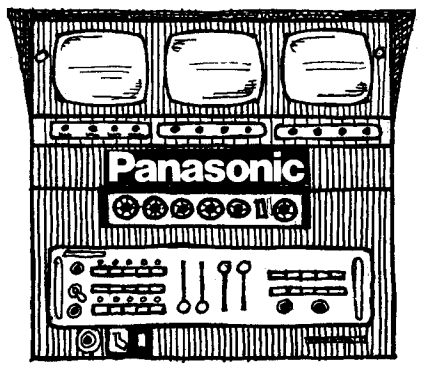
SPECIAL EFFECTS GENERATORS

In addition to the models listed below, there are several camera switchers and small special effects generators available.

All the Sony and Panasonic special effects generators have built-in sync generators and special connectors. The Viscount and Shintron models all require external sync generators and junction boxes for camera connection, feature vertical interval switching and color capability.

The Japanese SEGs should be used where simplicity, low cost, and ease of interconnecting are required. They are especially valuable for portable systems where weight and rack space are at a premium. All the SEGs in this table except the Sony SEG-1 are supplied ready for mounting in EIA standard racks and consoles.

The Panasonic VY-922 Genlock SEG is recommended for systems utilizing existing cameras. The back panel can be easily rewired for Sony CV and AV studio cameras and the Rover cameras with CMA 1 or CMA 2 camera adapters. The VY-922 comes factory wired with intercom and tally light power supplies for the Panasonic studio cameras. The Genlock allows titles and effects from live cameras to be added to previously recorded tapes.



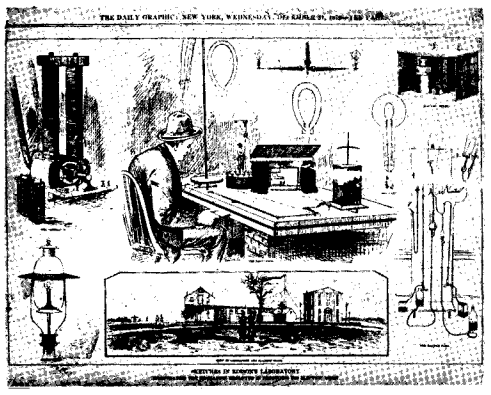
Panasonic Mini Studio Series 1100

PANASONIC MINI STUDIO SYSTEM 1100

This compact system features ease of transportation, simplicity and low cost. The system includes two VW-340P studio cameras with rear controlled zoom lens, two 25-ft. camera cables (10G-25), one 25-ft. coax cable, one Shure M68FC microphone mixer, one TN-633 triple 6" monitor, EIA Standard rack with lockable front door, power distributor box, three intercom headsets, and one WJ-540P or VY-922 special effects generator.

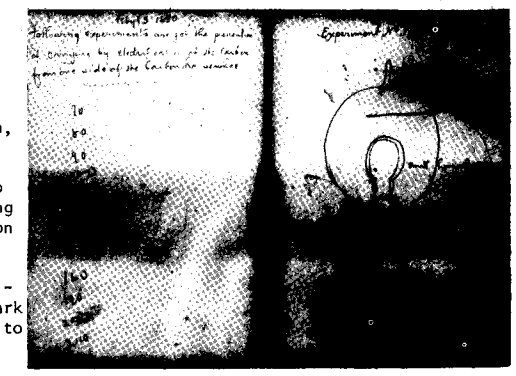
With VY-922 ..... $ 4,900.00
With WV-540P ..... $ 4,750.00

	Weight	Dimensions	Inputs	Outputs	Key	Sync Generator	Color or Monochrome	Special Features	Compatability	List Price
SONY SEG-1	9 lbs.	15-1/2"w x 5-1/4"h x 10"d	4/camera	1 program		2:1 interlace; external	monochrome	negative image switch; 6-pin plug for external sync	Sony 6 pin	$ 595.00
SONY SEG-2	31 lbs.	19"w x 7"h x 14-13/16"d	6/camera 1 key	2 preview 2 program	X	2:1 interlace; external	monochrome	tally; intercom; return video with junction box JB3	Sony 6 pin; Sony 10 pin for AVC-4000 with JB3	$ 900.00 (225.00 for JB3)
PANASONIC VY-922	22 lbs.	19"w x 5-1/2"h x 13"d	5/camera 1 VTR	2 preview 2 program		2:1 interlace; external; VTR	monochrome	negative image switch; Genlock for VTR; intercom; tally light circuit	Panasonic 10 pin; Panasonic 6 pin -- easily modified for Sony 6 pin	$ 950.00
PANASONIC WJ-540 P	20 lbs.	19"w x 5-1/2"h x 13"d	5/camera 1 aux.	3 preview 2 line		2:1 interlace; external	monochrome	negative image switch; intercom; tally light circuit	Panasonic 10 pin	$ 800.00
VISCOUNT 1120	11 lbs.	19"w x 8-3/4"h x 4-1/2"d	5/camera	1 preview 2 program		external (from camera #1)	color & monochrome	black generator; tally light switching	BNC	$ 995.00
VISCOUNT 7V3 FER	12 lbs.	19"w x 7"h x 6-1/2"d	5/camera 1 key 2 non-sync	1 preview 2 program	X	external only	color & monochrome	black generator; tally light switching; vertical interval switching	BNC	$1,950.00
SHINTRON 366	7 lbs.	19"w x 5-1/4"h x 6-1/2"d	4/camera 1 key	1 preview 2 program	X	external only	monochrome	tally light switching; vertical interval switching	BNC	$ 990.00
SHINTRON 370		19"w x 7"h	6/camera 1 key	2 preview 2 program background	X	external only	color & monochrome	diagonal & circle wipes; built-in colorizer; soft wipe (horizontal); tally light switching; vertical interval switch	BNC	$2,496.00

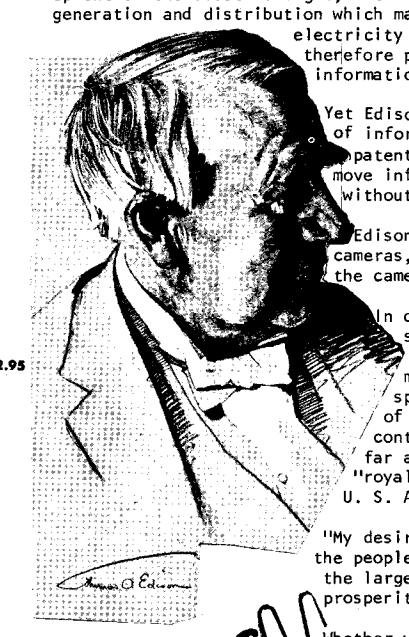


from an interview with
John Brumage & Shridhar Bapat --

- lighting equipment should not disturb the situation, especially in a reportage tape.
- the contrast ratio between black and white in video is much less than in film. Therefore video lighting must be "flatter" -- i.e., with less differentiation between highlights and shadow.
- when taping in a poorly-lit situation, you can maximize contrast by putting light objects against a dark background -- the objects become brighter relative to the room.



In this hemisphere Edison can be credited not only with the development of the electric light, but with the whole system of power generation and distribution which made both artificial light and electricity possible for everyman. He therefore produced the potential to move information.



Yet Edison was against the free flow of information. His aim was to patent everything so you could not move information in these systems without paying him a royalty.

Edison would rent but not sell his cameras, so many pirated versions of the camera were made.

In order to avoid Edison's lawsuits and arrests, the young New York motion picture movement countered with speed and space. The orange groves west of Los Angeles not only offered continuous sun, but they were as far as you could get from Edison's "royalists" and still be in the U. S. A.

"My desire," said Edison, "is to free the people from drudgery, and create the largest measures of happiness and prosperity."

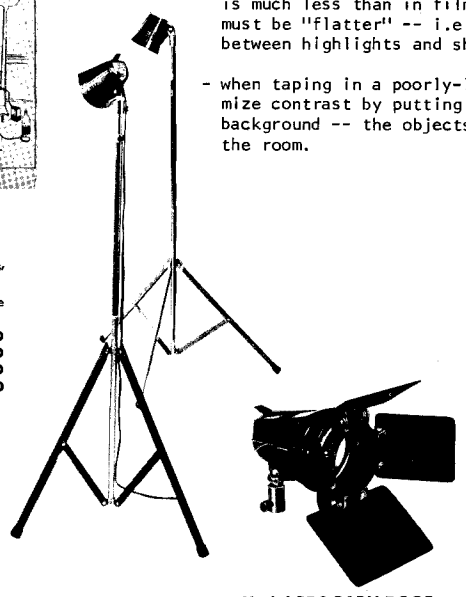
Whether you accept this statement to be true or ironical is relative to your definition of the word "free."

A Complete Studio in an Attaché Case

The Model K2 Kit consists of 3 lights with a total of 1800 watts, 3 stands and a compact carrying case.
The 3 Q1P Quartz Lights, each with a 600 watt DYH Lamp are rated at 3200° K, 75 hour life.

Complete Outfit No. K2 (without barn doors).. **$115.00**
Complete Outfit No. K2B (with 3 barn doors).. **150.00**
Model Q1P Quartz Light..... **21.50**
Model DYH 75 hour Quartz Lamp..... **10.90**

Smith Victor Corp.



Model BD3 BARN DOOR..... **12.95**

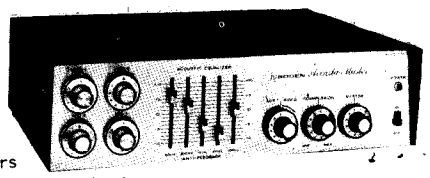
Designed especially for the Q1P Light. It is of all metal construction with 4 doors that rotate 360°. It simply clips on the light with 2 spring clips.

The K31is a delyxe professional kit that consists of 3 lights with a total of 1800 watts, 3 10-foot black anodized stands and a convenient carrying case.
The 3 Q1P Quartz Lights, each with a 600 watt DYH Lamp are rated at 3200° K, 75 hour life.

Complete Outfit No. K31
(without barn doors)..... **$180.00**
Complete Outfit No. K31-B
(with 3 barn doors)..... 215.00
Model DYH 600 watt 3200° 120 volt 75 Hr. Lamp **11.70**
Model FBX 650 watt 3200° 120 volt 100 Hr. Frosted **11.80**

Lighting & Audio Systems

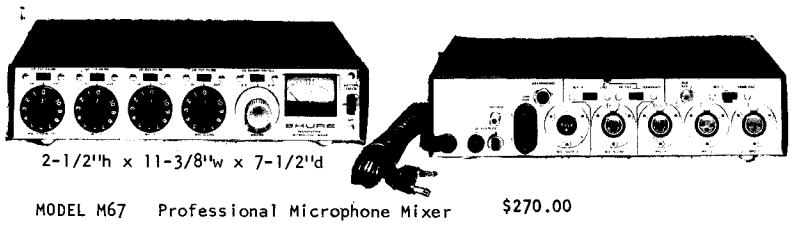
BOGEN



BOGEN mixer/amplifiers

CTL-30	Four low impedence mic inputs, two aux in, equalization for five frequencies	30 watts	$248.00
CTL-60	as above	60 Watts	278.00
CTL-100	as above	100 WATTS	323.00
WMT-1	LINE OUTPUT TRANSFORMER used with above for 600 ohm output		11.95
RPK-33	RACK MOUNT ADAPTER		10.45

SHURE

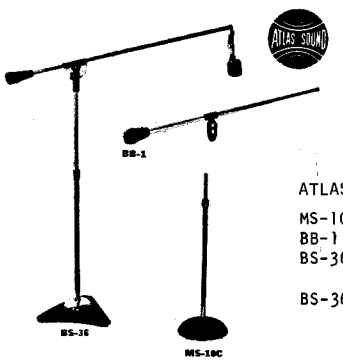


2-1/2"h x 11-3/8"w x 7-1/2"d

MODEL M67 Professional Microphone Mixer $270.00

Provides 4 low-impedence balanced line microphone inputs with individual gain controls and low frequency roll-off switches on each channel. One input is switchable to line level for 600-ohm termination or bridging. Outputs (a 600-ohm line and a low-impedence line level) are isolated and may be used simultaneously.

MODEL M-68FC Four low impedance mic inputs, low Z mic level and high Z line outputs $162.00

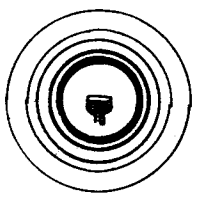


ATLAS MICROPHONE STANDS

MS-10C	10" Base 34"-62"	$ 9.50
BB-1	Baby boom adapter	6.92
BS-36	Boom stand to 72" high 62" boom	59.85
BS-36W	as above w/wheels	67.80

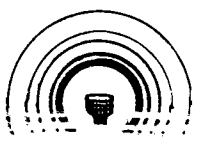
Sony microphones - see page 13

OMNI-DIRECTIONAL MICROPHONE:



- picks up sound from all directions
- lower sensitivity to breath pops and wind noises
- lower sensitivity to mechanical contact noises
- best for high quality recording
- recommended for PA if feedback is not a problem

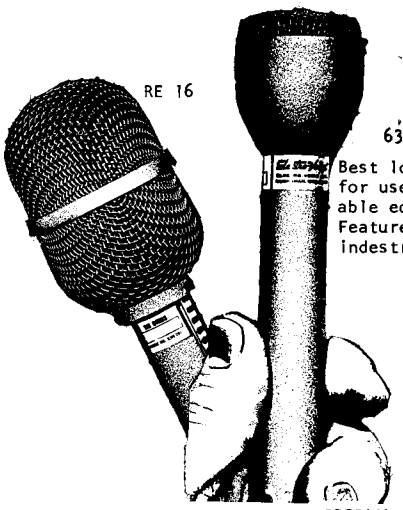
UNI-DIRECTIONAL MICROPHONE:



- reduced sound pickup from sides & rear
- reduces pickup of reverberation & background noise
- reduces feedback
- increases working distance
- best for PA systems
- recommended for recording if reverberation & noise are problems

ElectroVoice® MICROPHONES

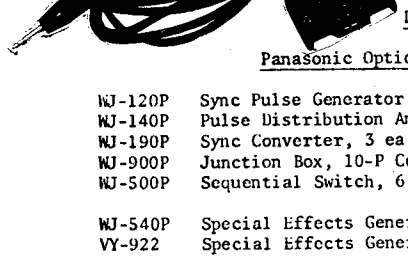
1751	Electret cardioid	$75.00
1750	Electret cardioid	45.00
1711	Electret omni	59.70
1710	Electret omni	39.75
642	Dynamic uni	272.40
643	Dynamic super uni	1095.00
668	Dynamic cardioid	318.00
667A	Dynamic cardioid	222.00
RE-20	Dynamic cardioid	272.40
RE-15	Dynamic cardioid	169.80
RE-16	Dynamic cardioid	176.70
RE-10	Dynamic cardioid	99.60
RE-11	Dynamic cardioid	106.50
RE-55	Dynamic omni	141.30
649B	Lavalier dyn omni	73.50
635A	Dynamic omni	56.70
RE50	Dynamic omni double case hand held/stand	77.10
	Dynamic omni double case lavalier	85.50



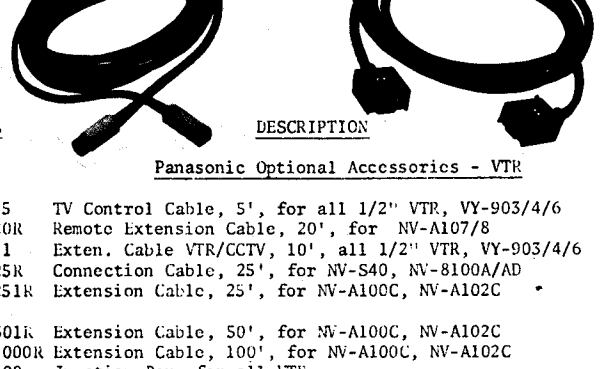
635 A

Best low-cost mike for use with portable equipment. Feature -- almost indestructible.

Panasonic Accessories



MODEL	DESCRIPTION	USER NET
	Panasonic Optional Accessories - CCTV Cameras	
WJ-120P	Sync Pulse Generator (2:1), 3 ea Outputs HD & VD	$ 250.00
WJ-140P	Pulse Distribution Amplifier, 6 Outputs	150.00
WJ-190P	Sync Converter, 3 ea Outputs HD & VD, Phase Shifter	120.00
WJ-900P	Junction Box, 10-P Connectors to UHF	35.00
WJ-500P	Sequential Switch, 6 Inputs	325.00
WJ-540P	Special Effects Generator with Sync (2:1)	800.00
VY-922	Special Effects Generator with Sync (2:1) & Genlock	950.00
10G-25	Cable w/10-P M. Conn, 25', for WV-250P, WV-340/360P	50.00
10G-50	Cable w/10-P M. Conn, 50', for WV-250P, WV-340/360P	75.00
10G-100	Cable w/10-P M. Conn, 100', for WV-250P, WV-340/360P	100.00
10H-25	Extension Cable w/10-P M/F Conn, 25', for 10G Cables	50.00
10H-50	Extension Cable w/10-P M/F Conn, 50', for 10G Cables	75.00
10H-100	Extension Cable w/10-P M/F Conn, 100', for 10G Cables	100.00
JC-1	Junction Cable, 10-P/2 UHF Conn.	15.00
JC-2	Junction Cable, 6-P and 4-P/6-P Conn.	15.00
WJ-A01	Rack Mount Frame; 3-1/2", accepts combination of up to 3 ea of WJ-120P, WJ-140P, WJ-190P, WJ-900P; or 2 ea of WJ-500P	30.00
WJ-B01	Blank Panel, 3-1/2" (H) x 2-3/4" (W)	7.00
WJ-B02	Blank Panel, 3-1/2" (H) x 5-1/2" (W)	8.00
WJ-B03	Blank Panel, 3-1/2" (H) x 8-1/4" (W)	10.00
WV-612P	Sync Generator (2:1) with 20' Sync Cable	400.00
WV-613P	Sync Plug-In Board (2:1) for WV-370P only	75.00
WV-617P	Sync Converter, Square Wave/Sine Wave	100.00
WV-622P	Video Distributor, 1 Input, 3 Outputs, UHF Conn.	110.00
WV-640P	Camera Control Unit, for WV-370P, only	200.00
WV-642P	Dual Camera Control Unit, for (two) WV-370P, only	400.00
WV-650	Power Supply; Tally Lamps & Intercom; 12 VDC	35.00
WV-862	Rack Mount Frame, for WV-612P, WV-617P, WV-622P	6.00
WV-960	Video Adaptor for all VTR & Monitors	12.95
4A-50	Extension Cable, 50', for 4B-20 Sync Cable	29.95
4A-100	Extension Cable, 100', for 4B-20 Sync Cable	65.00
4A-200	Extension Cable, 200', for 4B-20 Sync Cable	100.00
4B-20	Sync Cable, 20', for NV-504/5, WV-220P, WV-350P, WV-600P, WV-612P, AN-69V, AV-2200S, NV-A606	17.95
	Panasonic Optional Accessories - CCTV Cameras	
4C-50	Ext. Cable, 50', for 4D-20 Monitoring Cable	$ 29.95
4C-100	Ext. Cable, 100', for 4D-20 Monitoring Cable	65.00
4C-200	Ext. Cable, 200', for 4D-20 Monitoring Cable	100.00
4D-20	Monitoring Cable, 20', for WV-350P, WV-360P	17.95
7A-16P	Ext. Cable, 16', for Portable VTR	35.00
7A-32P	Ext. Cable, 32', for Portable VTR	55.00
21A-25	Extension Cable, 25', for WV-370P, only	100.00
21A-50	Extension Cable, 50', for WV-370P, only	150.00
21A-100	Extension Cable, 100', for WV-370P, only	250.00
31A-30	Extension Cable, 30', for WV-2000P, only	250.00
VEC-25	Video Extension Cable, 25', UHF/UHF Male & Coupling	9.95
VEC-50	Video Extension Cable, 50', UHF/UHF Male & Coupling	17.95
VEC-100	Video Extension Cable, 100', UHF/UHF Male & Coupling	29.95
VP-3	Tripod in Carrying Case, lightweight	40.00
	Panasonic Optional Accessories - Microphones & Microphone Accessories	
WM-2105P	Omni-Directional Dynamic Microphone, 20K Ohms, with Desk Stand, for all 1/2" VTR	$ 9.95
WM-214	Uni-Directional Dynamic Microphone, 20K Ohms, for all 1/2" VTR	19.95
WM-220V	Omni-Directional Dynamic Microphone, 600 Ohms, with Desk Stand, for all 1" VTR	19.95
WM-101B	Microphone Desk Stand, for WM-214, WM-220V	9.95
WM-401B	Microphone Floor Stand, for WM-214, WM-220V	19.95
MEC-15	Extension Cable, 15', for WM-2105P, WM-214	2.95
MEC-25	Extension Cable, 25', for WM-2105P, WM-214	3.95
MEC-50	Extension Cable, 50', for WM-2105P, WM-214	5.95
	Panasonic Optional Accessories - Lens	
MN-518	Telephoto, F1.8, 50mm, with Iris, all 2/3" Vidicon	$ 44.95
MN-815	Wide Angle, F1.5, 8.5mm, with Iris, all 2/3" Vidicon	54.95
H5-14C	Manual Zoom, F2.0, 14 - 70mm, w/Iris, all 2/3" Vidicon	200.00
H5-14P	Rear Control Zoom (Pushrod 60mm), F2.0, 14 - 70mm, (5:1) with Iris, for WV-340P, WV-340EN, WV-360P	350.00
H10-11P	Rear Control Zoom (Pushrod 60mm), F2.5, 11 - 110mm, (10:1) with Iris, for WV-340P, WV-340EN, WV-360P	800.00
F1Z-8	Rear Control Zoom (Pushrod), F1.8, 20 - 100mm, (5:1) with Iris, for WV-370P, only	650.00

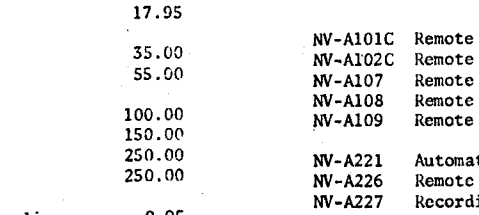


MODEL	DESCRIPTION	USER NET
	Panasonic Optional Accessories - VTR	
NV-C15	TV Control Cable, 5', for all 1/2" VTR, VY-903/4/6	$ 12.95
NV-C20R	Remote Extension Cable, 20', for NV-A107/8	29.95
NV-C21	Exten. Cable VTR/CCTV, 10', all 1/2" VTR, VY-903/4/6	14.95
NV-C25R	Connection Cable, 25', for NV-S40, NV-8100A/AD	30.00
NV-C251R	Extension Cable, 25', for NV-A100C, NV-A102C	80.00
NV-C501R	Extension Cable, 50', for NV-A100C, NV-A102C	110.00
NV-C1000R	Extension Cable, 100', for NV-A100C, NV-A102C	150.00
NV-J100	Junction Box, for all VTR	39.95
NV-S10	Video Switcher, 3-Input, for all VTR/CCTV	34.95
NV-S11	Video Switcher, 5-Input, for all VTR/CCTV	49.95
NV-S35	Time Mixer, for NV-8020	650.00
NV-S40	Portable VTR Camera Adaptor, for all 1/2" VTR	150.00
NV-U26	RF Convertor, NTSC Channel 6, for NV-3110 Only	69.95
NV-U28	RF Convertor, NTSC Channel 8, for NV-3110 Only	69.95
NV-U72	RF Convertor, B/W Channels 2 & 3, for all 1/2" VTR	49.95
NV-U74	RF Convertor, B/W Channels 4 & 5, for all 1/2" VTR	49.95
NV-U75	RF Convertor, B/W Channels 5 & 6, for all 1/2" VTR	49.95
NV-U90	RF Convertor, B/W Channels 3, 4, 5 & 6, all 1/2" VTR	99.95
NV-U97	RF Convertor, NTSC Channel 7, for NV-3120, NV-504/5	195.00
NV-U98	RF Convertor, NTSC Channel 8, for NV-3120, NV-504/5	195.00
TY-355C	Battery (Pair), for all Portable VTR	19.95
VY-903	Dubbing Distributor, 1 input, 3 outputs, all 1/2" VTR	75.00
VY-904	Editing Selector, all 1/2" VTR	120.00
VY-906	Signal Distributor, 1/2" VTR to 3 Monitors	75.00
	Panasonic Optional - Video Tapes & Empty Reels	
NV-P45	Video Tape 1/2", 840 ft., 23 min. for NV-8080/3080	$ 15.95
NV-P50	Video Tape 1/2", 1200 ft., 30 min. for NV-3080	21.95
NV-P71	Video Tape 1/2", 2400 ft., 1 hr., all 1/2" VTR	39.95
	Quantity 12 to 36	38.95
	Quantity 48 to 84	37.95
	Quantity 96 up	36.95
NV-P72	Video Tape 1/2", 1200 ft., 30 min. for all 1/2" VTR	26.95
NV-P73	Video Tape 1/2", 600 ft., 15 min. for all 1/2" VTR	16.95
NV-R45	Empty Reel 1/2", 840 ft., for NV-8080, NV-3080	2.75
NV-R50	Empty Reel 1/2", 1200 ft., for NV-3080	2.95
NV-R71	Empty Reel 1/2", 2400 ft., all 1/2" VTR	2.45
NV-R72	Empty Reel 1/2", 600 & 1200 ft., all 1/2" VTR	2.95
NV-P290	Video Tape 1", 2900 ft., all 1" VTR	69.95
NV-R290	Empty Reel 1", 2900 ft., all 1" VTR	29.95
	Panasonic Optional Accessories - VTR	
NV-A101C	Remote Control Unit for NV-505	$ 275.00
NV-A102C	Remote Control Unit for NV-504	275.00
NV-A107	Remote Control Unit for NV-8100A/AD —	70.00
NV-A108	Remote Control Extension Unit, for NV-A107	150.00
NV-A109	Remote Junction Box, for NV-A107/8	19.95
NV-A221	Automatic Rewind Adaptor, for NV-8100/AD —	170.00
NV-A226	Remote Control Timer, for NV-8100/AD —	120.00
NV-A227	Recording Time Control, for NV-8100/AD —	275.00
NV-A230	Automatic Stand-By Adaptor, for NV-8100/AD —	175.00
NV-A606	Color Adaptor, NTSC, for NV-504/5	750.00
NV-B21	Plastic Case for 1/2", 7" Reel	2.45
NV-B22	Video Output Connector, all 1/2" VTR	6.95
NV-B24	Dust Cover, for all NV-8100 series, NV-8020—	19.95
NV-B26	Slow Motion Handle, for all NV-8100 series	4.95
NV-B27	Eight Pin Coupler, for WV-350P, NV-J100	4.95
NV-B31	Video Booster Amplifier, for all 1/2" VTR	39.95
NV-B32	Battery Charger, for all Portable VTR	75.00
NV-B33	Video Adaptor, for all Portable VTR	175.00
NV-B36	Dust Cover, for all NV-3020 series	19.95
	Panasonic Mini-CCTV System and Optional Accessories	
WV-4KP	Compact CCTV System, comsist of: Mini-Camera (WV-3KP), Mini-Monitor; Camera Monitor connection cable contains lines for Intercom Circuit; System will accept up to three (3) Cameras (WV-3KP)	$ 350.00
WV-3KP	Mini-Camera and Wall Bracket, use with WV-4KP	150.00
WV-801P	Indoor Housing, for WV-3KP	30.00
WV-811P	Remote Control Panning Device, for WV-3KP	75.00
8E-30	Intercom Extension Cable, 33', for WV-4KP	30.00
8E-60	Intercom Extension Cable, 66', for WV-4KP	50.00
8E-150	Intercom Extension Cable, 166', for WV-4KP	75.00
3R-30	Remote Control Extension Cable, 33', for WV-811)	10.00
3R-60	Remote Control Extension Cable, 66', for WV-811P	20.00
3R-150	Remote Control Extension Cable, 166', for WV-811P	30.00

Junction cable:

A "Y" splitter which distributes the video signal from a deck to two or more monitors.

Only one of the branches of the cable can be longer than 15 feet, and the monitor at the end of the long cable must be terminated. (The same applies to the use of a "T" connector.)

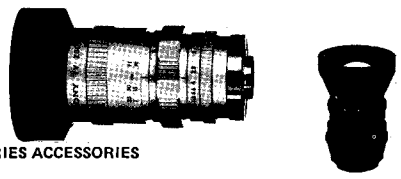


Termination:

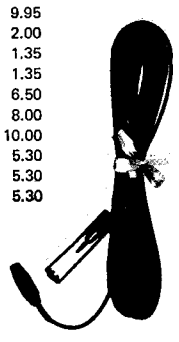
A video signal traveling in a coax cable can go in two directions. If the signal bounces back through the system it can cause "ghosts" or multiple image, and a noisy picture. A 75 ohm resistor is put onto the end of the line to absorb the signal energy so it doesn't reflect back to the line.

The 75 ohm switch on the end monitor is placed in the "on" position.

Sony Accessories



MODEL	DESCRIPTION	SUGGESTED RETAIL PRICE
CAMERA ACCESSORIES		
214 Lens	Telephoto Lens, 75mm f 1.9	45.00
507 Lens	Wide Angle Lens, 12.5mm f 1.9	70.00
VCL-08	Wide Angle Lens, 8.5mm f 1.5	75.00
VCL-1206	Zoom Lens, f 1.8, 12.5mm – 75mm, C-Mount	225.00
H8-12.5A	Rear Control Zoom Lens for AVC-4200A, f 1.2, 125mm - 100mm, C Mount	750.00
V5 x 20MSB	Rear Control Zoom Lens for AVC-4600, f 2.5, 20mm – 100mm, MS Mount	500.00
V10 x 15MSB	Rear Control Zoom Lens for AVC-4600, f 2.8, 15mm – 150mm, MS Mount	1,300.00
CG-1	Sync. Generator, pulse/square wave	175.00
VCT-20A	Tripod	45.00
TD-1	Tripod Dolly	50.00
TD-300	Tripod/Dolly Ensemble with Cum Link Head	345.00
VCS-31	Camera Selector to operate up to 3 Cameras with one Videocorder for AVC-3200 & AVC-3210	50.00
RGC-5	Coaxial Cable 5' with UHF Connectors with spare female feed	11.00
RGC-15	Coaxial Cable 15' with UHF Connectors with spare female feed	18.00
RGC-25	Coaxial Cable 25' with UHF Connectors with spare female feed	26.00
RGC-50	Coaxial Cable 50' with UHF Connectors with spare female feed	42.00
CCB-5	RF Cable with UHF Connector and matching transformer	12.00
CCY-10	Camera Extension Cable for AVC-4600, 32'	125.00
CCY-25	Camera Extension Cable for AVC-4600, 82'	250.00
SEG-1	Special Effect Generator, 4 inputs	595.00
SEG-2	Special Effect Generator, 6 inputs, Rack Mountable	900.00
JB-3	Junction Box for SEG-2 for tally and intercom	225.00
CAMERA ACCESSORIES		
AVF-3200	Viewfinder for AVC-3200 & AVC-3210	200.00
CCF-5	Camera Extension Cable 16'	9.00
CCF-10	Camera Extension Cable 32'	11.00
CCF-25	Camera Extension Cable 82'	25.00
CCF-50	Camera Extension Cable 164'	50.00
CMC-1	Video Monitor Cable, with 8 pin connector and mini plug for VCS-31 and other purposes.	6.50
BATTERY OPERATED VIDEOCORDER/CAMERA ACCESSORIES		
RFU-53W	RF Adapter, Video/Audio, Channel #3 for AV-3600/AV-3650/AV-3400	55.00
RFU-54W	RF Adapter, Video/Audio, Channel #4 for AV-3600/AV-3650/AV-3400	55.00
RFU-52W	RF Adapter, Video/Audio, Channel #2 for AV-3600/AV-3650/AV-3400	55.00
RFU-55W	RF Adapter, Video/Audio, Channel #5 for AV-3600/AV-3650/AV-3400	55.00
RFU-56W	RF Adapter, Video/Audio, Channel #6 for AV-3600/AV-3650/AV-3400	55.00
RFU-57W	RF Adapter, Video/Audio, Channel #7 for AV-3600/AV-3650/AV-3400	55.00
BP-20	Battery Pack	35.00
BP-30	Long Life Battery Pack	120.00
CMA-2	Recording Adapter to use AVC-3400 Camera with AV-3600/AV-3650	110.00
CCJ-1	Video-Audio-Power Extension Cable 5'	32.00
CCJ-5	Video-Audio-Power Extension Cable 16'	45.00
CCJ-10	Video-Audio-Power Extension Cable 32'	65.00
VCT-1	Monopod	11.00
DCC-2400	Car Battery Cord for AV-3400	19.50
AC-3400	Battery Charger/AC Adapter (standard accessory for AV-3400)	75.00
LC-3400	Complete Carrying Case for AV-3400 and AVC-3400	65.00
COLOR CAMERA ACCESSORIES		
CG-101	SONY Color Sync. Generator	1,100.00
VCR-1	SONY Color Film Chain Adapter	1,300.00
DA-101	Color Sync. Distributor	450.00
PSA-101	Sub-Carrier Phase Shifter	400.00
CN-1	Encorder Board for DXC-5020	500.00
JB-1	Junction Box to connect DXC-5000B or DXC-5020 to a conventional color sync. generator	65.00
JB-2	Junction Box to connect CG-101 to a conventional distribution amplifier	65.00
CCV-10	Camera Extension Cable 32'	160.00
CCV-25	Camera Extension Cable 82'	300.00
V-5	Zoom Lens, MS Mount, 20mm – 100mm f 2.5	500.00
V-10	Zoom Lens, MS Mount, 15mm – 150mm f 2.8	1,300.00
VDF-1	Variable Density Filter (1/4-1/32)	90.00
VCL-1100	Close-Up Lens, 32" – 13"	75.00
VCL-2100	Close-Up Lens 72" – 21"	75.00
TD-300	Tripod/Dolly Ensembel, with Cum Link Head	345.00
RMM-3	Rack Mount Hardware for Camera Control Unit	55.00
RMM-4	Rack Mount Hardware for CG-101 Color Sync. Generator	50.00
DR-10	Headphone	30.00
RGC-5	Coaxial Cable 5' with UHF Connector with spare female feed	11.00
RGC-15	Coaxial Cable 15' with UHF Connector with spare female feed	18.00
RGC-25	Coaxial Cable 25' with UHF Connectors with spare female feed	26.00
RGC-50	Coaxial Cable 50' with UHF Connectors with spare female feed	42.00
MICROPHONES & AUDIO ACCESSORIES		
F-98	Compact Cardioid Dynamic Microphone	13.50
ECM-19B	Electret Condenser Microphone	29.50
ECM-21	Electret Condenser Microphone	49.50
ECM-22	Electret Condenser Microphone	99.50
ECM-50	Electret Lavalier Condenser Microphone	130.00
ECM-53B	Electret Unidirectional Condenser Microphone	130.00
MX-300	Battery Operated Mic Mixer	60.00
MX-900	Professional Mic Mixer, with Rackmount Hardware	250.00
EC-5M	Mic. Extension Cable 16'	3.50
EC-10M	Mic. Extension Cable 32'	4.95
EC-25M	Mic. Extension Cable 82'	9.95
RK-34	Mini Male/Mini Male Cable	2.00
PC-1	Plug Connector (regular plug to mini plug)	1.35
PC-2	Plug Connector (mini plug to regular plug)	1.35
AXC-1	XLR Male/XLR Female Connector, 5'	6.50
AXC-5	XLR Male/XLR Female Connector, 16'	8.00
AXC-10	XLR Male/XLR Female Connector, 32'	10.00
EXC-1A	XLR Male/Mini-Plug Connector, 5'	5.30
EXC-1B	XLR Male/Mini-Jack Connector, 5'	5.30
EXC-1C	XLR Female/Mini-Plug Connector, 5	5.30



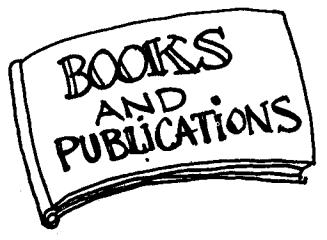
VIDEOCORDER EV–SERIES ACCESSORIES

CLP-1B	Color Adapter for EV-320F	1,150.00
EVR-320	Remote Control Unit with Electronic Editing for EV-320F	130.00
RCC-10A	Extension Cable for EVR-320, 32'	60.00
RCC-15A	Extension Cable for EVR-320, 48'	70.00
RMM-1	EIA Std. 19" Rack Mount Hardware for CLP-1B	45.00
RMM-2	EIA Standard.19" Rack Mount Hardware for EV-320F	45.00
CVA-103W	RF Distributor, Color/Mono, Video/ Audio, Channel # 3	195.00
CVA-104W	RF Distributor, Color/Mono, Video/Audio, Channel #4	195.00
TUM-100	Tuner/RF Modulator, Color/Monochrome, Video/Audio, Channel #3–Channel #4 Switchable	300.00
GC-3	Roll-about Cart, Metal Frame, can be folded	60.00

VIDEOCORDER ACCESSORIES

RFU-53W	RF Adapter, Video/Audio, Channel #3 for AV-3600/AV-3650/AV-3400	55.00
RFU-54W	RF Adapter, Video/Audio, Channel #4 for AV-3600/AV-3650/AV-3400	55.00
RFU-52W	RF Adapter, Video/Audio, Channel #2 for AV-3600/AV-3650/AV-3400	55.00
RFU-55W	RF Adapter, Video/Audio, Channel #5 for AV-3600/AV-3650/AV-3400	55.00
RFU-56W	RF Adapter, Video/Audio, Channel #6 for AV-3600/AV-3650/AV-3400	55.00
RFU-57W	RF Adapter, Video/Audio, Channel #7 for AV-3600/AV-3650/AV-3400	
CVA-103W	RF Distributor, Color/Monochrome, Video/ Audio, Channel #3	195.00
CVA-104W	RF Distributor, Color/Monochrome, Video/Audio, Channel #4	195.00
TUM-100	Tuner/RF Modulator, Color/Monochrome, Video/Audio, Ch. 3 – Ch. 4 Switchable	300.00
CVO-4A	Clear Plastic Dust Cover for AV-3600	12.95
LC-100	Expanded Vinyl Carrying Case for AV-3600	35.00
GC-3	Roll-About Cart, Metal Frame, 3 Shelves, easy to assemble	60.00
AC-2000	Converter to 12VDC from 100, 117, 220, 240V, 50 c/s or 60 c/s (to be used with an inverter)	495.00
KC-1C	Cleaning Videocassette	15.00
RFC-5	RF Cable, 16'	8.50
RFC-10	RF Cable, 32'	10.00
RFC-25	RF Cable, 82'	17.50
TAP-14	Multitap with 75 ohm Termination	27.00
TAC-84	Jerrold Color Caster, RF Amplifier up to 4 TV sets	45.00
UHA-61	Professional RF Amplifier with variable gain control	200.00
T-379	Matching Transformer	2.00
RK-50	Audio Cable with mini plug and pin (RCA) plug, 3'	1.70
RK-74	Stereo Audio Cable with pin (RCA) plugs at both ends, 4½'	2.60
RK-77	Audio Cable with pin (RCA) plugs at both ends, 19'	2.60
RK-82	Audio Cable with pin (RCA) plug and pin (RCA) jack, 16'	2.60
RK-88	Audio Cable with pin (RCA) plugs at both ends, 8'	1.70
RK-89	Stereo Audio Cable with pin (RCA) plug and pin (RCA) jacks, 3'	2.60
LC-10	Mailing Case for Videocasette (Sold in carton of 10 pcs. only)	6.00 per pc
LC-60	Videocassette Carying Case (holds up to 6 Videocassettes)	25.00
LC-200	Shipping Case for VP-1000	110.00
LC-300	Shipping Case for VO-1600	140.00
LC-400	Shipping Case for CKV-171	130.00
LC-600	Shipping Case for CKV-121	100.00
GC-4	Videocassette System Cart	50.00

MODEL	PLAYING TIME (MINUTES)	REEL DIAMETER	REELS TO CARTON	SUGGESTED LIST PER REEL
VIDEO TAPES				
V-30F	10	4-5/8"	12	$10.00
V-30D	20	4-5/8"	12	15.00
V-30H	30	5-1/8"	12	20.00
V-31	30	7"	12	20.00
V-32	60	7"	12	40.00
EMPTY REELS				
RH-7V Reel for V-32		7"	12	3.00
RH-72V Reel for V-30/31		7"	12	3.00



We couldn't possibly print the names of all the publications from which we gained information. The main reason is that we don't remember where every idea came from.

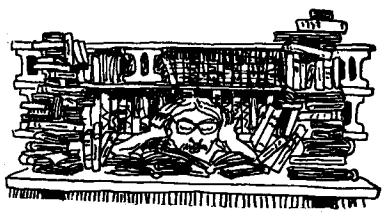
There were certain publications which we felt would be particularly important for people interested in learning about video and related areas.

THE INTELLIGENT EYE (with stereo illustrations) by R. L. Gregory
McGraw Hill

THE FOCAL ENCYCLOPEDIA OF FILM AND TELEVISION TECHNIQUES
Communications Art Books
Hastings House, Publishers Inc.

A DICTIONARY OF ELECTRONICS
by S. Handel
Penguin Reference Books

RADICAL SOFTWARE (There are 6 issues available.) If you care at all about alternate television, this is a publication that you should become familiar with.
Raindance Corporation (See page 21.)



The following is a list of books and periodicals we found helpful in the making of "Video Tools."

AUDIO CYCLOPEDIA
by Tremaine
Howard Sams Co., Inc.
Bobbs-Merrill Co.

EXPLORING LIGHT
by Alexander Efron
Hayden Book Co., Inc.

VIDEO PUBLISHER (Bi-monthly)
Knowledge Industry Publications, Inc.

RADIO ELECTRONICS (Monthly)
Gernsback Publications, Inc.
(Check out "Looking Ahead," a column by David Lachenbruch.)

MECHANIX ILLUSTRATED (Monthly)
Fawcett Publications

THE ARCHEOLOGY OF THE CINEMA
by C. W. Ceram
Harcourt, Brace & World, Inc.

DIAGRAMS
by Arthur Lockwood
Watson-Guptill Publications

VIDEA 1000 (Monthly)
The DeHavilland Library

CABLE CASTING (6 times a year)
Paul Kagan Associates

MAGNETOSCOPE (Monthly)
by Danny Goldberg &
Richard Robinson

WHOLE EARTH CATALOG
Portola Institute
dist. by Random House

PHOTOGRAPHY AND THE AMERICAN SCENE
by Robert Taft
Dover Publications

from

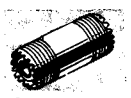
Introducing the Single Camera VTR System, by Grayson Mattingly and Welby Smith. (Smith-Mattingly Productions Ltd., P.O. Box 28031, Washington, D.C. 20005) 118 pages, $8.95, including postage

ELECTRICAL GOODS connectors

NC-75 $2.00
Cable Clip for RG/59U

WALL PLATES
all types
TV - CATV - MATV

PL259 Teflon $1.25
Standard ... $ .85
Male UHF Connector

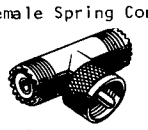


PL258 ..... $1.25
Female UHF Adapter

REQUIRES →
UG176/U FOR UHF PL259 . 20¢
Adapter for RG 59/U Cable

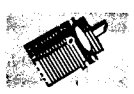
AF61A ..... 50¢
"F" Female Spring Conn.

1027-01 ..... $3.50
UHF Male to "F" Female Adapter



M358 .... $2.20
"T" UHF Adapter

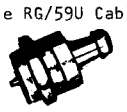
S0239 Teflon $1.00
Standard ..... $ .45
Female UHF Chassis Conn.



5804 ..... $1.25
Female UHF Chassis Conn.

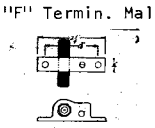
AF59 ..... 30¢
"F" Male RG/59U Cable Conn.

M359 ..... $1.50
Right Angle UHF Conn.

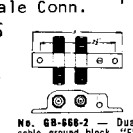


AF59TS 75¢
"F" Termin. Male Conn.

AF81-AB $1.25
1-3/4" "F" Spring Conn.

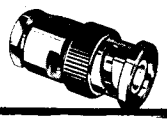


No. GB-568—Single cable ground block "F" female spring contact on each end of connector SS hardware. Net $2.50 ea.



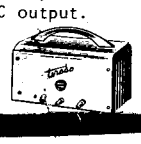
No. GB-668-2 — Dual cable ground block, "F" female spring contacts on each end of connector, SS hardware. Net $3.95 ea.

CRIMPS FERRULE ON
F59 — F59A - F56 — F11
C-59 CONNECTORS.
RG59 — RG6 — RG11
CABLES.
CUTS & STRIPS 10 to 22 GAUGE CABLE CT5911 $3.00



260 ..... $1.00
BNC conn. for RG/59U

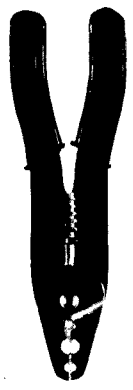
Until somepin' better comes
SOLID STATE
ULTRA FINE FREQUENCY STABLE INVERTERS
CONVERTS 12 VDC to 110VAC, 60 Hz, 275-300 watts. Frequency variation plus or minus 1/4 Hz with changing input and load. Ideal for operation of fine or critical equipment i.e. video equipment & instruments. Includes battery cables, remote control and variable AC output.
size 11"x6"x6"
30 lbs. $235.00
Terado # 50-191-3



CHARACTER GENERATOR ___ Allows keyboard entry titles, video signal output. Optional 30,000 character storage digital cassette drive. Also used for computer input-output terminal for automated editing systems, time sharing systems. Generates ASCII Standard Code. Write or come by for details

I feel that these items are worth looking into if you are ready to buy accessories:
-"C" mount adapter for Nikon lenses, which costs approximately $40.00.
-Spiratone Curvatar, which is a front auxiliary lens attachment, a wide angle extender that changes the ratio of the zoom lens to 6-25. It needs a thread mount, and it costs about $30.
There are two sun guns that should be checked:
-Century Strand news light #1850 -- it mounts on a camera and has a 150 watt quartz focusing spot; comes complete with a battery pack and charger; recharges in an hour and has a life of 10 minutes. The unit is lightweight and the battery attaches to a belt. Price is about $175. You can buy a dichroic filter for it.
-Sylvania SG-77 -- 150 watts; runs for about 7-1/2 minutes before recharging. It also fits onto the camera and has a battery that recharges in one hour and also attaches to a belt. Price is about $160. Comes with an extra battery and bulb.
Video has encouraged me to live out my fantasies.

-- Wendy Appel

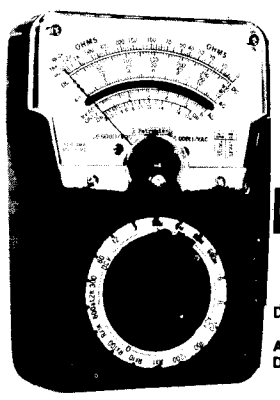


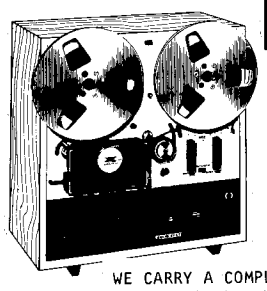
COAX CABLES UHF - UHF	
5 ft.	$ 5.00
15 ft.	7.00
25 ft.	8.00
50 ft.	14.00
100 ft.	25.00

BNC Conn. add $1 per cable.
"F" Conn. less 50¢ per cable.

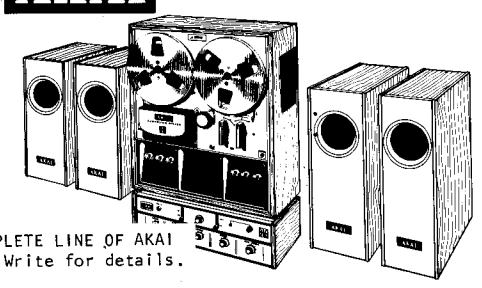
Equipment Checklist
For Shootings
Thanks to Susan Milano

1) Porta-Pak
2) corresponding camera
3) long camera cable
4) microphone (usu. ECM-21)
5) microphone extension cable
6) headphones and headphone extension cable
7) battery packs
8) camera brace
9) gaffers' tape
10) videotape
11) pen and labels
12) head-cleaning kit and a small Phillips screwdriver
13) 3-prong adapter to plug into normal outlet
14) power adapter
15) several extension cords

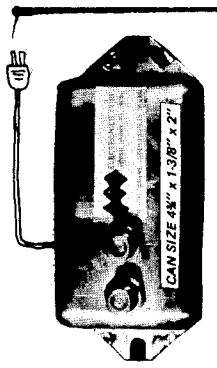




AKAI



WE CARRY A COMPLETE LINE OF AKAI TAPERECORDERS. Write for details.



AVA ELECTRONICS RF AMPLIFIERS

A110	10 DB gain for RF distribution systems, 110 VAC 60 HZ	$ 24.95
A110-4	same with built in four way splitter	29.95
A120	20 DB gain for RF distribution	39.95

AVA ELECTRONICS SPLITTERS

S-2	Two way	$ 4.50
S-3	Three way (asymmetrical)	8.90
S-4	Four way	9.50
S-8	Eight way	25.00

We carry a complete line of cable distribution hardware. Write for complete AVA Catalog.

Vidicon Tubes

7038	1" Vidicon Grade A Tubes for replacement or spare.	69.50
7262A	Hitachi original exact replacement for Sony and Panasonic Cameras.	69.50
7735A	Hitachi 1" Vidicon; extremely sensitive; can be used at much lower light level than the 7038.	69.50
8507	Hitachi Separate Mesh Vidicon	250.00
8758A	1" Vidicon. Same specs as 7735A but shown in length.	69.50
20PE11	2/3 Vidicon—used in many low priced cameras.	69.50
8823	2/3" Separate Mesh Vidicon—replacement for Sony battery operated portable camera	69.50
	1" Silicon Diode Array	750.00
	2/3" Silicon Diode Array	750.00

more Sony

Sony Porta-Pak Service Manuals
Deck $10.00 ; Camera $5.00
Sony AV series standard alignment tapes
portable 5" reel - metal case...$50.00
7" reel - metal case...$50.00
Sony AV OR CV series Video Head $89.00
Sony 3/4" cassette cleaner tape.....$ 10.50
also 3/4" cassette alignment tape.
WE CARRY SCREW KITS AND MISCELLANEOUS PARTS FOR SONY AV 3400 PORTA-PAKS.

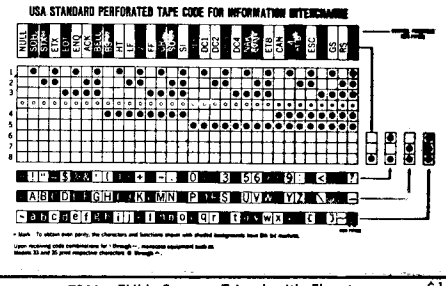
PATRONIC VOM METER

30,000 Ohms per Volt DC
15,000 Ohms per Volt AC
$12.95

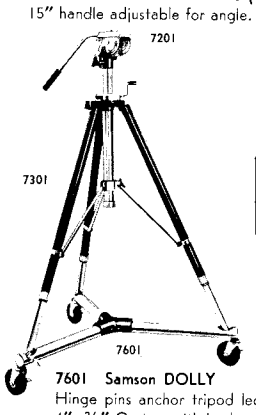
	RANGE
DC Volts:	0 - 3 - 12 - 60 - 300 - 600 - 1200
AC Volts:	0 - 6 - 30 - 120 - 1200
DC Center:	0 - 30 uA - 3 MA - 300 MA

OHMS
0 - 16,000 - 160,000 - 1.6 MEG. - 16 MEG. (RX1) (RX10) (RX100) (RX1000)
Expanded low end scale "100 center"
Decibels:—20 db to +63 db (5 ranges)

USA STANDARD PERFORATED TAPE CODE FOR INFORMATION INTERCHANGE



7201 Samson Motion Picture (TV) Friction Head $45
15" handle adjustable for angle. Height 6". Weight 2 lb.



WE CARRY A COMPLETE LINE OF
QUICK-SET
TRIPODS — WRITE FOR DETAILS.

7301 FULL Samson Tripod with Elevator $105
2-sec. legs, 1½" & 1⅜" dia. Elevator 1¾" dia., 18" rise. Height 34" to 76". Telescoped 6½" x 7½" x 38½" Weight 10 lb.

We carry DAVIS & SANFORD and HERCULES tripods.

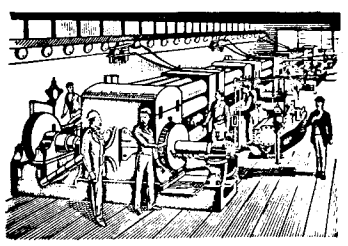
7601 Samson DOLLY $55
Hinge pins anchor tripod legs in recesses in Dolly arms. 4" x ¾" Casters with brakes. Folds to 6½" x 7½" x 21½" Capacity 50 lb. Height 7" Weight 8 lb.

closed circut accessories

WM-3	**UNIVERSAL WALL OR CEILING MOUNT** with wide flange base and pan & tilt head for adjustment at any angle.	29.95
YU-301	**HEAVY DUTY PAN AND TILT WITH REMOTE CONTROL BOX.** Smooth and rugged for indoor and outdoor. All camera and zoom cables internally connected through pan and tilt. No cable dressing or messy cables. Comes complete with remote control box and 15 foot 5 conductor cable.	923.50
VS-101	**MOTION DETECTOR.** Will automatically alert a bell, buzzer, chime or a relay to start a Video Tape Recorder when any motion at all occurs in CCTV camera range.	350.00
H-2	Theft-proof Indoor Housing. Locks to prevent vandalism. Easily mounted on ceiling, wall or shelf. Maximum camera capacity 6½" wide x 6¼" high x 20" long.	49.95
TVC-2A	**ALL WEATHER CAMERA SYSTEM.** Includes Westinghouse camera, weather proof housing, 25mm 0.98 lens and remote iris. (Slight extra charge for remote controls.)	2150.00
AS-3	**AUTOSCAN AUTOMATIC SCANNING UNIT** can be field adjusted at 45° scanning intervals. This unit comes with control box that provides either automatic or manual scanning with provision for instant stop and spot viewing. Will hold cameras up to 12 lbs.	288.00
WP-2	Deluxe outdoor weatherproof housing. Two key locked trap doors permit access to lens and camera. Light aircraft aluminum with white enamel finish. Maximum camera capacity: 7½" high x 7" wide x 21.5" deep. Outside dimensions: 9¾" high x 12½" wide x 28" deep.	179.50
VS-VIDEO SWITCHERS	Multiple camera input, single monitor output. Use as many cameras as you like on one monitor. All positions terminated except the one selected. VS-3 3 Camera Position VS-4 4 Camera Position VS-5 5 Camera Position Up to 12 position switches in same cabinet available from stock. Available up to 6 positions in loop through versions at no additional cost. Price per additional position Other configurations available on special order	49.50 69.50 89.50 17.50
SEQUENTIAL VIDEO SWITCHERS	**Sequential Switcher** allows viewing of any number of cameras sequentially; can be set from 5 to 60 seconds viewing of each camera position. Also has override feature allowing immediate manual view of any individual camera position. SEQ-4 4 Position SEQ-8 8 Position Available in larger sizes also. Price per additional position.	238.00 476.00 60.00
TS-48	**DELUXE VTR/MONITOR TABLE.** Made of heavy 1" chrome plated tubular steel. Holds 1" or ½" videotape recorder plus any size TV monitor. Tip-proof. Rolls effortlessly on ball bearing casters with 4" rubber wheels and shimmy proof spring clips. Front two wheels are equipped with toe operated brakes. Shelf size: 15" x 24". Height: 48" For single shipment to one destination .....per dozen	39.95

AUDIO CONNECTORS

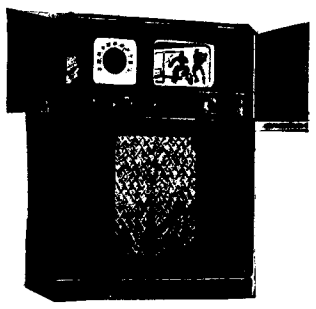
A3M-	$2.10
A3F-	$2.45
Mini male-	$1.25
Mini female-	$1.50
RCA female-	$ .45
RCA male-	$ .55
Phone male-	$ .65



Pearl Street generating station, New York, 1882

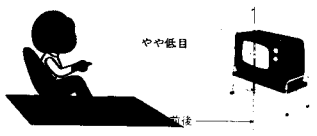
"If a man is hungry, his problem is a lack of information about getting food."
--Brumage

TELEVISION



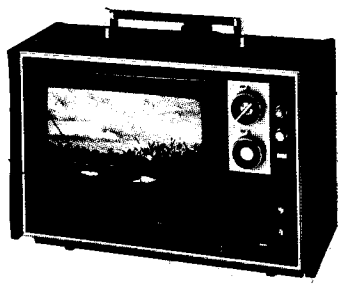
Notes

- Keep your set away from extremely high temperature or humid places.
- Clean the screen and cabinet with the supplied polishing cloth.
- Never use solvents such as thinner or benzine.
- When you do not use the set for more than six months, pull out the AC Power Cord from the house current outlet and wind the cord around the cord anchor in the back.



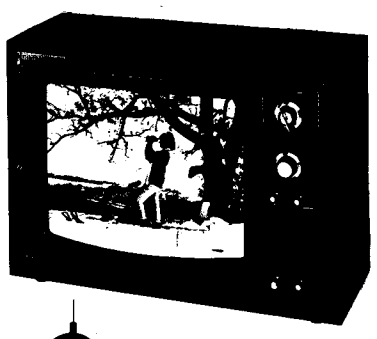
画面からの距離は、2 m 前後が適当です。
画面の高さは、目の高さよりやや低いほうが疲れません。

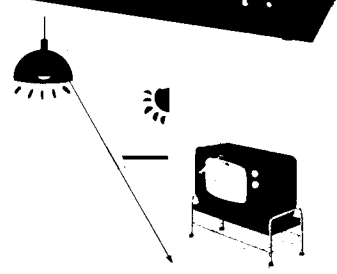
KV-9000U—Tummy TRINITRON—All solid-state "go-anywhere," "place-anywhere" 9 inch picture, measured diagonally, portable color TV. Unique Trinitron color system. Charcoal gray with chrome trim.



KV-1212—TRINITRON'S 12 inch picture, measured diagonally, eye opener. Pushbutton automatic color and fine tuning control. All solid-state lightweight TV. Handsome walnut finished cabinet with chrome trim.

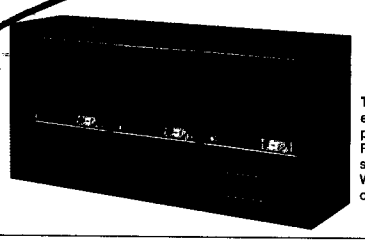
KV-1720—Deluxe solid-state 17 inch picture, measured diagonally, TRINITRON with integrated circuitry. Takes you there, first class, with exciting automatic color and fine tuning. Portable. Walnut hardwood finish with chrome.





日光や照明器具の光線が直接画面に入らない所をお選びください。
はっきりした美しい映像がご覧いただけます。

Color TV	Description	Retail
KV–9000U	*9" Trinitron Color*	$339.95
KV–1201	*12" Trinitron Color*	329.95
KV–1212	*12" Trinitron Color*	349.95
KV–1224	*12" Trinitron Color*	389.95
KV–1710	*17" Trinitron Color*	449.95
KV–1720	*17" Trinitron Color*	479.95
B & W TV		
TV–510U	*5" AC/DC*	116.95
TV–500U	*Deluxe 5" AC/DC*	137.95
TV–730	*7" AC*	109.95
TV–740	*7" AC/DC*	119.95
TV–940	*8" AC/DC*	129.95
TV–112	*11" AC/DC*	139.95
TVC–111U	*11" AC w/Digital Clock*	149.95
TV–130U	*Deluxe 13" AC*	158.95
TV–311R	*3 in 1 Spectacular TV*	695.00
TV ACCESSORIES		
BP–7	*Battery Pack w/o Battery*	7.00
564	*Rechargeable Battery*	15.95
BP–12*	*Battery Pack w/o Battery*	13.35
563	*Rechargeable Battery*	10.00
BP–21	*Battery Pack w/o Battery*	11.95
BP–21	*Battery Pack & Rechargeable Battery*	20.95
BP–14	*Battery Pack w/o Battery*	20.50
RP–626	*Deluxe Rechargeable Battery*	25.00
DCC–5	*Car Battery Extension Cord*	2.75
DCC–2AW	*Car Cord*	15.95
DCC–4A	*Voltage Converter 6V to 12V*	27.95
VCA–1	*Auto Antenna*	23.50
VCA–1H	*Auto Antenna*	23.50
VCA–2	*Auto Antenna*	23.50
VS–6	*Auto Seat Bracket for TV–510U*	9.95
VS–8	*Auto Seat Bracket for TV–500U*	19.95
EAC–10	*External Antenna Co r*	3.50
COLOR TV STANDS		
KVS–12	*For 12" Models*	16.95
KVS–17	*For 17" Models*	24.95



TV-311R—For the man who watches everything. Three separate 11 inch picture, measured diagonally, screens. Remote control switches sound from screen to screen. All solid-state. Wooden cabinet in walnut grain with chrome accents.

ACCESSORIES

Car Battery Cords

DCC-2AW—Battery cord for 12V auto/boat power supply. Plugs directly into cigarette lighter.
For use with all battery operated models.

DCC-5—Alligator clip and extension cord which permit use directly from battery when used with the DCC-2AW.
For use with all battery operated models.

Car Brackets

VS-6—Auto seat bracket.
For use with model 510U.

VS-8—Auto seat bracket.
For use with model 500U.

TV Stands

KVS-12—Deluxe color TV stand for 12" Trinitron TV's.

KVS-17—Deluxe color TV stand for all 17" Trinitron TV's.

Antenna Connector

EAC-10—To connect Sony car antenna to TV.
For use with models 740, 940, 112.

Car Antennas

VCA-1—For car windows with no frame. For use with all battery operated models.*

VCA-1H—For car windows with frame. For use with all battery operated models.*

VCA-2—Car roof antenna with directional switch for attenuator for maximum signal. For use with all battery operated models.*

* EAC-10 needed for TV 740, 940, 112.

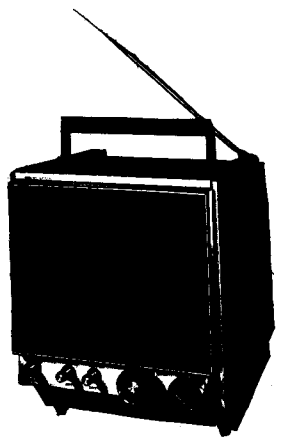
Rechargeable Battery Packs

BP-7/564—Shoulder rechargeable battery pack for 3-4 hours continuous TV, depending on the models.
For use with models 500U, 740, 940, 112.

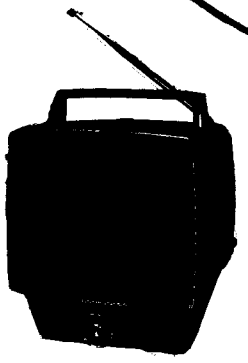
BP-12/563—Snap-on rechargeable battery for TV-500U. Operates 2 hours.

BP-14/RP626—Deluxe snap-on rechargeable battery pack which plugs into the TV with no external cords. For approx. 3 hours continuous TV.
For use with model 500U.

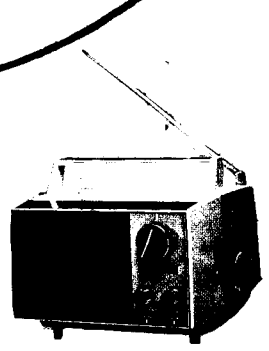
BP-21/563—Easy snap-on battery pack for 2 hours continuous TV.
For use with model 510U.



TV-940—An 8 inch picture, measured diagonally, spectator-size all solid-state black and white portable puts you on the scene. Optional rechargeable battery pack.

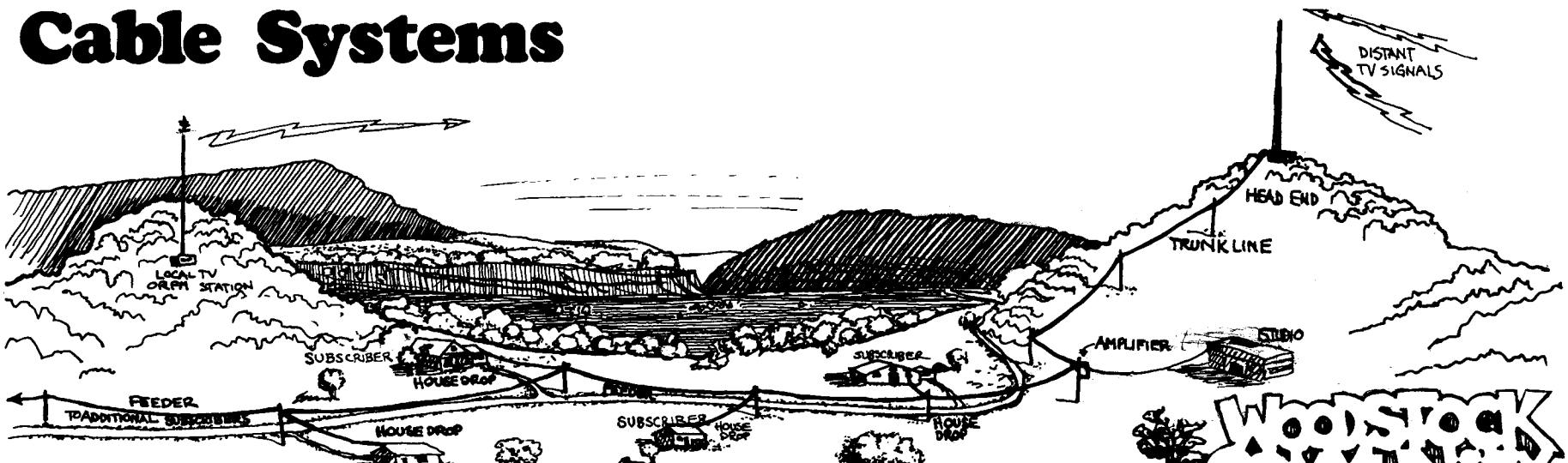


TV-740—A solid state 7 inch picture, measured diagonally, black and white compact portable TV with dashboard controls. Plays anywhere—indoors/outdoors with optional battery pack. Auto/Boat cords. Only 9 lbs. Charcoal gray with chrome.



TV-510U—The 5 inch picture, measured diagonally, "power-mite" black and white portable TV. Styled for "stand-out" performance—indoors/outdoors (with optional battery pack), non-glare filter screen. Weighs only 7 lbs. 8 ozs. for true portability.

Cable Systems



Subscribers to cable TV get better reception on regular TV stations, see locally produced TV programs on their sets and have a greater number of channels available. As the number of additional channels increases (from the current 6-12 to a possible 30), new uses for the medium become possible. Two-way TV is one of the most exciting services in development.

The Holmes Communications Corp. has a two-way security system in the practical hardware stage. The "Holm-Com" system uses the cable to carry alarm signals back to a central office. Sensors located in the home operate on a 5 to 25 MHz carrier which comes over a CATV or master antenna cable. A supervisory signal monitors the sensors every five seconds. Any interruption of this signal (from intrusion, wire cutting, fire) creates an alarm condition. This information is instantly decoded and communicated to the central monitoring facility from which action is taken, e.g. fire or police stations called, ambulances dispatched.

A two-way system is being tested which allows the viewer to shop via TV -- press a button to indicate a choice of products being displayed for sale, and the selection is transmitted back as an order over the cable. Many see a two-way system providing "viewer-on-demand" software from videocassettes at a central tape bank.

With more and more open cable channels it's possible that the cable operator will become a real communications terminal. TV programs, electronic banking services, computerized income tax help, educational courses and many other services will be carried by cable into the home.

Two technical developments are being tried to allow cable to spread even further, especially to areas where low population density might discourage cable operators. One is microwave: microwave beams, which use sharply focused radio beams to carry up to 18 programs at once, can hop over the countryside to populated centers, and from this hub the signal travels to subscribers through regular cable. The government has proposed launching a satellite-based cable system as early as 1973. The satellite will broadcast microwave signals over the Rocky Mountain states from a synchronous orbit. Special antennas and converters located in remote areas will pick up the satellite signals and send them through cable to homes, finally providing low-cost distribution for nationwide signals which are now sent by expensive telephone line leased to TV.

CABLE AND THE FCC

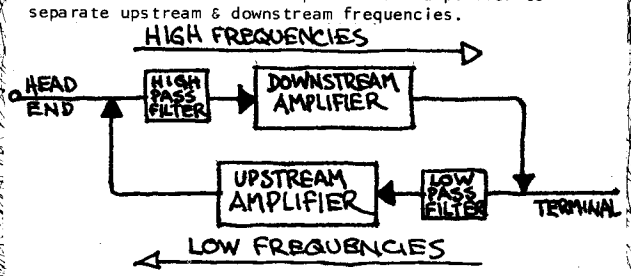
Up until recently cable stations with more than 3,500 subscribers were required by the FCC to originate programming. Cable owners who objected to the FCC ruling took their case to the St. Louis Court of Appeals, which decided against the FCC. Most of the larger cable stations seem to have made a commitment to program origination, which is heartening.

Quite apart from this are the Public Access channels which cable stations are still required to provide. In New York City there are four of these -- two supplied by Teleprompter and two from Sterling Manhattan. On June 1, Teleprompter is opening at least 10 neighborhood studios for public access production.

TWO-WAY CABLE SYSTEMS explained by John Brumage

Two-way cable allows a signal to be sent back to the head end from any point in the system for recording, control & redistribution. All information on the cable system is carried by radio signals. High frequency signals are used for transmission on the cable from the head end "downstream." The lower frequencies are used to send the signal "upstream" through the same cable. As the signal passes through the coax cable it gets weaker, so it is necessary to boost it back up with an amplifier about every 1,000 feet.

An amplifier works in one direction only, which is sufficient for a basic CATV system. In a two-way system, 2 amplifiers are necessary -- one for each direction. Filters are added to the input of each amplifier to separate upstream & downstream frequencies.



A high pass filter is added to the input of the downstream amplifier to allow only high frequency signals to pass through, and to reject lower frequencies. Similarly, a low pass filter is added to the upstream amplifier.

In a two-way system information can be received or transmitted at any point simply by connecting the proper hardware.

Woodstock Community video was started in 1971 by two video people from the New York based People's Video Theatre (Ken Marsh & Elaine Milosh) and a Woodstock artist (Bob Davy), and operates out of a donated storefront. Kingston Cablevision, owned by NBC under an old ruling now being challenged, serves the Northern Duchess County Area with a main head-end in Port Ewen.

Woodstock is serviced by a separate antenna and receives only FM radio and VHF airwave TV channels, none of the Kingston Cablevision community programming. WCV proposes that the Kingston cable franchise be reassessed by the Woodstock town government and that resident subscribers let Kingston Cablevision know that they want a head end in Woodstock and some support for it by a partial return from cable subscription fees turned back to the community for its own channel operations.

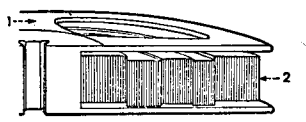
Presently WCV is providing closed circuit TV programs from their storefront, featuring regular reports from town officials, "Scoopscope" -- a community bulletin board, "Negapositube" -- a program on community issues, and "Channel Arts" -- on the talent of Woodstock. As a public enterprise WCV would be capable of providing closed-circuit facilities to send community messages in the streets or in meeting places, and the programming for a community channel.

"Cable...is a tool to vitalize the processes of our town's communications -- a needed vitality for a time of complex and varying social values and problems. Our local TV can reflect that vitality."

Public Access:

Teleprompter	942-7200
channel C regular series	(Henry Pearson)
channel D one time spot	
(Also opening 10 or so public access studios on June 1.)	
Sterling Manhattan	586-2426
channel C series repeats	(John Sanfratello)
channel D one or two times for a tape	
Westbeth Video	243-2201
broadcast through Westbeth master antenna loop to every apartment that has TV	(Ann Douglas & David McClellan)

MAINTENANCE



INADEQUATE WINDING TENSION. Tape, 2, winding on to spool, 1, tends to drop off centre line of spool when winding tension is insufficient.

SOME PREVENTIVE CARE TIPS FOR NON-TECHNICIANS

1. A large proportion of equipment breakdown comes from the fact that most video groups subject their half-inch gear to much more continuous use than it was built to take. So there is an extra incentive to minimize dust, dirt, ashes, excessive vibrations and jolts, unnecessary handling. Be particularly careful when packing gear for travel and when working in crowded situations.

2. Annoying minor design problems in the Video rover: the camera eyepiece hinge and the deck's control levers are liable to break off if treated roughly.

3. Other vulnerable areas: cables and their connectors. Always place multi-pin connectors in their sockets very gently. They can be forced in incorrectly even if there is only one comfortably fitting position. When disconnecting, never pull on the cable itself. Particularly susceptible to damage from this are the 10-pin camera connector and the 8-pin. Make it a habit to wrap up cables in a smooth loop: no knots or twists; a break in the middle of a cable is much more bothersome than a loose connection.

Miscellaneous Information

4. Clean the heads and tape track as a daily routine, as well as before particularly heavy use. Many taping or playback disasters result from dirt on the heads or in the brushes. Never use Q-tips to wipe off head dirt after the cleaner has been applied -- they usually aggravate the original problem.

5. Thread the tape quickly but never in a hurry. Wind it smoothly around the take-up reel. Never thread while the heads are still spinning, or when the VTR is in anything but STOP position. (Remember that under certain conditions a misthreaded Porta-pack will still record properly but only play back that tape if it is re-misthreaded in exactly the same way -- so double check visually.)

6. To preserve video tape, store it in cool, low humidity locations. Always store tape on end, one next to the other, like a shelf of books, since stacking them flat, one on top of the other, deforms the plastic reel and damages the edges of the tape.

7. Batteries will perform optimally if they are kept well charged. Make it a habit to put your batteries on charge after every shooting. If you are using a modified motorcycle battery, get a technician to make sure it has been connected properly -- the contraptions are notorious for blowing out fuses and worse. Learn how to change the fuse in a Sony Porta-pack; the other decks have easily accessible ones.

Shridhar Bapat

good stuff

2" Permacel Gaffers Tape

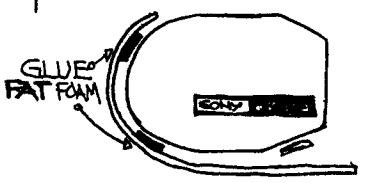
.. $4.50 per roll

Jimi sez:
I saw Lui Spray this on a 3400 head assembly that was giving a bad picture result- good picture

Sony Cleaning Swabs (pkg. of 5) $1.40

After a few months of use, your portapack may develop a problem which causes the tape to slip from its guides and get reduced to video spaghetti. To avoid this glue foam on the guide protective shield, situated just around the head.

The cause of this problem is that after a while the take up reel does not keepthe tape tightly on the drum head and may cause it to fall off the metal guides.



MAINTENANCE OF DECK

FROM RADICAL SOFTWARE #2

Keep the heads clean.

Cleaning Video Heads: popsicle stick with chamois cloth glued to one end dipped in alcohol. Don't use cleaning stick for cleaning video heads when it becomes visibly dirty.

Other Heads: use cotton swabs with rubbing alcohol.

Tape Guides: clean strongly.

Degaussing (demagnetizing): a degausser can be bought commercially to demagnetize the heads. Cover metal tip with one layer of plastic electrical tape.

Not wise to oil the deck. Squeeks are usually caused by something else.

Handling: Pick deck up with two hands. Don't pick up by strap which causes banging.

The video heads sit on a bar and spin very quickly. On the tips there are very brittle pieces of metal which can break easily. Don't slam anything on them.

Track: is a control for playback only. When playing back you'll see that there's some undesirable type lines that pop up in the picture—a small horizontal snowstorm which you can get rid of by adjusting the tracking knob (basically a head positioning mechanism).

Tape is Sensitive To:

1. *Moisture—can cause dropout*
2. *Magnetism (like power supply from Electric Generator, voltage regulator, top of monitor)*
3. *Heat*
4. *Touching recording surface at all with your hands causes grease deposits.*
5. *Mutilation—getting caught in machinery or twisted. Remove portion that is wrinkled.*
6. *Dust*

Problems:

The most common problem is dropout.

The recording surface is coated with an Iron Oxide. As long as the continuity of the oxide isn't broken the tape is intact and won't show any defects. If the oxide is disturbed (grease, scraping, crumbling, moisture, etc.) then dropout, which is lack of Oxide on the Tape, results. This shows up on the Monitor as a white line at bottom of screen and moves rapidly to top. There is no way to replace lost oxide—can't recoat. There are commercially produced dropout compensators which hide *but don't* replace *dropout.*

Any sudden momentum change other than motor function to STOP can cause problems: 1. Tape gets caught under lip of reel—chips oxide. When played will hear a buzzing sound. Should be physically edited out of tape. 2. Can get off tape path and become enmeshed in mechanism of machine. Damaging tape and machine.

Handling:

Don't handle the parts you want to look at. Make sure your hands are clean. Handling the leader is OK as long as you don't put it across the heads as it would deposit a layer of oil.

However, the tape is essentially rugged and strong and responds well to strain and tension, and can be rerecorded.

TOOLS

There is a basic minimum tool kit that no video person who wants to stay operational more than a block from the repair shop would be without. It includes:

1) A good soldering iron. (Unger makes a good one -- the model is called an "imperial" and the tip is replaceable. I like a thin "shovel" tip.)

2) Resin core solder. (Kester "44" is as good as any. A proper diameter is .032.)

3) A pair of needle nosed pliers, preferably with plastic around the handles.

4) A pair of regular pliers.

5) A thin slotted or regular screwdriver.

6) A good phillips head screwdriver. (Make sure you get a good phillips, i.e. one with a well made tip (no burrs, etc.), a shaft of a strong metal and one that's all one piece, not with interchangeable shafts. It wouldn't be a bad idea to take your portable recorder with you when you go to the hardware store to buy these things and make sure, for instance, that the phillips head fits snugly into the screws on the deck.)

7) A set of jeweler's screwdrivers with interchangeable shafts.

8) A spool of "hook up wire." (This is just any kind of thin wire with a plastic casing.)

9) Fuses for the various types of equipment you're using (3 amps - 250 volts for the Sony AV 3400 -- but the regular type NOT SLOW BLOW FUSES).

10) A roll of plastic electric tape.

11) A jackknife with a sharp blade.

12) Splicing and cleaning paraphernalia (provided with most VTRs, but which can be augmented with spray cleaner, a chamois cloth and a head degausser).

13) A multi meter. (Lafayette Radio Electronics makes a whole line of inexpensive, easy to use meters, as do a number of other companies. Unless you want to play electrical genius, you don't need to invest more than $10 or $15 at the most in a meter, but if you want to do much repairing at all, you'll need a meter.)

14) Diagonal wire cutters (called dykes).

15) A "cube tap" -- 3-way A.C. plug.

16) Spare audio & video connectors.

TECHNIQUES

The importance of light weight and small size in portable VTRs has lead to miniaturization of most components, and that leads to some hassles if you're not used to soldering and the like. Practice at soldering if you're not into the habit; it'll save you a lot of headaches.

For instance, the correct way to solder a single wire to a connector is to start with a clean, hot iron. When it gets hot you can wipe it briskly once or twice with an old rag to get the crud off. Twist the end of the wire to be soldered so that there are no loose strands of wire sticking out. Lay the wire on the tip of the iron and lay the solder on the wire until the solder flows over the wire in an even coating. Remove the wire from the iron and the solder will harden almost immediately. That's called "tinning the wire" and the process should be repeated for the receptacle on the connector. When both the wire and the connector have been tinned, all you need do to connect them is to heat the receptacle on the connector, slip the wire in, remove the iron and make sure that the solder joint (the point of connection) doesn't move. (It's best to wait at least two or three seconds until the solder has hardened.) Following this procedure avoids bulky or weak solder joints and melted insulation that tend to cause shorts or to break easily.

However, making the best solder joint in the world won't help you if you've lost the screws, washers, and various other miniscule paraphernalia needed to put the machine back together. A cardinal rule of all good technicians is to put all losable parts in some sort of reliable container. Cat food cans are great; hot cups with half a sip left of sticky sweet coffee are not. If you're on the road, the lens cap usually serves quite well. If you are prone to ending up with more parts than you started with, it might be wise to store them in a clear plastic box with compartments.

Unfortunately, most of the screws in Sony video equipment are made of brass which is a very soft metal. So if you're not careful when you are removing and replacing them, you may strip the tops off. You can also mess them up by using a poorly made phillips head screwdriver. If you run into a stubborn screw, don't be worried about exerting a little pressure downward on the screw. That sometimes breaks the lacquer seal or whatever else is holding it back. Occasionally you may run into a phillips head screw that simply isn't a phillips head anymore because the grooves have been completely stripped off. You have two choices of how to get it out, the most extreme of which is to drill it out. Drilling is not recommended except as a last resort because it ruins the threads in the hole and runs the risk of breaking a lot of things besides a stubborn screw. The other alternative is to take a hacksaw blade and make one groove across the diameter of the screw. You can then remove it with a slotted screwdriver.

There are a lot of techniques that are applicable to special situations but soldering and screwing, well, they'll get you a long way.

Parry Teasdale
(of the Videofreex/Media Bus)

World Wide Video

PIERRE IN EUROPE

I went to Europe with a Porta-Pack, an 11-inch monitor, and accessories. I bought a 220/110 transformer for $6, plus a domino adapter plug and I was in business.

I visited Belgium, France, Holland, and England. The most interesting was Holland. There we found a lot happening in video -- several groups are already operating and experimenting with different aspects of the medium. One group in Rotterdam is setting up an organization where anybody interested in using video could borrow or rent a Porta-Pack or the use of editing facilities. In the same town there is also a museum set up right in a shopping center where they show tapes continuously. Holland does not have a cable system but it should not be long before it gets one. Video activities are mostly government sponsored and funded as a public service.

In Amsterdam we met Jack Moore, who is operating what he calls a media hideout called the "Melkweg," or Milky Way. It is a huge building, lent and partially financed by the city as a sort of youth center where people can watch videotapes and films and listen to music. Jack trucks around the town and the country showing tapes that he's made of the Beatles, Bob Dylan, etc. The Melkweg is a landmark regarded with fondness by the young people there.

Paradisio is another place where tapes and films are being shown. It's an old church which has been converted into a youth club/multi-media showcase. There is a large club room upstairs where several TV sets are part of the decor and are used for people to watch broadcast programs and occasionally tapes.

Walking through the streets in France and taping, I met a lot of kids. They were very excited about video but they could hardly get to it, since the cost was so prohibitive for them.

There are no cable systems in France, and there is not much going on in video even though there is much talk about it. Furthermore, all imported electronic equipment is so heavily taxed that it puts video out of reach of most people; the French government seems concerned about Japanese and Chinese imports and wants to protect its own electronic industries even though it doesn't seem likely that the French will come up with any better hardware. The result is that video is still in its infancy there and largely ignored. A half-hour tape will cost you $40 in France, which is obviously a rip-off; a Porta-Pack will cost $2,000, etc. Video is classified as strategic material.....not educational.

It is estimated that it will take fifteen years to set up a total video communications system that would serve France in its entirety with computer time sharing and retrieval systems of the type that would serve every home in the country -- that is, if it is started now, which is not the case. The main problem seems to be about control: Everything in France is heavily centralized, with Paris as the main head. All TV is government owned and operated. Video is really all new stuff to them. Meanwhile, the main publishers, hardware makers and others are on the scene trying to get the best pieces of the action in the videocassette market.

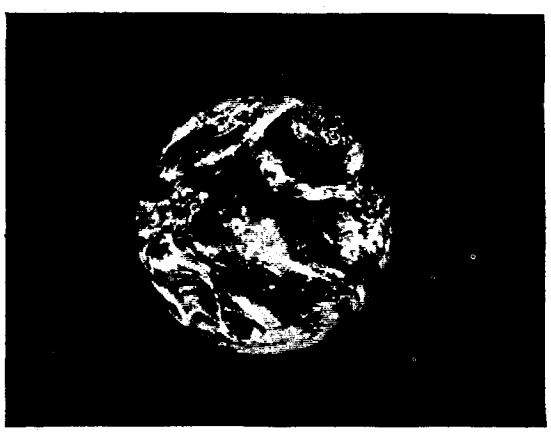
France has one of the lowest TV-to-inhabitant ratios in all of Europe. The arithmetic of it is quite easy to understand: The average French worker has a salary equal to half of what an American worker makes, while televisions cost more in France than in the U. S. because of the heavy taxes.

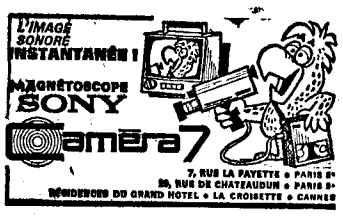
In Paris the school of Beaux Arts (UP 6) uses video for the architects' school and is accessible. There is a group called Immedia which is trying to get equipment. Another, called Video Dropout, is doing counter news and street shows. The Club Méditerannée is also setting up an audio visual department. The club has dozens of vacation villages all over Europe, North Africa, and the Caribbean. In Grenoble some people are experimenting with cable.

In Belgium I found a firm called VIDEO CHAIN. These people are putting video in the hands of school children, letting them record and edit their own educational video tapes. They seem very satisfied with the results obtained. They have also begun to produce complete videotaped courses on various subject matters. Belgium has a good cable system, but local origination is strictly prohibited since here again the whole television scene is a state monopoly taboo, and all so incredibly insipid.....all programming ends at 11:30 p.m. All the cable does is relay programs from neighbouring countries.

There are some kids in Brussels who have an experimental theatre. We showed some tapes there. In Brussels equipment is also very expensive; the government seems not to want anyone to have it. I had a problem with Customs on the way back from France -- at the Belgian border they wanted a deposit, to make sure that we weren't going to sell the equipment.

In England there is no cable system to be found, but here again there is much talk about it to find out who will get what, and how. In London we met with Hoppy (John Hopkins) from VISION. Vision uses video, among other things, in the Camden area of London. Camden is a depressed area soon to be demolished, and a lot of people are being relocated. The local town council has been approached and experiments are being made to see how claims could be adjusted with the aid of video



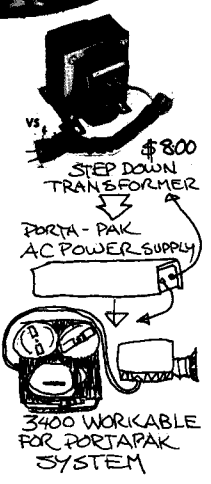


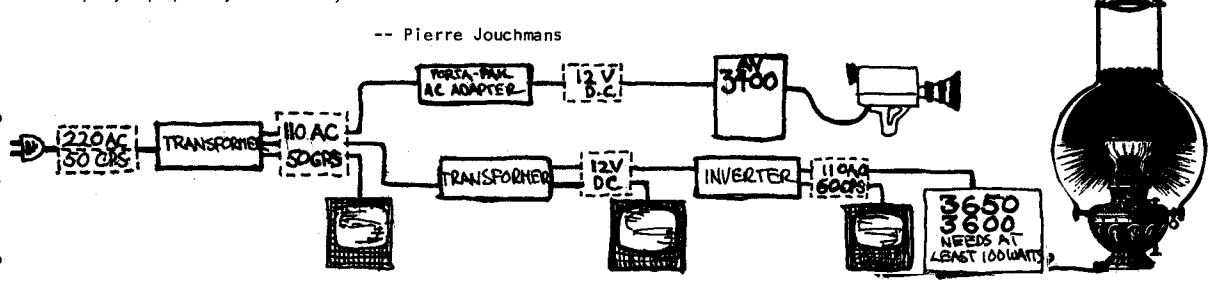
tapes. Vision is also into training people in the practical uses of video and is trying to get free public access to cable systems soon to be installed. They are into using video in community development and lecturing in schools and universities about it.

Generally, I found Europeans pretty much sold on the idea of video uses. However, there is much fear that such set-ups would lead to Big Brother's controlling people even more, rather than having a liberating effect. Belgium, for instance, is about to computerize its entire population (9 million). It would store all information about its citizenry -- insurance, police, and property records, etc., would be centralized and readily available to authorities.

A videotaped report of the nine groups and individuals visited in Europe is available through the Videofreex. It is called EUROPEAN VIDEO RESOURCE TAPE. It gives a pretty good idea of what is happening there and of the people that are doing it, with descriptions of their tapes, equipment, interests, etc.

-- Pierre Jouchmans





SHOOTING VIDEOTAPE IN HAMBURG, GERMANY

I got the idea of shooting the American Women's Art Show one night from a press release about it. The show was going to be held in Hamburg on April 14; it represented the first time that American women artists would be exhibiting collectively abroad, and I found the idea of video taping it both exciting and intimidating.

My next few days were spent getting up a format for the taping and trying to find a sponsor. Finally Joan Lee Smith, acting director of the Space for Innovative Development, pledged her cooperation. Now I just had to deal with all the potential problems involved in using American video equipment in Europe: lack of skilled technicians, lack of Sony outlets, etc., and of course the ever present danger that one small part could blow out and no suitable replacement be found.

I carried the most delicate equipment with me on the plane (1/2" Sony Porta'Pack deck, camera, monitor). I was on a charter flight which took me to Munich, where I was relieved to find a Sony shop. (Sony Munich, Ichstattstrasse 3, 8 München 5, Germany.) The people were amazingly kind, cooperative and capable and went out of their way to answer my questions and even repair a fault in the deck.

As various people had emphasized the risks of using American equipment abroad, I decided to work off two 3-hour PB-30 batteries to avoid any sync problems after my return to the U. S. We were careful not to use the batteries to their maximum and recharged them as soon as possible.

The shooting in Hamburg went smoothly, except for one camera cable problem. As we were mostly inside the Kunsthaus Museum, we had access to electricity (220 current in Germany). We used a step down transformer which was adequate for our needs -- mostly re-charging the battery and playing back tapes on the monitor.

If you are going to Europe with video gear, keep in mind that your equipment list must be stamped by the Customs authorities here before you go -- and make sure to leave a sufficient amount of time to do this. It could even be done several days before you leave, thereby saving some nervous sweat. This will save you a lot of hassling with customs officials in Europe.

The tape we made of the Women's Art Show is now available for shooting.

-- Cindi Valtaire

People working with video in Europe

Immedia
75 Rue Dutot
Paris 14th, France
tel: BLO-1739
Alain Jacquier
736-1147

Jack Moore
Video Heads
Milky Way
Leidseplein, Amsterdam
tel: 777-325

Video Chain
8 Chausseu·de Vleurgat
Brussels, Belgium
Ramone Zoon
tel: 493-225
418-226

(NKTV)
North Kensington TV
837 A Fulham Road
London, S.W. 6, England
Mick Hickie
Bob Jardine
tel: (01) 736-0533

John Meng
Atteneum Book Handle
Amsterdam
tel: 233-933

Carolyn Paul Rossopoulous
18 Rue de l'Odeon
Paris, France
tel: 325-1844

Vision
Hoppy John
77 Prince of Wales Road
Camden, London, England

Rotterdamse Kunstiching
Lignbaan Centrum, Lijnbaan
tel: (010) 142-522

Tajiri Shinko
Kastell Scheres
Barloo Netherlands
tel: (1207) (4707)

Videocorder users who require tape distribution to affiliates outside the United States are faced with two major considerations: (a) TV standards and (b) power source of the country in which the tapes are to be played.

TV STANDARDS

Equipment on both ends of an international tape-exchange link must operate on the same TV standards. We recommend the use of US standards (60 fields per second, 525 lines per frame) so that tapes are made on U. S. Standard machines and played back on modified machines installed at the overseas office. The source of signals to be recorded and the monitors must also operate on the same standards.

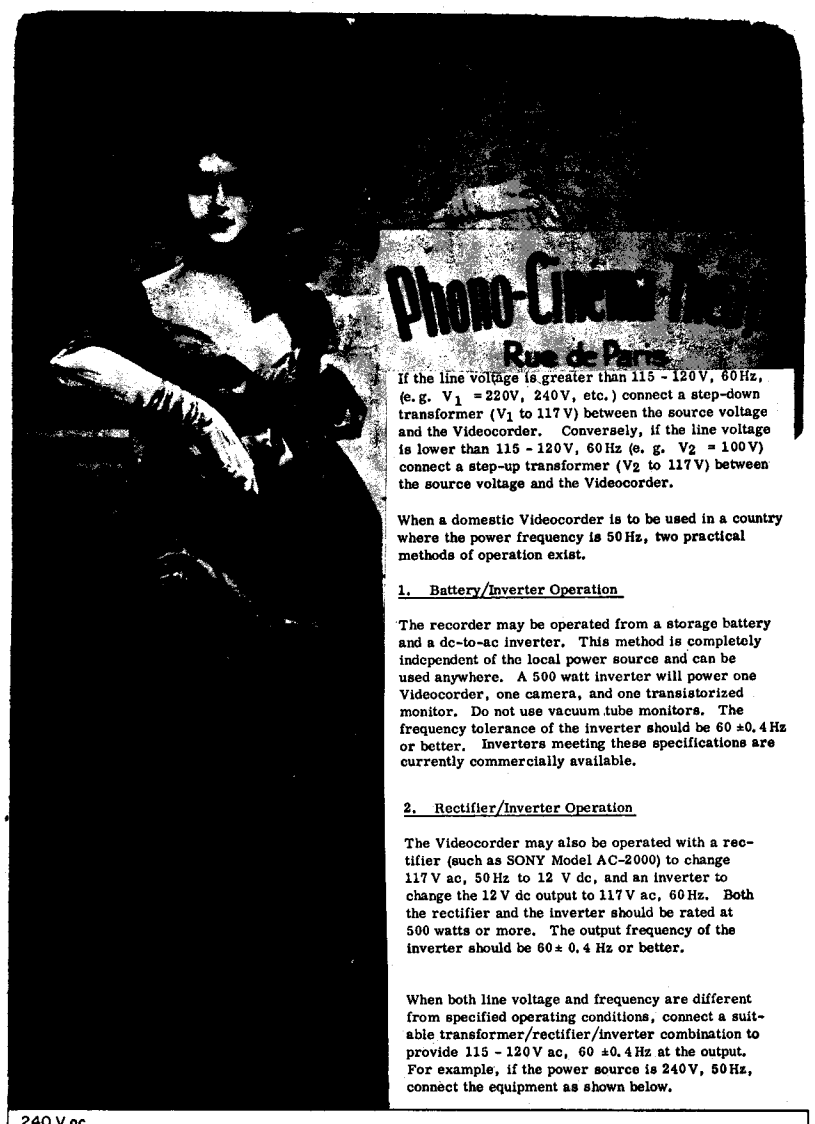
POWER FREQUENCY AND VOLTAGE

In those countries that supply 50-cycle power, the VTR must be arranged to operate from that power frequency but continue to operate on American TV standards. This requires a special or modified VTR or the use of external equipment to convert the available power to 60 Hz. Voltage differences are much easier to correct as a simple transformer can do this job.

When the Videocorder is used where the power source is some value other than 117V, 60Hz, transformers, rectifiers and/or inverters are required for operation.

TRANSFORMER OPERATION

When the Videocorder is used where the power source is some value other than 117V, 60Hz, transformers, rectifiers, and/or inverters are required for operation.



If the line voltage is greater than 115 - 120 V, 60 Hz, (e. g. V_1 = 220V, 240 V, etc.) connect a step-down transformer (V_1 to 117 V) between the source voltage and the Videocorder. Conversely, if the line voltage is lower than 115 - 120 V, 60 Hz (e. g. V_2 = 100 V) connect a step-up transformer (V_2 to 117 V) between the source voltage and the Videocorder.

When a domestic Videocorder is to be used in a country where the power frequency is 50 Hz, two practical methods of operation exist.

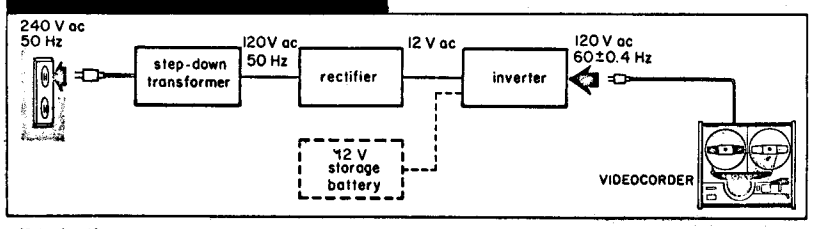
1. Battery/Inverter Operation

The recorder may be operated from a storage battery and a dc-to-ac inverter. This method is completely independent of the local power source and can be used anywhere. A 500 watt inverter will power one Videocorder, one camera, and one transistorized monitor. Do not use vacuum tube monitors. The frequency tolerance of the inverter should be 60 ±0.4 Hz or better. Inverters meeting these specifications are currently commercially available.

2. Rectifier/Inverter Operation

The Videocorder may also be operated with a rectifier (such as SONY Model AC-2000) to change 117 V ac, 50 Hz to 12 V dc, and an inverter to change the 12 V dc output to 117 V ac, 60 Hz. Both the rectifier and the inverter should be rated at 500 watts or more. The output frequency of the inverter should be 60 ± 0.4 Hz or better.

When both line voltage and frequency are different from specified operating conditions, connect a suitable transformer/rectifier/inverter combination to provide 115 - 120 V ac, 60 ±0.4 Hz at the output. For example, if the power source is 240 V, 50 Hz, connect the equipment as shown below.



Note that if a storage battery is accessible, the step-down transformer and rectifier may be omitted, as previously described.

MODIFIED VIDEOCORDERS

SONY offers, on special order, Videocorders with American TV standards modified for 50 Hz operation. SONY monitors also require modifications; SONY cameras do not.

Modified Videocorders will record as a closed system only (camera recordings). Telecast programs cannot be recorded unless the telecast signal conforms to American TV standards (525 scan lines). Tapes recorded on this machine are fully interchangeable with those recorded on standard CV-series and portable DV-series recorders, but are not compatible with overseas models. CVC-series cameras must be used with CV-series Videocorders. The DXC-2000A (EIA) camera must be used with EV- or PV-series Videocorders and operated with internal sync. Random interlace cameras whose vertical oscillator is synchronized to the power line frequency will not work.

Videocorders modified for 50 Hz operation are not exported by SONY. The customer must purchase the unit in the United States and make all shipping arrangements independently of SONY. Modifications are performed on original purchases only. If the unit is intended for operation on 220V, a step-down transformer is required and must be supplied by the customer. Modified recorders are no longer subject to the standard service warranty policy when they are shipped out of the U. S. A. Minor repairs may be done at SONY overseas service stations. Service station lists are available from SONY regional offices.

The following table gives TV standards and power source for foreign countries. For a complete list of power sources of foreign cities, by country, refer to "ELECTRIC CURRENT ABROAD," Catalog No. C 41.2: E12/12/967, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. The price is 30 cents.

I have just returned from Japan (May '72), where I was researching video on a Canada Council grant. Very little was happening in the way of alternate video (the word "alternative" does not exist in Japanese), except for Takahiko Iimura, who had moved to N.Y.C. A group formed while I was there called "Video Hiroba" (Plaza), whose aim is to fight broadcast T.V. With the initial help of Sony we gave two weeks of intensive workshops, mostly with young artists, dancers, filmmakers, and musicians, and then held a two week continuous showing with special events. To contact them write: c/o Fujiko Nakaya, Jingu-Mae 1-21-1, Harajuku, Shibuya, Tokyo, Japan (Tel.: 401-1222).

Had a good look at the Sony color video projector. It is really good quality, better than 8mm (which is very popular in Japan, and 40-50 people can comfortably watch the special highly-reflective screen (which cuts down on the viewing angle).

Word has it that a smaller portapak camera is being developed; Sony will change over to EIAJ colour; Panasonic claims to have a high-speed video copier; and one-tube colour is almost ready. FM wireless mikes were everywhere, but it is illegal to record things with them.

--Mike Goldberg

c/o Image Bank, 4454 West 2nd
Vancouver 8, B. C., Canada

TABLE

Country	TV Standard	Scan Lines	Power Source	
			Voltage (V)	Frequency (Hz)
Algeria	French	819	220	50
Argentina	West European *	625	220	50
Australia	West European	625	240	50
Austria	West European	625	110/220	50
Belgium	French, West European	819 625	110/220	50
Bermuda	American	525	115	60
Brazil	American	525	127/220/120	60/50/50
Bulgaria	East European	625	220	50
Canada	American	525	110	60
Canary Islands	West European	625	110	50
Chile	American	525	220/110	50/60
Columbia	American	525	110/220	60
Costa Rica	American	525	110	60
Cuba	American	525	115	60
Cyprus	West European	625	220	50
Czechoslovakia	East European	625	110/200	50
Denmark	West European	625	220	50
Dominican Rep.	American	525	115	60
Ecuador	American	525	110	60
Egypt	West European	625	115/220	60/50
El Salvador	American	525	110	60
France	French	819	127/220	50
Finland	West European	625	220	50
Germany	West European	625	220	50
Ghana	West European	625	220	50
Gibraltar	West European	625	220	50/60
Greece	West European	625	127/220	50
Guadeloupe	East European	625	220	50
Guatemala	American	525	110/220	60
Haiti	American	525	110/220	60/50
Hawaii	American	525	115	60
Honduras	American	525	110/220	60
Hungary	East European	625	110/220	50
Iceland	West European	625	220	50
India	West European	625	220	50
Indonesia	West European	625	127/220	50
Iran	American	525	220	50
Iraq	West European	625	220	50
Israel	West European	625	220	50
Italy (Naples)	West European	625	220 (105)	50/60
Jamaica (Kingston)	West European *	625	110	60 (40)
Japan	American	525	100	50/60
Kenya	West European	625	220	50
Korea	American	525	105	60
Kuwait	West European	625	220	60
Lebanon	West European	625	110/220	50
Liberia	West European	625	110	60
Libya	American	525	230	50
Luxembourg	French	819	110/220	50
Malta	West European	625	220	50
Mauritius	West European	625	220	50
Mexico	American	525	120	50
Monaco	French	819	110/127	50
Morocco	French	819	115	50
Netherlands	West European	625	220	50
Nicaragua	American	525	115-120	60
Nigeria	West European	625	230	50
Norway	West European	625	230	50
Okinawa	American	525	110	60
Panama	American	525	110	60
Peru	American	525	110/220	50/60
Phillippines	American	525	110/220	60
Poland	East European	625	220	50
Portugal	American	525	110/220	60
Rhodesia	West European	625	220	50
Roumania	East European	625	220	50
Ryukyu Islands	American	525	110/220	50/60
Samoa	American	525	110	60
Saudi Arabia	American	525	120/240/120	60/50/50
Sierra Leona	West European	625	230	50
Singapore	West European	625	220	50
Spain	West European	625	127/220	50
Sweden	West European	625	127/150/220	50
Switzerland	West European	625	220	50
Syria	West European	625	115	50
Thailand	American	525	115/220	50
Trinidad & Tobago	American	525	115	60
Tunisia	French	819	110/127/220	50
Turkey	West European	625	110/220	50
United Kingdom	British	405/625	220	50
Uruguay	American	525	220	50
U. S. A.	American	525	115	60
U. S. S. R.	East European	625	120/220	50
Venezuela	West European *	625	120	60
Virgin Islands	American	525	120	60
Yugoslavia	West European	625	220	50

Video People, Projects and Events

Alternative Environmental Futures
P. O. Box 182
Planetarium Station
New York, N. Y. 10024

Purpose: origination and articulation of new directions and alternative futures within the educational process.
Tools: 1/2" video tape production equipment.
Tapes: "Englewood Project" -- a documentary of junior high school students constructing an indoor play environment for pre-schoolers.
The project was designed and administered by architectural students from City College in Manhattan. It was developed as a prototype for similar projects in schools throughout the country.
Presently producing "Profiles of Architects." The first of the series is on John Johansen.

David Miller
Appalshop
Appalachian Film Workshop
Box 332
Whitesburg, Kentucky 41858

A non-profit educational group of young mountain people using the media of film, video, and still photography to document the history, heritage, life, and unique culture of our region. Our films and videotape are by, for, and about mountain people.
Our equipment (a Sony CV series Porta-Pak, a record/playback deck, and a monitor) is being used to train impoverished Appalachian youth in cinematic technique and to re-establish a cultural identity.
We urgently need a CV editing deck and another Videorover 1 to back up our often out of order hardware. If your company will be replacing CV equipment with the new EIAJ Type 1 standard equipment, we sincerely request that you consider making a tax deductible donation of your old Sony equipment to the APPALSHOP.

Mark Brownstone
199 Henry Street
New York, N. Y. 10002
(212) 254-7267

Interested in all phases of video.
Currently a teacher at Bellevue Day Care Center. Experimenting with uses of video tape in the preschool classroom.
Tape: kids' reactions, learning about equipment.

Walter Dale
Port Washington Public Library
Main Street
Port Washington, N. Y.

Emphasizing the involvement of a diverse number of people -- trained more than 300 people in use of VTR equipment; frequent playback to groups of 30 - 50 people.
"Port Now" -- a monthly video playback of citizens speaking about Port Washington, made by citizen video volunteers focusing on the problems of the community.

Dowling College Media Center
Idle Hour Boulevard
Oakdale, Long Island, N. Y. 11769
(516) LT 9-6100

Interest: education, college level.

Fifth World
c/o David Moore
1026 Madison Street
Syracuse, N. Y. 13210

Working towards the establishment of a community video network in and around the city.
Accessible equipment: 10 Sony Porta-Paks, 2 Sony SEG's, a 3-camera Mini Production Studio, 2 Studio cameras, a Panasonic SEG, a Sony Camera Ensemble, and editing facilities.
The main energy output will be to provide assistance to people interested in video work. Would be interested in gaining access to video tape libraries and copies of tapes that might be useful to the video happenings in Syracuse.

Cary Fisher
Communitel Corp.
312 East 9th Street
New York, N. Y.
(212) 254-9200

A TV set sitting in a storefront window with an exterior speaker to show tapes made on 9th Street to the people living on the street as they pass by.
Promote possibilities of re-combinations and hybrid forms of art and cultures as represented on a diversely populated street.

Bob Foshay
AV Department
Irvington High School
Irvington, N. Y. 10533
(914) 591-8500

Record/playback of students' projects at all levels; use equipment in K-1-2 open classroom.

Stephen Germany, TV Coord.
Rm. 501, Essex County College
31 Clinton Street
Newark, New Jersey 07102
(201) 621-2200

Studio and Portable equipment (after summer).
Interests: education, college; cable.

Cyril Griffin
c/o Henry Crow Dog
Crow Dog's Paradise
Spiritual Landing Place
Rosebud Reservation
Rosebud, South Dakota 57570

Video Consultant to: Creative Artists Public Service Program; Syracuse University Union Cable System; Bowery Video; New York Public Library; Ithaca Video; American Indian Movement (AIM); Native American Church.
Tapes: "Peyote Ceremony for Crow Dog's 50th Wedding Anniversary"; "Sundance Ceremony"; "Ghost Dance Ceremony."
Wanted: Video Transmitter to give Lakota Sioux Indians a communication medium in their own language.
Offered: multi-media show on Native Americans for universities and schools.

Ernest Gusella
98 Bowery
4th floor
New York, N. Y. 10013
(212) 966-6089

Interest: video as art.
Equipment: Sony Porta-Pak unit, Sony Color Monitor, Sony SEG with Gen Lock, Shintron Keyer, custom built Colorizer, Putney VCS-3 Electronic Synthesizer, Stereo Tape Deck.
Tapes: abstract images generated by the synthesizer, which are then reprocessed in the special effects equipment and then colorized.
Would be interested in information of a technical nature, such as alterations of TV sets to produce certain effects.

H. Pierre Jouchmans
471 West Broadway
New York, N. Y. 10012

Introduced to video two years ago. Has been working with hardware for one year.
Work: Documents alternative life styles and survival; operates a truck-based 1/2" video studio. Just back from Europe where he worked on "EUROPEAN VIDEO RESOURCE TAPE."
Tapes: "Earth People's Park Commune"; "Construction of Geodesic Domes"; "Expanded Foam Houses"; "Sufi Dancing"; "Building an Inflatable Shelter."

Arnold Klein
3411 Flatlands Avenue
Brooklyn, N. Y. 11234
(212) 258-0800

Presently doing research on new video technology and other communications systems.
Color Porta-Paks, Holographic Television, Laser Video. It's all coming. Soon.
Recently worked with Media for the Urban Environment and University of the New World.
Want to share knowledge, ideas and projects.

Language on Video
Whyatt, Seidman, Katzman
Westbeth
463 West Street
G116
New York, N. Y. 10014

Writers using video in creative writing seminars/workshops/readings, etc. Also serve as documentors of contemporary American writers. To develop the experimental in creative language.

Portable Channel
308 Park Avenue
Rochester, N. Y. 14607
(716) 244-1259

Continuing the Rochester Media Equipment Pool; doing workshops and demonstrations and generally politicizing about media, cable and feedback.
Tapes: "Feedback: Feedforward"; "Tape-Log #3"; Portable Channel One" -- a 30-minute sampler.

Psychodynamic Research Corporation
150 East 69th Street
New York, N. Y. 10021
(212) 249-6829

Behavioral sciences, organized development, mental health.
Producer of: Learning Systems; Training Films; Audio Cassettes; Video Cassettes.

Lynda Rodolitz
69 West 9th Street
New York, N. Y. 10011
(212) 475-8507

An independent video artist, working with video for about one year.
Equipment: Sony Porta-Pak, Sony 1/2" editing deck.
Tapes: "Circus Parade" -- animals marching through the streets of New York and an interview with a young clown; "Bread" -- how to make some, by Diedre; "Eugene Makes a Hologram" -- Eugene Dolgoff; "Bio-Feedback" -- bio-feedback training with Eric Peper. "April 22" -- how to build an anti-war demonstration; "Flying" -- over New York in a plane.

Smith-Mattingly Productions Ltd.
Box 31095
Washington, D. C. 20031
(301) 736-3742

Services include: VTR training programs, production, editing, consultation.
"Introducing the Single Camera VTR System" by Grayson Mattingly & Welby Smith.
This manual contains simple definitions, maintenance tips, and exercises.

Elon Soltes
Mark Sherman
Barry Orton
c/o 9 Harvey Street
New Brunswick, N. J. 08901
(201) 846-8094

Education: Technology environmental perception.

Television Lab
(WNET-TV/Ch. 13)
345 East 46th Street
New York, N. Y.
(212) LT 1-6000

Director: David Loxton
Assistant Director: Ranald Graham
Funding: Rockefeller Foundation and the New York State Council on the Arts.
The lab has been set up as a studio for experiments in both broadcast and non-broadcast oriented production. The philosophy behind the lab emphasizes its role as that of a video arts research facility rather than a funnel for broadcast production. Plans are being formulated to involve a series of artists-in-residence (the current one is Nam June Paik) and guest artists in video experimentation.
Another major function of the lab is that of providing access to a sophisticated studio (and the services of full-time resident engineer, John Godfrey) to the wider community of experimental video groups and artists. Studio use is free of charge.
The studio has full color capability including Shibaden color cameras, IVC 1" decks, Chroma key, Grass Valley processors and full audio mixing facility. By July, the latest version of the Abe/Paik Video Synthesizer will be in full operation there.

Video Softwear, Inc.
Box 39082
Washington, D. C. 20016
(301) 656-6042

Purpose: to develop the helical-scan VTR as a communications medium in the areas of business and education.
Services include: training and production.

Lee Kaminsky
Space VideoArts
The Space for Innovative Development
344 West 36th Street
New York, N. Y. 10018
(212) 279-5941

The Space for Innovative Development was established to provide work space and equipment for artists doing experimental/new work. Space VideoArts will allow an experienced video artist access to their space and equipment. Primarily for post production work.
School: An intensive study program is being developed. It will cover: Porta-Pak, 1/2" and 1" editing, multiple camera studio work, sound through stereo miking.
Cable: One show every two weeks. A series on the resident groups working at the Space. Some tapes on other artists whose work is innovative in their field.

The Kitchen
240 Mercer Street
New York, N. Y. 10012
(212) 475-9865

The Kitchen, supported by a grant from the New York State Council on the Arts, is the only regularly functioning electronic media theatre in the East. The space has been opened to artists working in all aspects of the electronic media from contemporary experimental music to live, taped and synthesized video.
Equipment: 3 portable cameras, Sony SEG-1 mixer, 2 keyers, 9 large screen monitors (1 color), Sony 5000-A 1/2" VTR, Sony AV-3400 VTR, B&W video projector, Putney audio synthesizer, complete audio system.
There is a presentation at The Kitchen every evening, with the week divided between experimental music, video and intermedia events. Our most important regular feature is the Wednesday night open screenings of video tapes, where any video maker can come and show tapes on a first come, first served basis.
Kitchen program directors: Woody and Steina Vasulka, Shridhar Bapat, Rhys Chatham, Dimitri Devyatkin.

Robert Armour
Cyclops
25 Fifth Avenue
New York, N. Y. 10003
(212) 260-0767

(See article on "Voodoo Video," page 3 of this catalogue.)

Video Rivington
10 Rivington Street
New York, N. Y.
(212) 254-2886 btw. 3 and 8 P.M.

A tuition-free workshop sponsored by the Young Filmmakers' Foundation, Inc., giving neighborhood teenagers an opportunity to learn about and produce video tapes.

Community Newsreel (same address)
Tapes: "Community Control of Schools"; "Subcommittee on Puerto Rican Political Prisoners."

The Dumping Place

The Dumping Place is a printed, all media information service for you and everyone else. It evolved at the April Video Conference. People there felt a need to be able to relate directly to others working in their own medium, as well as to integrate and keep up with the other media. The conference itself was excellent for accomplishing this, but something was needed to further the process of interaction and information flow. Something intimate, frothing with firsthand knowledge or ignorance. Something filled with the flash of energy and the strength of synergy. Something to include us all. Coupled with these feelings were the ideas of decentralization and simplicity of operation. Responsibility should rest with the mass rather than a central group.

Thus, The Dumping Place -- an arbitrarily situated location for dumping information, which is then collated and sent out to subscribers. Its basic design principles were: no editorial body, enabling anyone to say what he felt with no middleman interpreting; and an absolute minimum of drudge work, paste-up, etc. Both of these factors allow the location of The Dumping Place to be extremely flexible, requiring only a mailing address and a reliable printer, as you will see.

The above yearnings were fulfilled by the use of 5x7 and 3x5 cards for information modules. You, or anyone else, sends in information -- printed, written, or drawn on the size card or cards necessary to accommodate it (using the 5x7s horizontally and the 3x5s vertically), to: The Dumping Place, 339 Lafayette Street, New York, N. Y. 10012, with one of the following categories written big on the back side: NEWS, MEDIA NETWORKS, POLITICAL/CULTURAL, SURVIVAL, TECHNICAL, SOFTWARE, CABLE, INFORMATION NEEDED, FEEDBACK/GOOFS, CONTACTS, CALENDAR. (These categories are subject to evolution.) The cards are then pasted down, as they come in, in their proper section. This layout system is quite simple, since two 5x7s horizontally or four 3x5s vertically fit perfectly on a single sided 8-1/2 by 11 sheet with the proper margins. It means that the card you send in is what gets sent to the printer. Also you can fill the card to the edge, it will all be printed.

When you receive information from The Dumping Place, you can then punch holes in the sheets and place them in a looseleaf in the designated categories or your preference, or cut them up into the original cards and file them that way.

As you see, everything happens when you -- or someone like you -- sends information in. It is not someone else's dumping place, but ourseveryone's. Since there is no way of determining how much material will be printed and mailed, an almost arbitrary amount of $5 has been set for a year's subscription. Because each edition will have valuable reference material, and there is no provision in the system for reprinting (no editors), each subscription will begin with the first issue. Information will be updated and added to your growing file.

One potentially invaluable source of information will be the CONTACTS section. Even non-subscribers can avail themselves of it by sending in a card.

This listing service will then allow others of like interest to get in touch; opportunity may come calling.

Every card, or the last in a series, should end with the sender's name, address, and telephone number to allow people to contact you directly.

Everything send in should be written, printed, drawn in black -- definitely. Please note, those empty spaces on the cards could hold drawings or photos. In extreme cases, an entire 10x7" page (two 5x7 cards horizontally = 10x7 or 7x10) could be created since that also accommodates the margin on an 8-1/2 by 11 page.

"Problems should be accepted as opportunities."
-- Al Hanson

People ask us, "Where can I show my tapes?" Here's

WHERE TO SHOW TAPES IN NEW YORK CITY

Public Access:

Teleprompter channel C regular series channel D one time spot (Also opening 10 or so public access studios on June 1.)	942-7200 (Henry Pearson)
Sterling Manhattan channel C series repeats channel D one or two times for a tape	586-2426 (John Sanfratello)
Westbeth Video broadcast through Westbeth master antenna loop to every apartment that has TV	243-2201 (Ann Douglas & David McClellan)
The Kitchen They show tapes every Wednesday night.	475-9865 (Woody & Steina Vasulka)
The Egg Store facilities available to show tapes in any format	431-5293

equipment exposition

The American Management Association is holding their annual Equipment Exposition at the Americana Hotel on August 1st through 3rd. Write for free registration cards.
AMA
135 West 50 St.
New York N.Y. 10020

Radical Software will be continuing publication with a promise of nine more issues to be distributed by Gordon & Breach Publishing Company. Subscriptions can be ordered for $12.50 by sending money to Radical Software, Suite 1304, 440 Park Avenue South, New York City 10016. Individual issues will still be available at bookstores for $1.95 each.

We have given up our loft in Manhattan and are working out of decentralized locations in upstate New York, the city, and California. Contributors may send material to us at Box 543, Cooper Station, New York City 10003.

We also want to let others do whole issues of Radical Software so if you are interested, let us know.

CTL INFORMATION LIBRARY

For the past few months we have been collecting information for "Video Tools." We find ourselves with a lot of material on audio, video, electronics, electricity, sound and light theory. We are in the process of organizing the material. After that we hope to set up an information library.

I think we tend to shelter ourselves. We are often in contact with people who reaffirm our beliefs.. We are so excited about the happenings with 1/2" video that we sometimes forget that network television is as influential as ever. I think we have to understand and know who's buying the equipment we can never afford. The expanding technology has made 1984 all too close.

We must always be aware of the power of the tool, and examine our motives and application.

I hope things will get better.

Paula Jaffe

MANY PAINTERS, printmakers, and sculptors in France reacted violently against photography and its incredible popularity. Condemnations were showered upon it in press articles and caricatures. Not only had it become an economic threat to the artist; its claims as an art form were resented.

Baudelaire in the *Revue Française*, 1859, wrote "We must see that photography is again confined to its sole task, which consists in being the servant of science and art, but the very humble servant like typography and stenography which have neither created nor improved literature."

What a far cry from the triumphant shriek of Paul Delaroche on first seeing a daguerreotype, "From today painting is dead!"

The camera was a threat. The purpose of art was being changed by the public's demands for more exact likenesses, more perfect rendition of detail. The camera supplied the people with what they wanted.

VIDEO FESTIVAL IN JUNE

Throughout June The Kitchen will be holding a video festival dealing specifically with video as an electronic art medium.

Video artists from throughout the United States and Canada have been scheduled to present their works, which will include synthesized color and black & white visual compositions, simultaneous multi-channel video environments, and other rarely seen forms of electronic art.

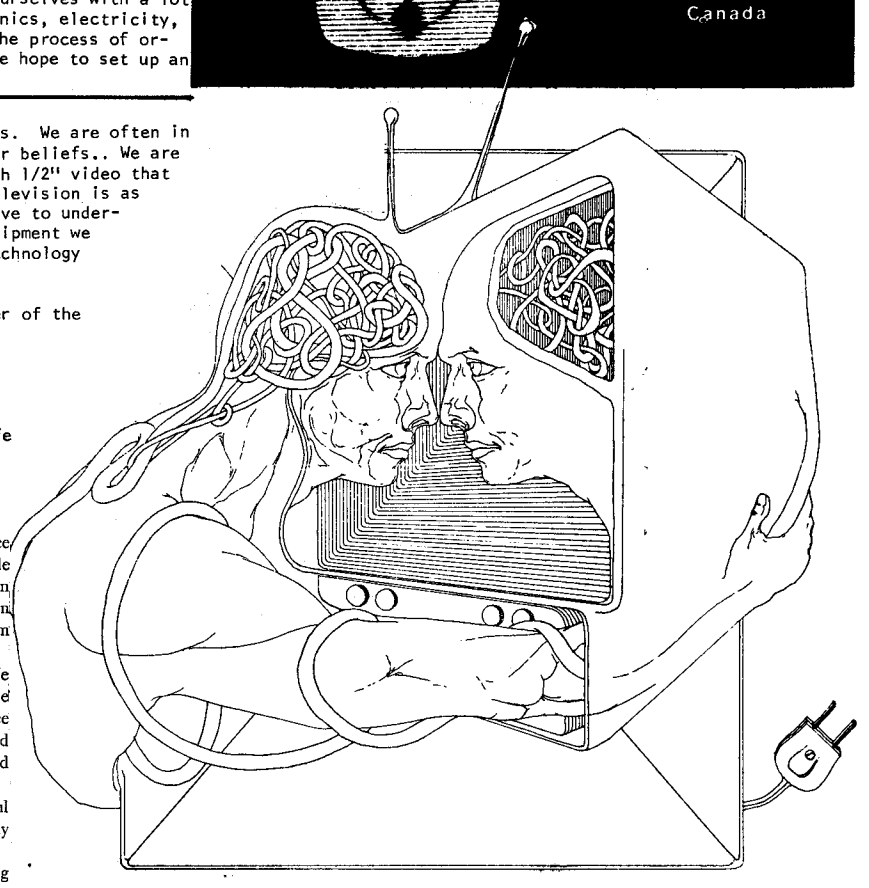
Among the artists participating are Nam June Paik, Eric Siegel, Stephen Beck (each of whom uses his own specially designed video synthesizer); Aldo Tambellini Video Free America - San Francisco, Jackie Cassen, Global Village, Space VideoArts, Stan Vanderbeek, Douglas Davis, and more than twenty other individuals and groups, both established artists and those new to the public.

Organizing (and participating in) the festival are Woody and Steina Vasulka, Shridhar Bapat, Bill Etra.

For information about specific daily Festival programs call (212) 475-9865, or write to The Kitchen, Mercer Arts Center, 240 Mercer Street, N. Y. 10012.

Further festivals are planned, dealing with all areas of the video space, particularly its more documentary/ naturalistic aspects: guerilla video, real time video verite, children's video tapes, etc.

Send information to:



--from "Environetic Synthesis" by Richard Lowenberg

Edison's First Studio, "The Black Maria," 1898

the egg store

VIDEO PRODUCTIONS

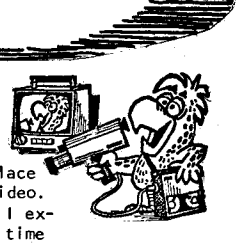
THE EGG STORE is a new production and editing facility developed by CTL Electronics and Frank Cavestani, and located at 146 Reade Street, just two blocks from CTL's showroom and service department. The primary function of The Egg Store is to provide a high quality production and editing facility for both 1" and 1/2" video tape, and to offer an environment for experimentation in the art and technology of video production. In addition, material can be transferred from 1/4" Akai, 1/2" CV, 1/2" AV, super 8, 3/4" cassette to 1" for editing, and then transferred back to the original format for distribution. Material shot on Akai, Sony, Panasonic, Javelin, IVC and Ampex equipment can be handled at The Egg Store.

The Egg Store is equipped with three Sony DXC 5000 color cameras, an Ampex 7800, a Panasonic NV 3120, the Sony AV 3650 and EV 320F. The sound system includes Nivico, Ampex, and Sansui components.

The studio will also be equipped for multi-media presentations including film, slides, audio and live actors, dancers and musicians.

Special considerations will be given to artists and non-profit groups to use the facility during unscheduled hours at a nominal fee. Careful consideration has been given to the needs of the video community, including the capacity for closed circuit viewing of tape for audiences up to 40 persons. The close proximity of CTL's service department assures that the equipment will always be operating at the required standards. Artists and engineers are welcome at The Egg Store.

For more information contact Frank Cavestani at (212) 431-5293.



Lui says:

"The Egg Store is a gathering place for people that are into new video. I'm excited by the Egg Store. I expect to be spending a lot more time there."

The Egg Store has a mobile color studio which was used by Sterling Manhattan Cable. On April 23 and 24 the A. J. Liebling Counter-convention on journalism was broadcast on channel 10. The panel for the show included: Otto Preminger, Gore Vidal, Thea Sklover, Abbie Hoffman and Gabe Pressman. The crew taped 16 hours, 10 of which were live. They used 2 Sony DXC-5000 series cameras and a Viscount switcher.

PORTABLE STUDIO

SEG with mini-monitor mounted in belt battery pack. This design is currently in the CTL research group.

May 20, 1972

Michael Shamberg
TOP VALUE TELEVISION
Box 630
San Francisco, California

Dear Michael:

This letter confirms our commitment to make our Egg Store video editing facility available to TOP VALUE TELEVISION, your project to videotape the 1972 Political Conventions in Miami Beach.

TOP VALUE TELEVISION is a joint project of Raindance and Ant Farm Video. Using the techniques and technology of portable (1/2") videotape we plan to make non-commercial television of the 1972 Republican and Democratic conventions.

GLOSSARY

amplifier - A device used to increase the power, voltage, or current of a signal.

audio-video mixer (modulator) - An electronic component of an RF transmission system that combines the separate audio and video signals into one. The combined signal is then fed to the antenna terminals of an ordinary television receiver. Sometimes called an RF converter.

band-elimination (reject) filter - A filter that attenuates a particular band of frequencies, while permitting other frequencies to pass and be heard.

band-pass filter - A filter that attenuates all but a particular band of frequencies. The opposite of a band-elimination filter.

capstan - A rotating spindle used to move things.

cassette (cartridge) - Pre-packaged tape in self-enclosed format.

channel - The segment of the RF spectrum to which a television station is assigned, or to which a television camera is tuned when transmitting via radio frequencies.

closed circuit - A system of transmitting TV signals to receiving equipment directly linked to the originating equipment by coaxial cable, microwave relay or telephone lines.

coaxial cable - A special cable designed to carry one or more channels of television signals simultaneously.

color bars - These are established color standards set up by the Society of Motion Pictures and Television Engineering to appear at the beginning of each tape, and are used within the station to set up proper color balancing of that tape for the reproduction of viewing.

contrast - The difference in intensity between colors and/or the black and white parts of a picture.

contrast ratio - Brightness range between blacks and whites.

CRT - Abbreviation for Cathode Ray Tube, the type of tube used to display television signals.

degauss - To demagnetize or erase, a degausser being the device which does this.

distortion - The departure, during transmission or amplification, of the received signal waveform from that of the original transmitted waveform.

drop out - A black and white horizontal "blip" on the picture tube during playback of a videotape. Caused by missing video information. Common physical cause: missing iron oxide coating on videotape.

electronic editing - The editing of videotape by selecting and electronically reassembling the selected section of the best "take" to produce a finished program or commercial. Electronic editing is a post production (after shooting) procedure.

erase head - The leadoff head of a tape recorder that erases previously recorded material on the tape prior to its passing the record head.

field - One-half of a complete picture (or frame) interval containing all of the odd or even scanning lines of the picture.

field frequency - The rate at which a complete field is scanned, nominally 60 times a second.

film chain - A term in tape used to encompass the total grouping of equipment used to convert film picture frames to electronic picture frames on videotape. This group of equipment usually contains 35 mm. projectors, 16 mm. projectors, 35 mm. slide projectors.

frame - One complete picture consisting of two fields of interlaced scan lines.

frame frequency - The rate at which a complete frame is scanned, nominally 30 frames a second.

frame roll - a momentary vertical roll on the picture tube.

freeze frame - To hold a single frame or picture for a period of time, thus freezing the action.

frequency - Vibrations per second of a signal.

frequency modulation - The periodic variation of signal frequency affecting pitch.

gain (video) - To adjust the picture contrast. The term "to ride the gain" (when used in connection with visual images) is to check and adjust that contrast, either mechanically or manually.

generation - This refers to the number of times a dupe is removed from the original master video tape. For example, the video tape used by the VTR during the actual shooting is a first generation tape. The edited dupe made from those original tapes would then be once removed from the original and be called second generation tapes.

ghosting - Repetitive secondary picture images. This is usually caused by reflections. This effect is often seen on home TV screens when there are big buildings around the receivers.

gray scale - White-through-grey-to-black shade values on the TV screen.

head - The scanning device on the VTR which records or plays back the video information from the videotape. There is also a sound (audio) head on a VTR that records the sound track separately on a special portion of the videotape.

helical scan - The type of videotape recorder which records video information along slanted tracks on the tape.

hertz - A term used internationally in place of "cycles per second." Hertz (Hz) derives from the name of the German scientist Heinrich Rudolph Hertz, who was first to detect, create, and measure electromagnetic waves.

immediate access - The ability to retrieve or store information instantly.

interference - In a signal transmission path, extraneous energy which tends to interfere with the reception of the desired signals.

interlaced scanning (interlace) - A scanning process in which each adjacent line belongs to the alternate field.

jack - A socket-type connector to which temporary connections may be made with patch cords.

kinescope recording - A film recording made by a motion picture camera designed to photograph a television program directly off the front of a television tube. Sound is recorded simultaneously. Often called a "kine."

line feed - A coaxial cable either connecting a place where a shooting is taking place to a distant videotape recording facility; or connecting a station where a program is originating to other stations broadcasting that show or commercial.

line frequency - The number of horizontal scans per second, nominally 15,750 a second. (The number of frames --30-- times the number of lines per frame --525.)

magnetic tape - Iron-oxide-coated plastic tape used in magnetic recordings. Standard widths are one-quarter, one-half, and one inch.

master - The prime or original recording.

microwave - A method of transmitting closed circuit television signals through the air on a highly directional, line-of-sight system from the originating station to one or more receiving stations.

mixer - A device for combining several input signals by algebraically summing their instantaneous amplitudes.

monitor - A highly stabilized cathode ray tube that accurately reproduces the taped information.

noise - The word "noise" is a carryover from audio practice. Refers to random spurts of electrical energy or interference. May produce a "salt-and-pepper" pattern over the picture. Heavy noise sometimes is called "snow."

oscilloscope - An instrument that reproduces on the screen of a cathode ray tube a graphical representation of signals as voltages with respect to time. Used to determine amplitude, frequency, and other waveform characteristics.

patch - A plug-in connection between two lines. There can be video (picture) patches or audio (sound) patches or both.

picture tube - A cathode ray tube used to produce an image by variation of the intensity of a scanning beam.

receiver - A television set, designed for tuned (RF) channel reception of sound and picture. A receiver/monitor is a combination instrument capable of receiving RF or video and sending out video signals.

GLOSSARY cont.

recording head (audio) - A stationary assembly used to record or play back electrical impulses at audio frequencies.

recording head (video) - Mechanical rotary assembly, usually a rotary motor driven device, for impressing video information onto videotape.

resolution (horizontal) - The amount of resolvable detail in the horizontal direction of a picture. A picture which is sharp and clear shows small details, shows

has a good, or high, resolution.

RF - An abbreviation for Radio Frequency, a system of transmission utilizing tuned bandwidths of the radio spectrum to carry both audio and video signals -- as in commercial TV broadcasting.

signal - An electrical pulse. In particular for our work, the electrical pulse which expresses the translation of light into electrical energy. Signals are noted in terms of strength (voltage) and frequency (cycles per second). Audio signal frequencies range from 20 to 20,000 cycles per second; video, from 20 on up into the millions of cycles per second.

special effects generator - A device permitting selection of several special combinations of images, supplied by one or more video inputs.

switcher - A control which permits the selection of one image from any of several cameras to be fed into the television display or recording system.

switcher-fader - A device permitting gradual, overlapping transition from the image of one camera to another. Sometimes incorporated as part of a special effects generator.

sync generator - A device used to supply a common or master sync signal to a system of several cameras. This insures that their scanning pulses will all be in phase. Scanning pulses out of phase produce distortion or rolling. This is sometimes noted as sync "loss."

synchronization - The maintenance of one operation in step or "phase" with another. Abbreviated "sync."

system - Equipment which when combined, form an organized group.

tape recorder - A device, partly electrical - partly mechanical, for impressing electrical signals into magnetic tape. It usually operates by feeding tape off one reel and onto another (generally from left to right).

test pattern - The specially designed artwork card used to help line up and adjust equipment before taping or studio programming.

transistor - A device made from semiconductor materials that can act as an electrical insulator or conductor, depending on the electrical charges placed upon it. Transistors are used in amplification and oscillation as a substitute for vacuum tubes.

the transport - Usually used to mean the device that moves the medium of information, i.e. the tape transport.

time sharing - The ability to use something for more than one purpose at the same time.

video - Seeing yourself on TV.

VTR - The videotape recording and playback machine.

videotape - The technology which records picture and sound using magnetic information as its methodology of recording, storing and reproducing. The word can be used to describe the actual tape itself of the entire production process, i.e. let's videotape this production.

vidicon - The type of camera pickup tube used most frequently in closed circuit television. Uses Antimony TriSulfide as a photo-sensitive surface.

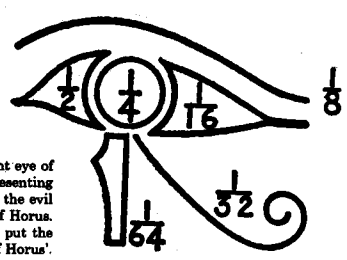
viewfinder - A small monitor built into the TV camera, enabling the cameraman to see exactly what his camera "sees."

wye (Y) connector - A device having the appearance of the letter "Y"; at the arms and bottom of the stem are three connectors, all connected in parallel at the intersection. Should not be used for mixing signals, but for dividing a signal to send it to more than one place.

Fractions were written in several ways. The ancient system, which continued in use for land or corn was given by halving and is most curious. The following fractions could be written:

1/2 1/4 1/8

1/16 1/32 1/64



These symbols formed part of an eye: the right eye of Horus, the Sun. In an ancient myth, no doubt representing the fight between day and night, evil and good, the evil god Seth attacked and tore to pieces the eye of Horus. Thoth, the god of learning, reason and justice, put the pieces together again to make the 'sound eye of Horus'.

"The Intelligent Eye"
by R.L. Gregory

Survival

My friend, I am going to tell you the story of my life, as you wish; and if it were only the story of my life I think I would not tell it; for what is one man that he should make much of his winters, even when they bend him like a heavy snow? So many other men have lived and shall live that story, to be grass upon the hills.

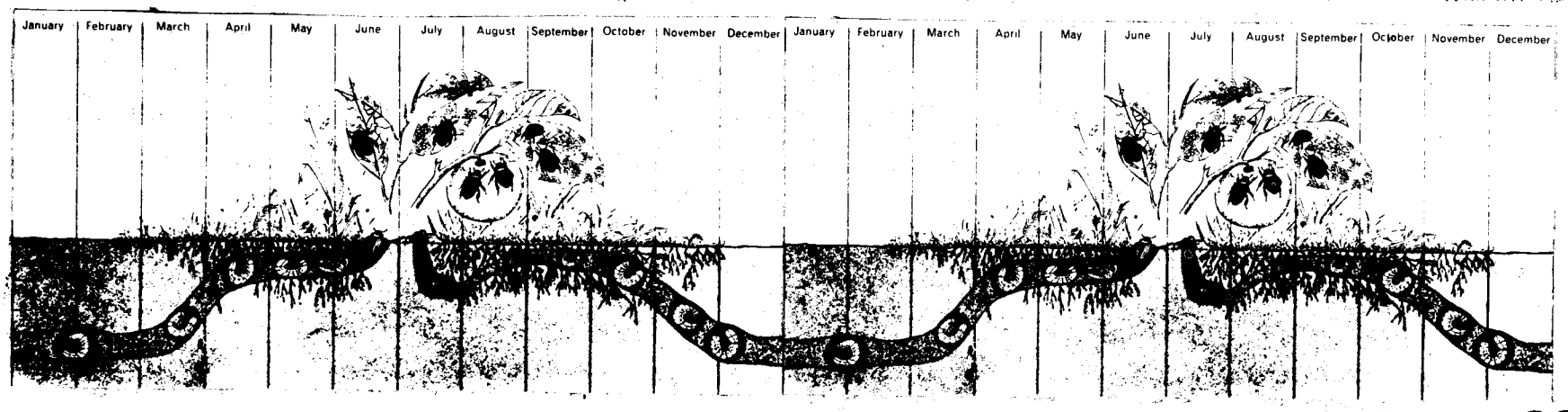
It is the story of all life that is holy and is good to tell, and of us two-leggeds sharing in it with the four-leggeds and the wings of the air and all green things; for these are children of one mother and their father is one Spirit.

This, then, is not the tale of a great hunter or of a great warrior, or of a great traveler, although I have made much meat in my time and fought for my people both as boy and man, and have gone far and seen strange lands and men. So also have many others done, and better than I. These things I shall remember by the way, and often they may seem to be the very tale itself, as when I was living them in happiness and sorrow. But now that I can see it all as from a lonely hilltop, I know it was the story of a mighty vision given to a man too weak to use it; of a holy tree that should have flourished in a people's heart with flowers and singing birds, and now is withered; and of a people's dream that died in bloody snow.

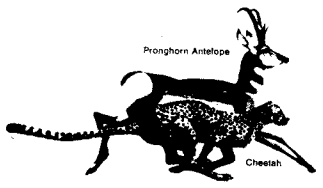
But if the vision was true and mighty, as I know, it is true and mighty yet; for such things are of the spirit, and it is in the darkness of their eyes that men get lost.

-- Black Elk

Black Elk Speaks: University of Nebraska Press, Lincoln



Survival



VIDEO MOVEMENTS

The $1500 video system allowed large numbers of people to produce video that never had access to such a system before. A number of groups formed in the New York State area, and they have been funded primarily by the New York State Council on the Arts. These groups are the People's Video Theatre, Raindance, Videofreex, and Global Village.

New York State Council on the Arts (NYSCA)

The State Council on the Arts should be credited with having had the imagination to fund these groups two years ago. Not only did it fund them, but it left them pretty much alone. No government agency has gotten more energy and real information for its money than the State Council has from the video community.

1971-72 NYSCA Grants for TV/Media:

WCNY-TV, Syracuse $26,350
to cover costs of one or more 1/2-hour or one-hour color programs for the New York Network Art series, to be aired by all 7 member networks.

WLIW-TV, Garden City, with (each) $21,350
WMHT-TV, Schenectady; WNED-TV, Buffalo; WSKG-TV, Binghamton; and WXXI-TV, Rochester -- same as above.

WNET-TV, New York City (Ch. 13) $69,200
same as above, and to support the Artists' TV Workshop as a unit of the Experimental TV Center (artist-in-residence Nam June Paik).

American Crafts Council $ 2,800
to further the use of video feedback in the context of crafts exhibits.

The Block of 7th Street $19,986
Media Project, Inc. -- to support media workshops and work with teenagers; to produce fund-raising & publicity programs.

Broadway Local $ 2,000
to buy video equipment to record & play back community events.

Brooklyn Museum $ 5,000
to explore the potential of Museum arts programs for use on TV.

Collaborations in Art, $20,000
Science & Technology -- for continuation of collaborative art & technology programs including "Multi-Media Poetry Tour."

Electronic Arts Intermix, Inc. $35,300
to support three existing programs: Perception; Avant Garde Festival; Open Circuit.

Experimental TV Center, Ltd. $12,248
toward design and construction of Paik-Abe video synthesizer.

Experiments in Art & $ 4,550
Technology -- to produce thirteen 1/2-hour experimental programs with artists for Public Access TV.

Finch College Museum of Art $10,160
to help support a 6-week videotape exhibition of ten programs at the Finch College Museum.

Global Village Resource $15,000
Center, Inc. -- toward continuation of artist and community video workshops.

Intermedia Institute $40,000
to produce eight programs in the multi-media evening series at the Institute.

Media Bus (Videofreex) $15,000
toward the continuation of the Media Bus Mobile community video workshops in upstate New York, and the development of various video methodology workshops.

The Media Coop $ 5,000
to support a conference with other media groups to encourage community participation in media.

Media Study, Inc. $25,286
to establish a media center in Buffalo and Western New York State.

Metropolitan Museum of Art $16,453
toward the production costs of one 1/2-hour color broadcast tape on the Museum's collections.

New School for Social $14,700
Research -- to establish a public access cable TV facility with program content control administered by the New School.

Open Channel $14,000
to support a New York community cable TV facility.

People's Video Theatre $18,000
toward continuation & expansion of community television programming.

Port Washington Public $14,000
Library -- to continue an experimental media project in the community.

Priority One of Greater $ 3,000
Syracuse, Inc. -- to continue multi-media productions dealing with community issues.

Raindance Foundation $19,500
to continue Radical Software and community program origination for cable TV.

Rochester Museum & $15,000
Science Center -- to continue video equipment pool.

Space for Innovative $38,400
Development -- salaries for directors of Space VideoArts, general costs of administration of the Space; for an independent non-urban cable TV pilot project conducted by Paul Ryan.

Sonic Arts $ 5,000
to continue and develop multi-media concerts.

Elaine Summers Experimental $14,000
Intermedia Foundation -- to continue experiments in intermedia production, including the relation of video to dance & theatre.

Supernova of the Arts, Inc. $14,000
to continue existing programs.

Unit Productions, Ltd. $ 3,000
for six in-studio interviews with Long Island artists for broadcast.
to video tape multi-media workshops organized by the Museum of the City of New York.

United Presbyterian Church $ 6,750
for trainees in cable TV workshops.

Western New York Educational $65,000
Television Association, Inc. -- to produce and tape three or four concerts and to produce a 1/2-hour program on artist Charles Burchfield.

Creative Artists Public Service Program (CAPS)

A spin-off of the State Council is the Creative Artists Public Service Program. This program was specifically designed to aid individual artists who had no support of a university, foundation, or other bureaucracy.

The individuals who got commissions in 1971 and 1972 are:

1972 CAPS Commissions in Video -- $2,000 each

Peter Campus — to make a 2" broadcast color version of his "Double Vision" tape now on 1/2".

Cary Fisher — for a community video project to document neighborhood activities on East 9th Street.

Davidson Gigliotti - (member of Videofreex) - to document a "New York City Overview" to show the city as an organic system.

Philip Mallory Jones - for a video exploration of the importance of Ithaca in the Underground Slave Railroad.

H. P. Jouchmans - for exploring and documenting life within the "Alternate Culture" in a self-contained video truck.

Benedict Tatti — using electronic equipment to develop the video medium as a three-dimensional conceptual design tool.

Keiko Tsuno — to document the activities & needs of the Asian community in New York City.

1971 CAPS Commissions in Video -- $2,000 each

Lee Ferguson — to increase the consciousness of a group of women through video feedback and to communicate that consciousness to other women and men.

Juan Garcia, Kenneth Marsh & Elliot Glass - to increase the consciousness of the Puerto Rican community through video feedback, and to communicate that consciousness to other people.

Beryl Korot & Phyllis Gershuny - to create a video tape about the potential of video.

Woody Vasulka — to further his work in the creation of generated images.

THE PYRAMID AND THE CIRCLE

It was man's presumption to use tools to harness the earth. Agriculture created cities and "civilization," where status is measured in proportion to one's distance from the earth.

Men grew distant from one another as they went further and further from their natural environment. In early Greece, the annual rebirth of spring was celebrated with songs to the ram in which all members of the community participated. As the Greeks became more sophisticated and their civilization grew, the collective songs were changed into a contest in which only a few competed to see who was "best." Eventually what started out as a collective hymn to life became a contest between dramatists to see who could write the best play about individual conflict. The participation of all had been abandoned. Now the many were passive spectators; few were the active participants.

It would seem that civilization is based on pyramidal structures, in which the few actively participate in the flow of information. Tribal man's culture, on the other hand, is based upon the circle, in which all participate equally, all have access to all the information: "In the democratic society of the Plains," Richard Erdoes writes in his book, The Sun Dance People, "every member of the tribe had his say. In a tribal council he would be listened to respectfully and without interruption." The tribal council was circular. There was no filtering down of information from the top. There were only participants, no spectators.

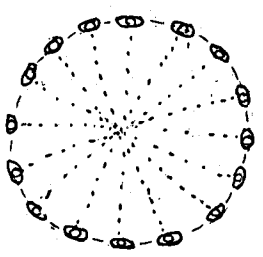
Until portable video, all media was in the hands of the few. Starting with writing or any other recording system, the use of the communications media was always limited to those at the top of the pyramid. What is exciting about hand-held portable video is that any person who can afford a new car can afford his own recording, storage, and playback system. Short video tapes on 1/2" equipment produced for less than $15.00 can be as moving as films or TV documentaries costing $150,000.

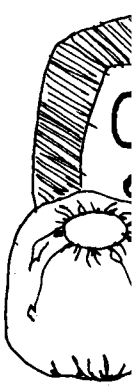
Video raises the consciousness of those who use it because it verifies what they see. People are frequently inarticulate about a meaningful experience; with video there is a document which communicates that experience.

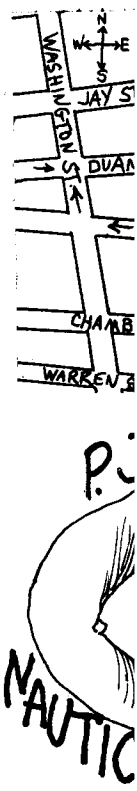
In television time is money and therefore time is scarce. Real people are seldom seen on network television. Instead the time is given to stars and politicians. With video, time is abundant, and real people are its content. Stars and politicians look out of place on video -- their aura of importance is lost in the midst of honesty.

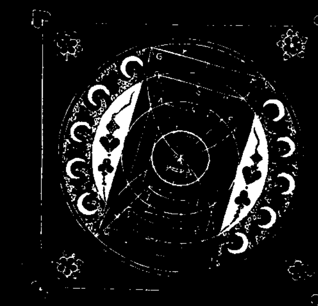
Video is not the television experience, nor the reading experience, nor any other communications experience where the many are passive receivers of information. Video may be the tool to help people get back to the circle, natural communication, and the earth.

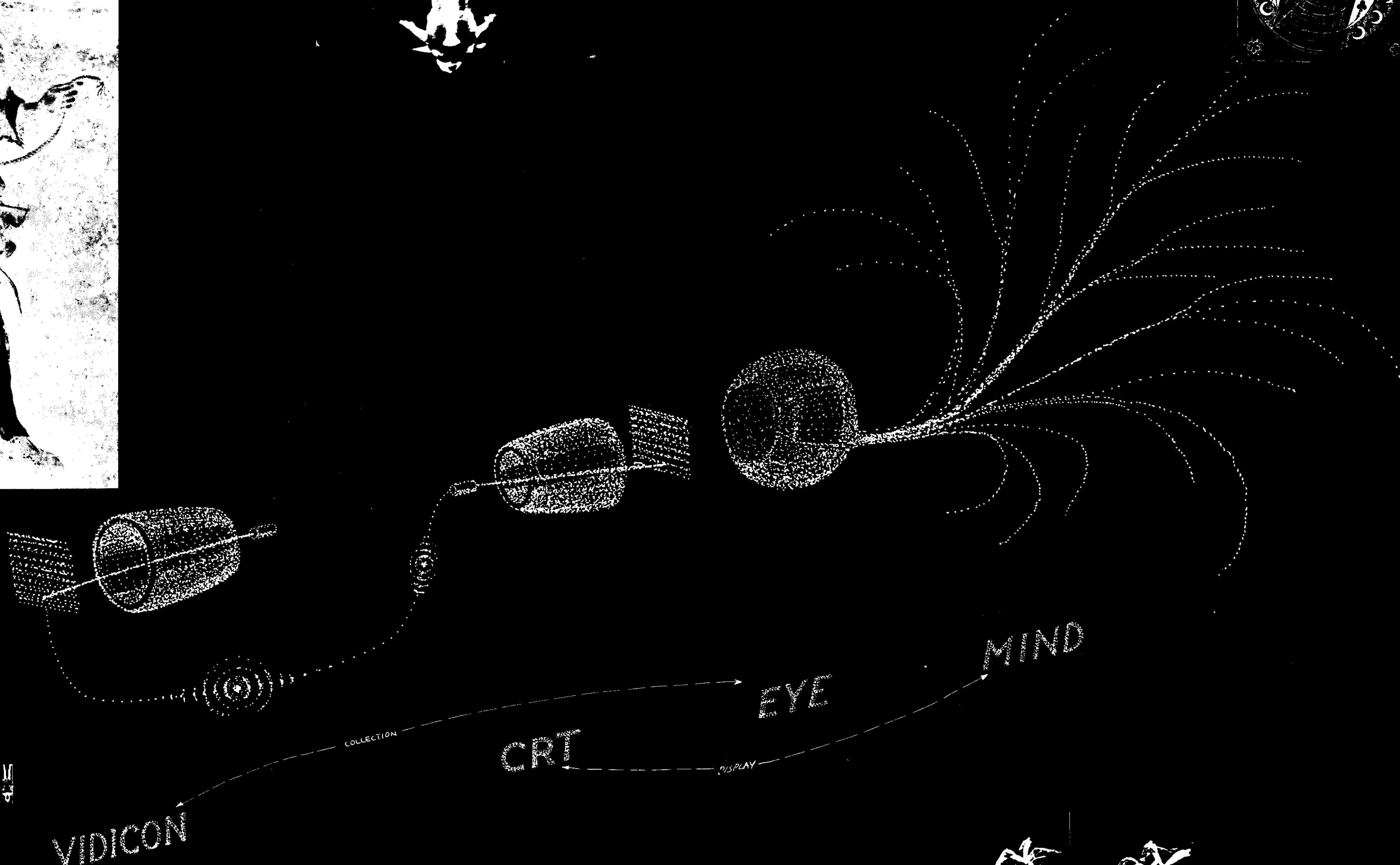
Griffin

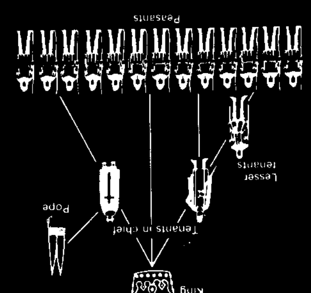









MIND
EYE
CRT
VIDICON
COLLECTION
DISPLAY


Peasants
Lesser tenants
Tenants in chief
Pope
King