

**ADO 1000  
HIGH QUALITY DIGITAL EFFECTS  
ARE NOW MORE AFFORDABLE  
THAN EVER BEFORE**



**AMPEX**

# EMMY AWARD WINNING, INDUSTRY STANDARD DIGITAL OPTICS AT AN AFFORDABLE PRICE

**N**ow the ADO™ system, with its high video quality and built-in excitement, is available to facilities with modest budgets. Features like rotation and perspective, the full array of ADO effects, multi-channel capability, and many others can add more imagination and sparkle to your programming than you ever thought possible. And the ADO 1000 can make your budget go even further if you decide to buy the *two-dimensional* version now, and upgrade later to 3D as your facility, and your budget grow.

## 30 "Instant" Effects

The ADO 1000 system gives you immediate access to 30 on-line effects. A single key-stroke will incorporate zooms, flips, tumbles and other award-winning effects into live programming. And for added flexibility, these effects can be changed at any time, even while on the air. This feature provides much more versatility than the usual "shotbox", because now you can:

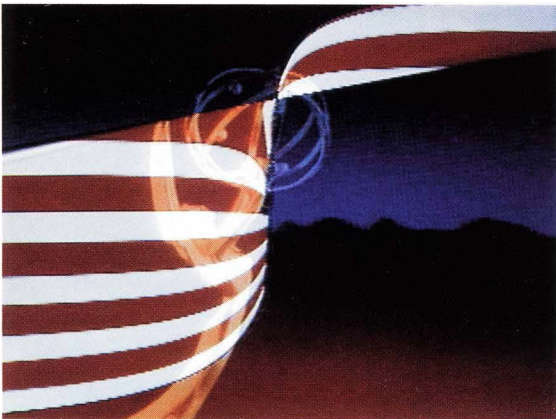
- run the effect forwards and backwards
- make a smooth transition (slew) from any present picture location to the beginning of any effect
- specify 10 position effects in three dimensional space, and choose different types of transitions to reach those positions
- "trim" each effect as a minor adjustment for X and Y position, and/or size.

## An ADO 1000 system grows with your needs, and fits into your budget, too.

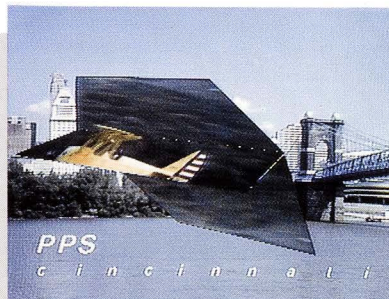
The "1000" can be expanded to almost any level, so you're not locked into a deadend system.

When integrated with an Ampex AVC™ switcher, you can call up all 30 effects from the switcher, use the fader arm for effects control, and use the "take" key to run the effect.

Other options like a Digi-Matte™ accessory and RGB input and output provide flexibility and easy interface to other studio equipment. For example, Digi-Matte (a proprietary key processing channel) processes a full 8-bit key simultaneously with the input video, allowing objects to be flown against a background. An independent H phase control for the key input permits the ADO system to accept key inputs that are *out of time* with the video inputs, allowing easy yet precise interface with other studio equipment.



Full creative control allows effects to be run in forward and reverse. Any effect you build is precisely described by a set of numbers, so you have the perfect combination; complete freedom in creating the effect, and the ability to return to it at will, exactly as you created it.





## ADO 1000 Standard Features and Effects<sup>1</sup>:

- 30 on-line effects with single key recall
- Controllable aspect ratio
- Continuously variable compression and expansion
- Picture cropping
- Precise picture placement
- Mirror
- Blur
- Mosaics
- Posterization/solarization
- Luminance reversal
- Soft key edges
- Border color generator
- Key generator
- Programmable key flag
- Globals
- Channel identifier
- Auto cube
- Dual video inputs
- Full four-channel capability (user configurable)
- Floppy disk (for effects archival storage)
- Multi-control panel/multi-channel control software

## Optional features and effects:

- Digi-Matte™ key processing channel
- ADO/AVC integration package
- RGB input/output
- Perspective upgrade for the 2D system

<sup>1</sup> The ADO 1000 system comes in two configurations; a 2D version for flips, tumbles and zooms, and a 3D version with 3-axis rotation and true perspective.

**Unique to the ADO system is a 3-axis joystick that lets you control all effect parameters. Floppy disk memory allows the use of individual disks for each production requirement.**



**Ampex Digital Optics provides an almost endless combination of effects to suit your creative imagination and add sparkle to your productions.**



# ADO 1000 SPECIFICATIONS AND ACCESSORIES

## Accessories

The **Hub Box** acts as a buffer and line isolator for the ADO communication lines. It allows four control panels to communicate on the bus, and at the same time be isolated from each other.

The **Interface Box** allows daisy-chain interconnection between control panels in multi-control panel installations. (When more than two control panels are used, a *Hub Box* is recommended).

The **Test Signal Generator** generates precision test patterns to be used during troubleshooting of the digital single path, as well as for the alignment of output analog circuitry.

**Up to 8 Control Panels** can be used with the ADO system, and can be located as far as 2,000 feet from the Signal System.

## ADO System Specifications

### PHYSICAL

Signal system chassis:

H: 22.72" (58 cm), W: 17.5" (44.5 cm), D: 22" (55.9 cm), Wgt: 200 lb (90 kg.)

Can be mounted in 19" equipment rack or free-stand as a tabletop unit.

Control system:

Monitor housing contains 9" CRT and mini floppy disk drive H: 11.75" (30 cm),

W: 15.25" (39 cm), D: 14.5" (37 cm) Wgt: 30 lb (13.5 kg.)

Keyboard: H: 3.25" (8 cm) max. (sloping front), W: 15.25" (39 cm), D: 7.75" (20 cm), Wgt: 8 lb (3.6 kg.)

### POWER CONSUMPTION

110-120 VAC, 60 Hz or 220-240, 50 Hz – single phase

Signal system 1.8 kW; Control system: 100 W

### CONTROL SYSTEM

Detachable keyboard with 3-axis joystick

9-inch CRT for data display

Mini floppy disk drive for effects archiving

Remote data display output (Non-synchronous)

GPI Trigger Input

Serial Control . . . ACE Interface

### SIGNAL SYSTEM INTERCONNECTS

Video Inputs: Two, BNC 75 Ohm, 1 Volt, Composite, Analog encoded

Key Inputs: Two, BNC 75 Ohm, Composite or Non-Composite, Analog encoded

(White or black in key hole.)

Video Outputs: Two, BNC 75 Ohm, 1 Volt, Composite, Analog encoded

Digital Signal Data

To Combiner: Balanced ECL Digital Data, 15 feet max, multi-wire cable supplied with Combiner

Digital Control Data: RS-422, 4-wire plus shield, 9-pin 'D' Connector

Communication line. Remoteable 2000 ft. (600 meters)

(between control panel and signal system)

### PERFORMANCE

Luminance frequency response:

NTSC  $\pm 0.5$  dB to 4.2 MHz;  $+0.5 -1.0$  dB to 5.0 MHz

PAL  $\pm 0.5$  dB to 4.5 MHz;  $+0.5 -1.0$  dB to 5.0 MHz

Input video level range:  $\pm 2$  dB

### DIGITAL SIGNAL SAMPLING

Luminance sampling rate: 13.5 MHz

Specifications subject to change without notice or obligation.

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**AMPEX**

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Audio-Video Systems Division

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