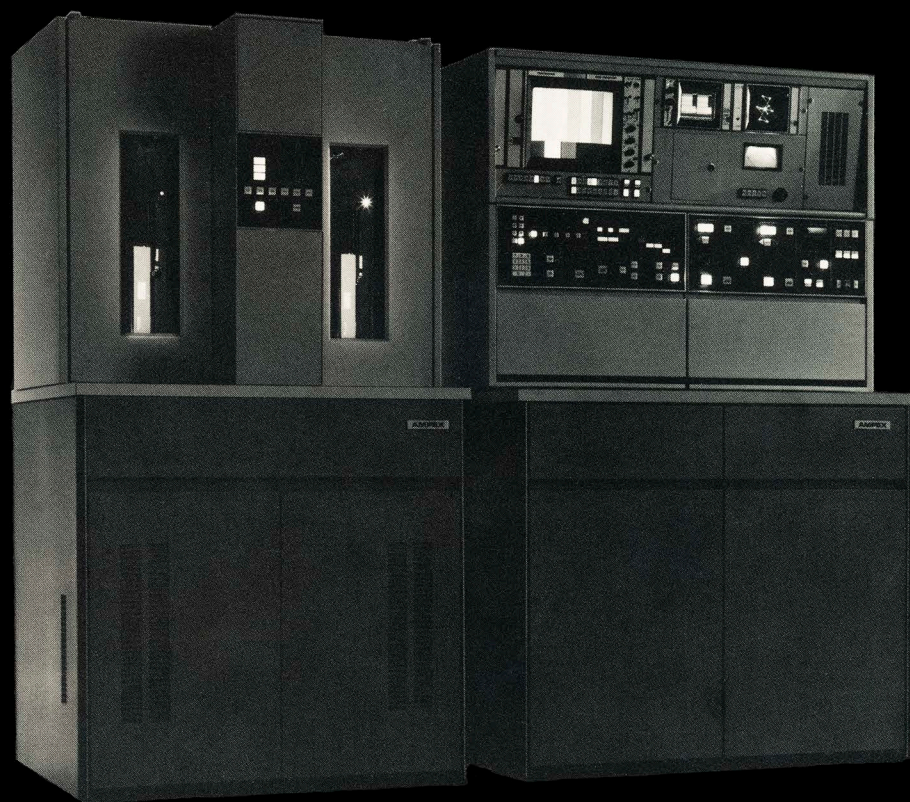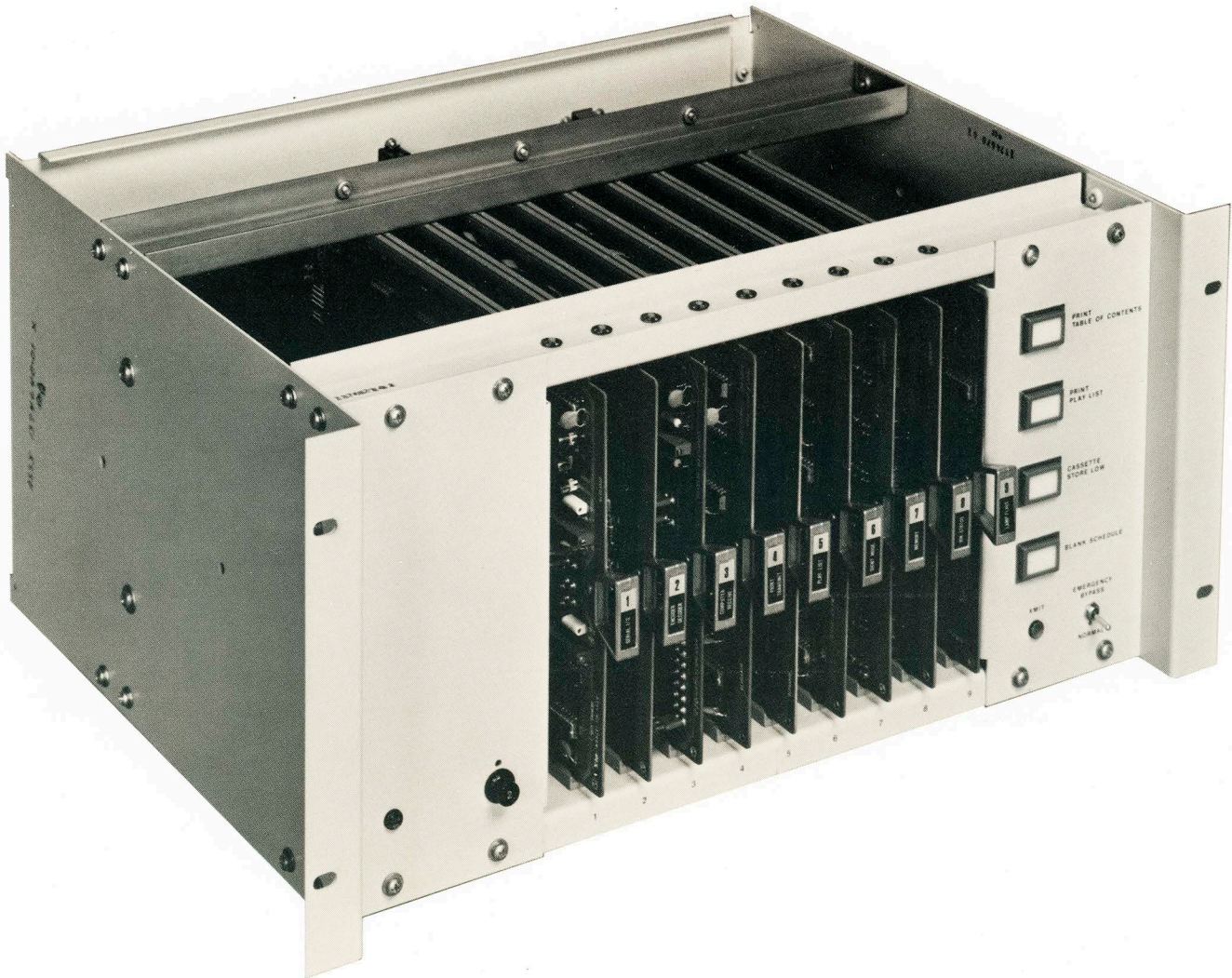# AUTOMATION DATA ACCESSORY

## for the Ampex ACR-25 Automatic Video Cassette Recorder/Reproducer



**AMPEX**

- permits programming and playback control by computer
- operates with various station automation systems
- reduces exposure to human error
- utilizes full potential of ACR-25

Automated broadcast operations can realize the full operational and economic potential of the Ampex ACR-25 Automatic Cassette Video Recorder by programming it with a computer. The secret of this significant step is the Automation Data Accessory (ADA), which operates with any ACR-25 equipped with the Ampex Identification Data Accessory (IDA), and which is compatible with technical automation systems.

ADA integrates the ACR-25 into your automated operations by acting as a kind of bilingual translator, receiving and storing information from the ACR-25 and transmitting it to the host computer, then storing and relaying the appropriate commands and information from the computer to the ACR-25. (See Technical Description on back page.) *The only human effort required to operate the ACR-25 is the loading and unloading of cassettes as necessary.*

Economically, the benefits are readily apparent. Since the computer does most of the work of scheduling the daily events to be aired anyway, it can easily supply a list of ACR-25 playbacks. ADA relays this list to the ACR-25, and the computer rolls the machine on cue. *All manual programming of the ACR-25 is eliminated.*

Adequate insurance against human error is provided. If a scheduled cassette is missing, the computer will recognize the error and the ADA will display a warning light. As the scheduled cassettes are played and the remaining number of scheduled cassettes is reduced, another warning lamp advises that the number of bins available for reloading is increasing. Both warning circuits are remotable.

When it is time to re-stock the ACR-25 with fresh cassettes, the machine's random-access feature simplifies the procedure. Cassettes can be loaded into *any* available bin by the operator in just a few minutes. ADA will tell the computer the name of each cassette and its location so that the computer can schedule it.

ADA also protects the ACR-25 against the possibility of computer failure. At any given time, the ADA can store as many as 63 scheduled events in its memory. Even if the computer goes down, the ADA continues to supply the proper sequence of playbacks to the ACR-25 per schedule. Plenty of time is available for the ACR-25 to be programmed manually. The ADA can also print out a list of the events in its memory on a teleprinter or similar display device, so the operator can readily determine which events are already programmed. He can then manually add succeeding events until the computer resumes control. Even power failure isn't catastrophic for the ADA. Auxiliary battery power protects the contents of its memory.

But there are more benefits. As any manager of a technically automated station knows, the on-air look of the station is sharper than ever. The right spots are played at the right time, reducing the need for make-goods and increasing the number of satisfied advertisers. Every second of commercial air time is fully utilized, and every spot aired can be recorded for logging and billing purposes. At the same time that people are being released from some of the routine work for other tasks, the whole technical and business operation gains more efficiency.
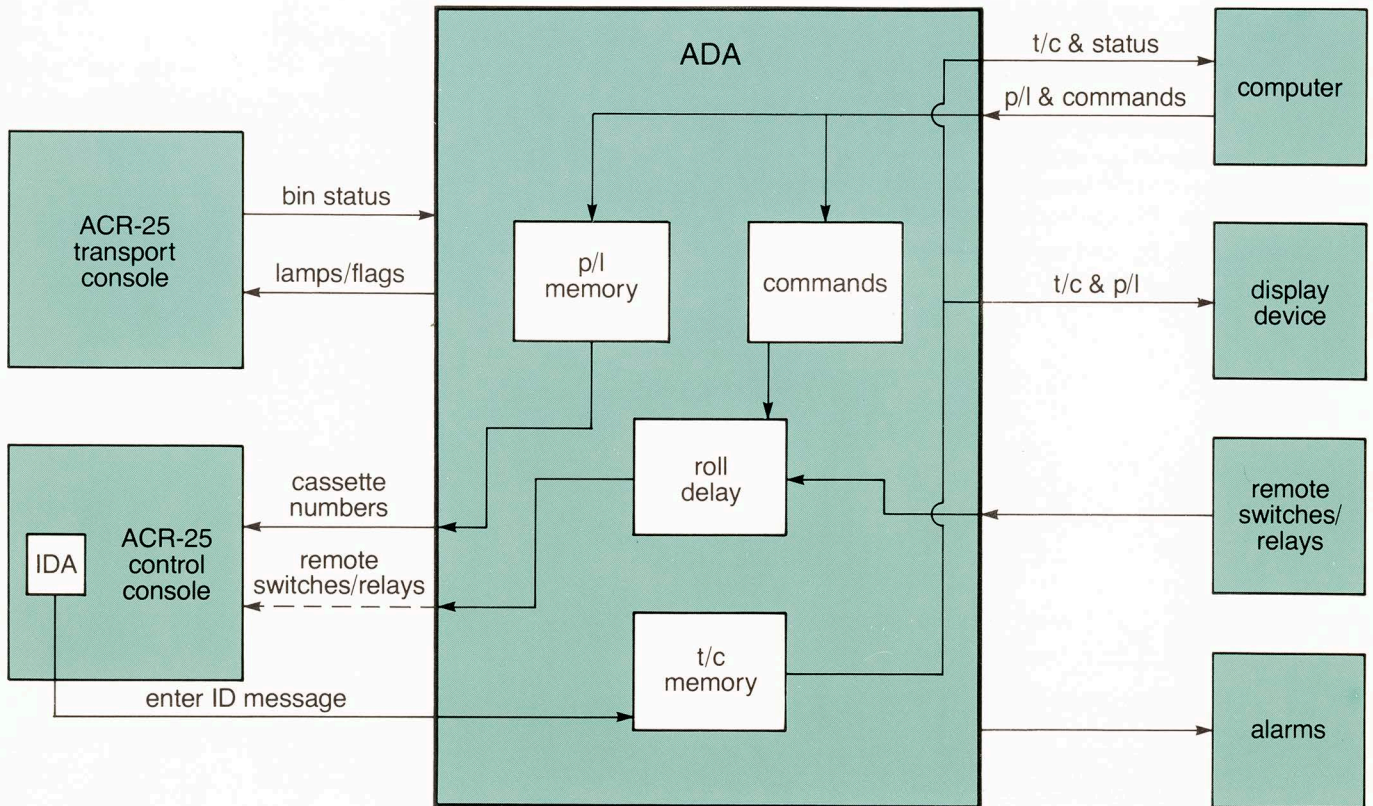
# technical description

The Ampex Automation Data Accessory (ADA) is a rack-mounted device that operates with any ACR-25 equipped with the Ampex Identification Data Accessory (IDA), and is compatible with any host computer that has input/output (I/O) interface to serial ASCII.* With a supplementary display device of the user's choice, (such as a teleprinter or line or page printer) the ADA prints out status and scheduling information. The only manual function to be performed is the loading/unloading of cassettes into the carrousel of the ACR-25.

In an automated station equipped with an ADA-equipped ACR-25, the host computer prints a daily list of ACR-25 playbacks. From this list, the operator selects cassettes from the library and loads them into *any* empty bin in the ACR-25. The ADA senses the insertion of the cassettes, and after the load door is closed, causes the ACR-25 to fetch the newly inserted cassettes and cue them. Identification messages recorded on the pre-roll segment of the cue track of each cassette are read by the IDA, and are then entered into the Table of Contents (T/C) section of the ADA's memory.

When the T/C is complete with data on all loaded bins, it is sent in one transmission to the computer for storage in memory. Each of the 24 items in the T/C comprises bin number, bin status, and identity message, if present. Bin status is recorded as one of four conditions: empty, contents unidentified, contents unscheduled, or contents scheduled.

Now the computer matches ACR-25 playbacks from the station schedule with items from the T/C. When a matching item is found, the computer records the bin number. Then the computer also computes the time from the end of each item to the beginning of the next, and selects an appropriate instruction: End After, Standby After, or Continue After. In this way the computer compiles the Play List (P/L), consisting of bin numbers and instructions in the order of presentation. Then the computer copies the P/L to the ADA's memory. Since the P/L is now stored in both the computer and the ADA, protection against computer failure is assured, and the ACR-25 can be controlled manually if necessary. Emergency battery power in the ADA protects memory contents.

In addition to the T/C and the P/L, commands and status information are exchanged between the ADA and the computer. The ADA requests the P/L from the computer and flags the computer when the ACR-25 becomes operable or goes out of service. Various functional commands may be input to the ADA either from the computer or manually from the station remote panel.

Throughout the operating day of the automated station, lamps on the ACR-25 transport control panel signal bin status. When a bin contains a scheduled cassette, the lamp for that bin is dimly illuminated. When a bin is empty or contains an unscheduled cassette, the lamp is fully illuminated. When the operator presses the Load Control button, only empty bins continue to show a fully illuminated lamp, while a flashing lamp indicates unscheduled contents. Mechanical flags prevent the operator from inadvertently extracting any scheduled cassette.

Front panel controls on the ADA permit the user to print the T/C or the P/L on a supplementary display. Other front panel controls warn the user when a cassette scheduled to play is not in any of the bins, or when the store of scheduled cassettes in the bins is low. There is adequate warning to allow reloading of the ACR-25.

*American Standard Code for Information Interchange

# ADA specifications

| | |
|---|---|
| **power:** | AC Input: 105 to 125 VAC, 47 to 63 Hz or 210 to 250 VAC with 230 V kit |
| **mounting dimensions:** | 19″ x 8¾″ x 14″ (exclusive of rear panel connectors) |
| **interconnect cable lengths:** | Interconnect Cable A (ACR-25 transport card rack to ADA) 50 feet; Interconnect Cable B (ACR-25 remote control chassis to ADA) 50 feet, (ACR-25 remote control chassis to IDA keyboard) 6 inches |
| **operating environment:** | Temperature: 0°C to 45°C Relative Humidity: 10% to 90% (non-condensing) |