## Mag tape table headings

The descriptions are broken into the categories of: General Features, Performance Data, Cost Data, Marketing Summary, and Remarks. The definitions of the items under these categories are given below. If the descriptions mean the same as those in the previous tables, the explanation is omitted.

*Manufacturer.* This is the name of the original equipment manufacturer. With one previously mentioned exception, these are also the companies which market the units to the end users and service the leased or purchased units.

*Number of tracks.* This number includes the number of bits that are recorded simultaneously across the width of the magnetic tape. The number includes a parity bit which is checked when read.

*Recording.* The entry means either nonreturn to zero (NRZ) or phase encoding or both.

*Automatic threading.* This indicates the capability to automatically thread the tape on the take-up reel, load the vacuum columns, move the tape to the load point (reflector), lower the read/write head and indicate ready to the operator and return ready status to the controller. Some units also include a power window which is automatically raised during the load process.

*Read backwards.* This feature is not usually considered critical but it does increase the efficiency of data sorts and merges, and other data processing applications. It might be a deciding factor when competitively comparing two otherwise equal contenders.

*Tape speed.* This number indicates the magnetic tape speed, in inches per second (ips), during read/write operations.

*Recording densities.* The recording density is usually expressed as bits per inch (bpi) but it really indicates bytes per inch as all bits of each byte are recorded simultaneously across the width of the tape. Many models offer seven tracks per inch as options, and this option normally indicates the ability to write or read tapes, compatible with the IBM 729 Series, at 200, 556, and/or 800 bpi.

*Data transfer rate.* The transfer rate is given in thousands of bytes per second.

*Rewind time.* This number indicates the time, in seconds, required to return the tape to the load point from the end-of-tape. Some of the numbers may indicate average rewind time and thus half of the maximum rewind time.

*Lease rate.* The lease rate is the cost of monthly rental including at least one shift of maintenance. The rate is according to the shortest term available, usually one year.

Purchase Price, Maintenance, Delivery Lead, First Delivery, and Comments have definitions similar to those specified for magnetic discs.

**MAGNETIC TAPE UNIT REPLACEMENTS**

| | MANUFACTURER | Ampex Corporation | | | | Bucode (OEM) |
|---|---|---|---|---|---|---|
| GENERAL | MODEL NO. | TM-1624 II | TM-1624 III | TM-1624 V | TM-1624 VI | 20247 |
| | REPLACES IBM MODEL | 2401-2 | 2401-3 | 2401-5 | 2401-6 | 2420-7 |
| FEATURES | NO. OF TRACKS | 9* | 9* | 9 | 9 | 9 |
| | RECORDING MODE | NRZ | NRZ | Phase | Phase | Phase |
| | AUTOMATIC THREADING | No | No | No | No | Yes |
| | READ BACKWARDS | Yes | Yes | Yes | Yes | Yes |
| PERFORMANCE DATA | TAPE SPEED | 75 | 112.5 | 75 | 112.5 | 200 |
| | RECORDING DENSITIES | 800 | 800 | 800/1600 | 800/1600 | 1600 |
| | DATA TRANSFER RATE | 60 | 90 | 60/120 | 90/180 | 320 |
| | REWIND TIME | 90 | 90 | 90 | 90 | 60 |
| COST DATA | LEASE RATE | 400 | 520 | 435 | 530 | |
| | PURCHASE PRICE | 14,400 | 17,900 | 16,400 | 21,600 | |
| | MAINTENANCE | 70 | 86 | 82 | 98 | |
| MARKETING SUMMARY | DELIVERY LEAD | 3 | 3 | 3 | 3 | 3 |
| | FIRST DELIVERY | Oct. 1968 | Oct. 1968 | Oct. 1968 | Oct. 1968 | Mar. 1970 |
| REMARKS | | *Seven track version available, GSA Contract, Auto-load feature, single capstan drive, vacuum-column rewind, servo control of tape speed. | | | | See Text |

| | MANUFACTURER | Potter Instrument Company | | | | |
|---|---|---|---|---|---|---|
| GEN-ERAL | MODEL NO. | SC 2402 | SC 2403 | SC 2405 | SC 2406 | AT 2425 |
| | REPLACES IBM MODEL | 2401-2 | 2401-3 | 2401-5 | 2401-6 | 2420-5 |
| FEATURES | NO. OF TRACKS | 9 | 9 | 9 | 9 | 9 |
| | RECORDING MODE | NRZ | NRZ | Phase | Phase | Phase |
| | AUTOMATIC THREADING | No | No | No | No | Yes |
| | READ BACKWARDS | Yes | Yes | Yes | Yes | Yes |
| PERFORMANCE DATA | TAPE SPEED | 75 | 112.5 | 75 | 112.5 | 100 |
| | RECORDING DENSITIES | 800 | 800 | 1600 | 1600 | 1600 |
| | DATA TRANSFER RATE | 60 | 90 | 120 | 180 | 160 |
| | REWIND TIME | 130 | 100 | 130 | 100 | 100 |
| COST DATA | LEASE RATE | 400 | 530 | 440 | 550 | 500 |
| | PURCHASE PRICE | 18,200 | 21,100 | 20,800 | 25,000 | – |
| | MAINTENANCE | 85 | 90 | 95 | 100 | 105 |
| MARKETING SUMMARY | DELIVERY LEAD | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 |
| | FIRST DELIVERY | 1968 | 1968 | 1968 | 1968 | Aug. 1970 |
| REMARKS | | Single capstan drives, vacuum-column rewind-automatic threading versions available. Potter TC5803 Controller replaces IBM 2803-1, 2. | | | | See Text |

| | MANUFACTURER | Potter | Storage Technology Corporation | | | |
|---|---|---|---|---|---|---|
| GEN-ERAL | MODEL NO. | AT 2427 | ST 2430 | ST 2450 | ST 2460 | ST 2470 |
| | REPLACES IBM MODEL | 2420-7 | 2401-3 | 2420-5 | 2401-6 | 2420-7 |
| FEATURES | NO. OF TRACKS | 9 | 9 | 9 | 9 | 9 |
| | RECORDING MODE | Phase | NRZ | Phaze | NRZ/Phase | Phase |
| | AUTOMATIC THREADING | Yes | Yes | Yes | Yes | Yes |
| | READ BACKWARDS | Yes | Yes | Yes | Yes | Yes |
| PERFORMANCE DATA | TAPE SPEED | 200 | 112.5 | 100 | 112.5 | 200 |
| | RECORDING DENSITIES | 1600 | 800 | 1600 | 800/1600 | 1600 |
| | DATA TRANSFER RATE | 320 | 90 | 160 | 90/180 | 320 |
| | REWIND TIME | 75 | 60 | 60 | 60 | 60 |
| COST DATA | LEASE RATE | 885 | 545 | 515 | 555 | 820 |
| | PURCHASE PRICE | | 25,000 | 24,000 | 27,000 | 37,000 |
| | MAINTENANCE | 115 | 105 | 100 | 110 | 110 |
| MARKETING SUMMARY | DELIVERY LEAD | 1 or 2 | 2 | 2 | 2 | 2 |
| | FIRST DELIVERY | Oct. 1970 | Nov. 1970 | Jan. 1970 | Sept. 1970 | Oct. 1970 |
| REMARKS | | See Text | Cartridge loading, automatic threading, single capstan drive, 24-hour maintenance, many other technical features. | | | |

| | MANUFACTURER | Telex, Computer Products Division | | | | |
|---|---|---|---|---|---|---|
| GEN-ERAL | MODEL NO. | 4812 | 4822 | 4832 | 4852 | 4862 |
| | REPLACES IBM MODEL | 2401-1 | 2401-2 | 2401-3 | 2401-5 | 2401-6 |
| FEATURES | NO. OF TRACKS | 9* | 9* | 9* | 9 | 9 |
| | RECORDING MODE | Phase | Phase | Phase | Phase | Phase |
| | AUTOMATIC THREADING | No | No | No | No | No |
| | READ BACKWARDS | No | No | No | No | No |
| PERFORMANCE DATA | TAPE SPEED | 37.5 | 75 | 112.5 | 75 | 112.5 |
| | RECORDING DENSITIES | 800 | 800 | 800 | 800/1600 | 800/1600 |
| | DATA TRANSFER RATE | 30 | 60 | 90 | 60/120 | 90/180 |
| | REWIND TIME | 80 | 80 | 80 | 60 | 60 |
| COST DATA | LEASE RATE | 310 | 435 | 530 | 480 | 540 |
| | PURCHASE PRICE | 15,740 | 17,020 | 19,340 | 19,900 | 25,170 |
| | MAINTENANCE | 62 | 70 | 86 | 82 | 98 |
| MARKETING SUMMARY | DELIVERY LEAD | 1 | 1 | 1 | 1 | 1 |
| | FIRST DELIVERY | 1969 | 1969 | 1969 | 1969 | 1969 |
| REMARKS | | *Seven-track version available, automatic loading. | | | | |

| | MANUFACTURER | Telex | Texas Instruments | | | |
|---|---|---|---|---|---|---|
| GEN-ERAL | MODEL NO. | 5420-7 | 924-2 | 924-3 | 924-5 | 924-6 |
| | REPLACES IBM MODEL | 2420-7 | 2401-2 | 2401-3 | 2401-5 | 2401-6 |
| FEATURES | NO. OF TRACKS | 9 | 9* | 9* | 9 | 9 |
| | RECORDING MODE | Phase | NRZ/Ph | NRZ/Ph | NRZ/Ph | NRZ/Ph |
| | AUTOMATIC THREADING | Yes | No | No | No | No |
| | READ BACKWARDS | No | Yes | Yes | Yes | Yes |
| PERFORMANCE DATA | TAPE SPEED | 200 | 75 | 112.5 | 75 | 112.5 |
| | RECORDING DENSITIES | 1600 | 800 | 800 | 1600 | 1600 |
| | DATA TRANSFER RATE | 320 | 60 | 90 | 120 | 180 |
| | REWIND TIME | 60 | 100 | 100 | 100 | 100 |
| COST DATA | LEASE RATE | 890 | 426 | 489 | 470 | 499 |
| | PURCHASE PRICE | ~45,000 | 11,400 | 11,900 | 11,700 | 12,500 |
| | MAINTENANCE | 120 | 109 | 138 | 131 | 160 |
| MARKETING SUMMARY | DELIVERY LEAD | 1 | 2 or 3 | 2 or 3 | 2 or 3 | 2 or 3 |
| | FIRST DELIVERY | 1969 | Nov. 1969 | Nov. 1969 | Nov. 1969 | Nov. 1969 |
| REMARKS | | | *Seven-track version available, single capstan drive, vacuum-column rewind, 16-hour maintenance. | | | |