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AE data
sets

AE2024

AE2025

AE2026

FAST, ECONOMICAL TRANSMISSION OF BUSINESS DATA OVER VOICE BANDWIDTH ON LEASED OR PRIVATE LINES

Now...high speed...flexibility...d

COMPACT, ATTRACTIVE DATA SETS

Capable Of High Speed Transmitting, Receiving Business Machine Codes Over Voice Bandwidth Leased Or Private Lines . . . To Nearby Or Distant Points.

and with outstanding AE features—

- ★ **HIGH SPEED**—up to 2400 bits per second.
- ★ **FIELD COMPATIBILITY**—Unique design permits field conversion from non-synchronous to synchronous, from binary to duobinary to meet any business machine requirement.
- ★ **CARD MODULES** for easy maintenance.
- ★ **FLEXIBILITY**—Options to meet a wide variety of specific applications.



AE2024—Non-synchronous frequency shift keying (FSK) binary; operates at any information rate up to 1600 bits per second.

AE2025—Synchronous FSK binary; operates at fixed information rates of 600 or 1200 bits per second.

AE2026—Synchronous FSK duobinary; operates at fixed information rate of 2400 bits per second.

Operating at speeds up to 2400 bits per second, AE Data Sets handle serial, binary data. They permit initial operation at low speed (300 or 600 bits per second) and later conversion to high speed (2400 bits per second) with minimum additional investment. Flexible and modern, the Data Sets are easy to install and to use.

Performance Speeds Ideal for variety of business applications—With serial binary data up to 2400 bits per second, the equivalent of over 205,000 words per hour may be sent by the AE2026 Data Set. Lengthy reports which could take 3 hours to transmit by normal teletypewriter circuits take only 3 *minutes*. A complete reel of magnetic tape data with 6 million characters (1 million words) can be transmitted in less than 5 hours.

dependability...expansibility

OPTIONAL SERVICE FEATURES

Flexibility and compatibility—AE Data Sets can be equipped for half-duplex, full-duplex or economical one-way operation. Standard interface provides compatibility with many different kinds of business machines and data processing equipment: computers, magnetic tape terminals, keyboard printers, visual display units, etc.

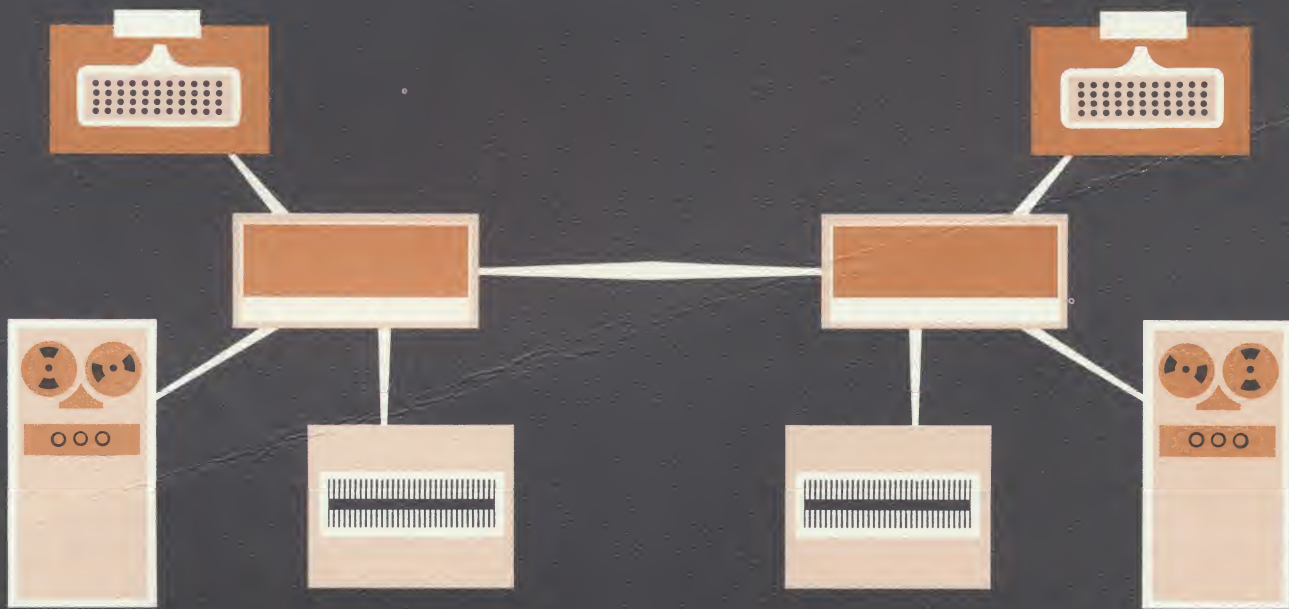
Variety of control circuits available—Interface leads compatible with EIA RS-232B for the operation of the AE Data Sets are:

CA "Request to Send"
CB "Clear to Send"

BA "Transmit Data"
BB "Receive Data"
CF "Carrier Detect"
SE "Suppress Echo"
CC "Data Set Ready"
CH "Speed Selector"
DE "Transmitter Clock"
DD "Receiver Clock"

Time Delays associated with "Clear to Send," "Carrier Detect" and "Suppress Echo" are available in a variety of combinations.

Line connection utilizing the line core furnished is applicable to either 2-wire or 4-wire, 600 or 900 ohm impedance.



Data sense and carrier line conditions, though normally conforming to EIA Standards, are readily provided in other configurations by strapping options.

—all this, and accuracy, plus minimum down time, too—Advanced proven FSK modulation techniques and zero-crossing detectors help to reduce the

long term error rate to much less than one error out of 100,000 bits. A simple system is provided which has high performance characteristics. Solid-state, conservative design increases reliability and trouble-free operation. Maintenance is easy. Plug-in cards are easily replaced, offering maximum convenience for trouble-shooting, and minimum down time.

TECHNICAL SUMMARY

DATA RATE

AE2024 — Up to 1600 bits per second.
AE2025 — 600 or 1200 bits per second, single or dual speed.
AE2026 — 2400 bits per second only.

DATA INPUT

Format Serial binary data.
Interface Negative unipolar, 0v and -3v to -25v; or EIA (RS-232B) bipolar, +3v and -3v minimum to +25v and -25v maximum.
Impedance In excess of 3000 ohms.

DATA OUTPUT

Format Serial binary data.
Interface Negative unipolar, -0.25v and -6v at 2 ma., (or -20v at no load); or EIA bipolar, +6v and -6v at 2 ma. (10v no load).

LINE TRANSMISSION

Carrier frequency AE2024 — 1200/2200 Hz.
AE2025 — 1200/2400 Hz.
AE2026 — 1200/1800/2400 Hz.
Modulation AE2024 — Non-synchronous FSK.
AE2025 — Synchronous FSK.
AE2026 — Synchronous FSK (Duobinary).
Detection Zero-crossing, linear FM/FSK.
Transmit level 0, -4, -8, -12 dbm (card strap).
Receiver sensitivity -33, -29, -25, -21 dbm (card strap).
Line connection 2-wire half-duplex, or 4-wire half- or full-duplex.
Impedance 600 or 900 ohms.
Line type (without auxiliary equalizer) FCC Tariff 260 Type 3003 (4A) or equivalent.

DELAY EQUALIZERS

200-type fixed value equalizers available for various types of facilities.

POWER REQUIREMENTS

117 vac, 60 Hz., approximately 15 watts.

PACKAGING

Card file enclosed in housing 6" x 9½" x 18¾". For desk top or hanging on wall. Color, two-tone beige standard. Shipping weight, 20 pounds.

For further information or assistance in ordering AE2024, AE2025 or AE2026 Data Sets, contact your nearest AE representative. Or write to the Director, System Sales, Automatic Electric Company, Northlake, Illinois 60164.

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