

# OEM MAGNETIC TAPE SUBSYSTEMS

## M243X Series

*Stand-alone Subsystems*

Masters:

Slave:

**M2436L1**

**M2436L8**

**M2436L2**

*Unique GCR magnetic tape subsystems  
that give the most for the money*





# OEM MAGNETIC TAPE SUBSYSTEMS

**Fujitsu presents the M2436 Series high performance 200 ips start/stop tape subsystems that combine advanced technology with superior quality.**

The M2436 Series subsystem provides IBM and ANSI compatibility at both 1600 bpi and 6250 bpi. Utilizing Group Coded Recording (GCR) the M2436 Series provides up to 180MB of storage capacity on a single 2400 foot reel of tape.

Sophisticated vacuum column technology in conjunction with a two phase photoelectric tachometer ensures precise positioning at 200 ips in the start/stop mode. The M2436 Series transfers data at 1.25MB/s offering ideal back-up for a variety of large system applications.

## **Compact design**

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The M2436 Series subsystems employ advanced LSI circuits reducing the number of electronic components dramatically. This widespread use of LSI enables the magnetic tape drive and formatter(s) to be housed in a compact cabinet when used as a master, or to be mounted individually in a 19 inch rack. A dual master unit is also available in an identical cabinet which contains two formatters in addition to a tape drive. Up to seven additional drives or slave units may be attached to a master unit providing a pool of up to eight drives in a subsystem. This design reduces floor space requirements which can be less than 60% of equivalent systems.

## **User friendly**

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The data protection feature enables the operator to disengage the write-enable function by simply pressing the PROTECT key on the operator panel without removing the write-enable ring from the supply reel. This feature allows the operator to protect data volumes created on the previous run without having to unload the tape drive.

## **Quality inside and out**

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A unique tape quality monitoring feature automatically stamps a red E warning mark on the back of the tape reel when the number of write-retry operations counted by the drive exceed a specified number. This feature allows the operator to take proper actions before the tape becomes unusable or valuable data is lost.

## **Enhanced reliability**

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GCR is a very powerful recording method which provides up to two track error correction. The error correction now performed in the drive electronics not only ensures data integrity but can provide substantial savings in system overhead by freeing the computer from time spent on retry and error recovery procedures.

## **Advanced diagnostics**

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A wide variety of microprogrammed self-diagnostic functions have greatly enhanced the M2436 Series' troubleshooting and preventive maintenance capabilities. Two-digit error codes on the operator panel identify the cause of tape and drive errors. With this information, the operator can decide whether the trouble is operator correctable or the customer engineer must be called.

In a multi-drive configuration, one unit may be tested offline while the formatter(s) and other drive(s) are operating.

## **Simplified operation**

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M2436 Series can mount tape cartridges. Even without a cartridge, tape loading is very simple. You merely position the tape end near the threading chute and press the LOAD/REWIND button on the operator panel. Everything else is automatic. The supply reel locks (powered hub), the window closes (powered window), then the tape threads (automatic threading) and loads (automatic loading). These subsystems will accept both half-size and full-size reels. The cartridge, however, may be used only with full-size reels.

A sophisticated auto-cleaner moves a cleaning ribbon between the tape and head during a rewind command. This feature not only improves data reliability by cleaning both the tape and head but also enhances head life by minimizing abrasion.

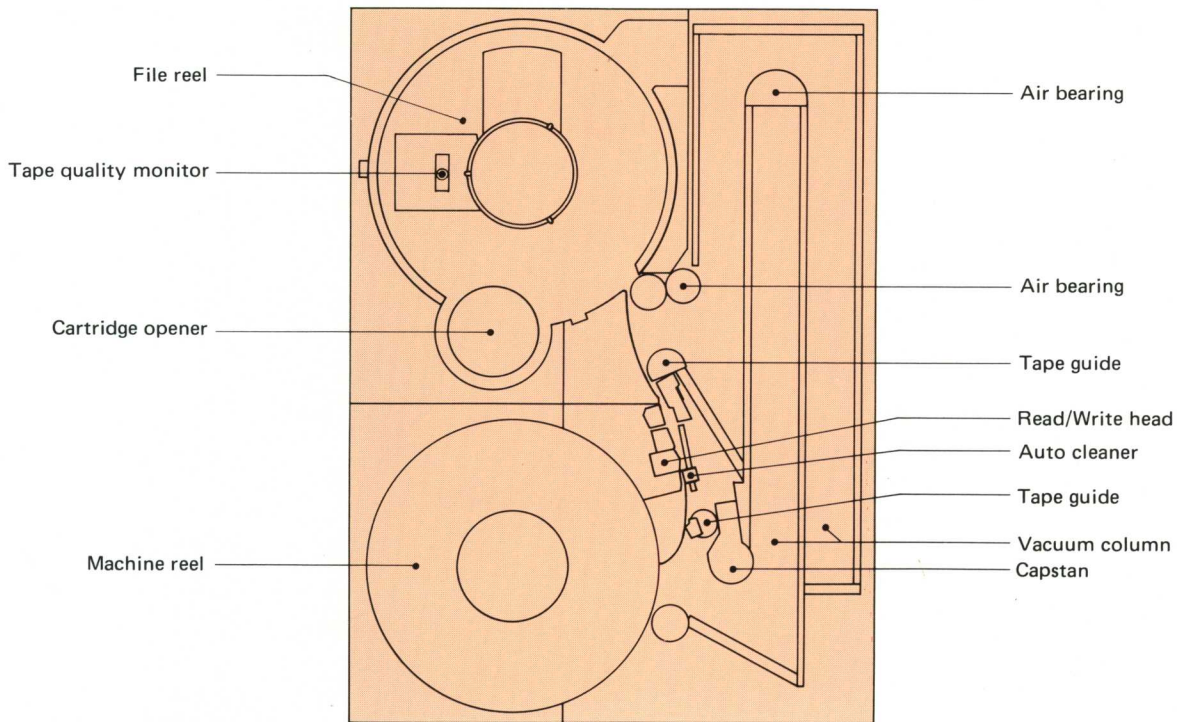
## Tape transport mechanism

To reduce tape wear, the tape path has been designed so that the coated tape surface contacts only the read write head and tape cleaner. The tape is driven by a single capstan and supported with air guides so that tape friction and wear are minimized.

## System configuration

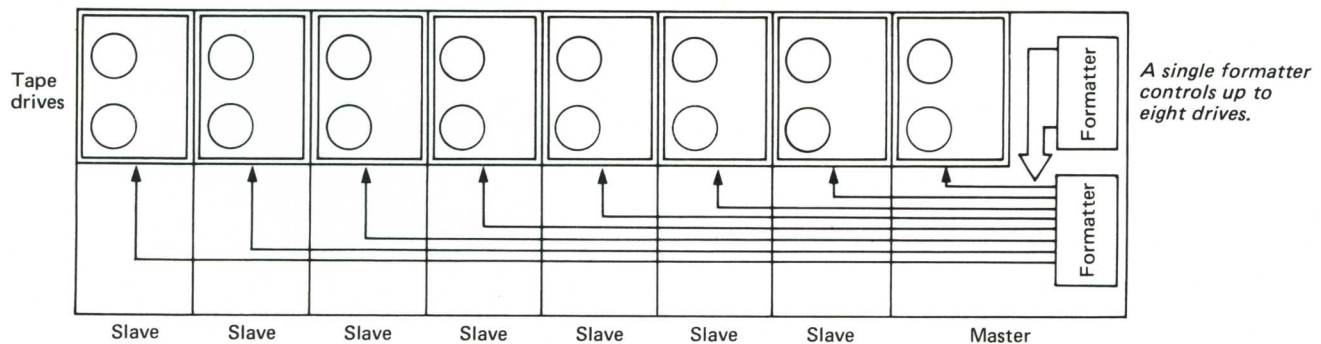
Designed on a Master/Slave concept, up to eight drives may be controlled by a single formatter saving the expense of duplicating formatting electronics for each drive. Two formatter systems provide individual tape drives with two control paths to enhance drive availability.

### Tape transport mechanism



### Subsystem configurations (Stand-alone types)

200 ips subsystem: Master (M2436L1/L2), Slaves (M2436L8)





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## FUNCTIONAL SPECIFICATIONS

Recording Density	1600 bpi/6250 bpi		
Recording Method	Phase Encoded/Group-Coded Recording		
Data Transfer Rate	1250KB GCR 320KB PE		
Inter-Block Gap (IBG)	.3 GCR .6 PE		
Tape Speed	200 ips		
Access time	Read	1.7ms GCR 2.3ms PE	
	Write	1.6ms GCR 1.9ms PE	
Rewind Time	66s		
Loading Time	12s Auto Load		

## PHYSICAL SPECIFICATIONS

Power Supply	200/208/220/230/240VAC 50-60HZ +2 -4% Single Phase	
Power Consumption	3.3kva	
Environment	Temperature	5°C to 40°C
	Relative Humidity	20% - 80% Non Condensing
Heat Dissipation	2800 Kcal/hr	
Air Flow	11 m <sup>3</sup> /Min	
Dimensions	Master	Slave
Height	55.1 in.	55.1 in.
Width	39.4 in.	19.4 in.
Depth	29.9 in.	29.9 in.
Weight	948 lbs.	551 lbs.



**M2436/L8**



**M2436L1/L2**

*Specifications are subject to change without notice.  
For the latest information, contact your local  
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