

KENNEDY CO.

WORLD'S LEADER IN LOW-COST DIGITAL RECORDERS

The 1708 series are versatile, high speed, dual buffered, IBM compatible tape transports designed for use in systems that require asynchronous recording at high data rates with no loss of data during gap insertion.

The 1708 series utilizes a standard Kennedy synchronous 8½" reel tape transport in conjunction with a dual static MOS shift register to accomplish its goals. Input data is strobed into the buffer at completely asynchronous rates. When one buffer is filled, the input data stream is transferred to the second buffer and the tape transport is activated. It writes the contents of the first buffer onto tape and stops to await filling of the second buffer. In this way the 1708 switches back and forth between the two buffers writing the information in records the size of the buffer. Should it be necessary to write a record shorter than the buffer size, an EOR command can be entered at any time. This will cause the contents of the buffer to be written on tape. Records of less than 15 characters are not recommended for computer compatibility.

The Kennedy 1708 series is available in both seven track (6-bit buffer) or nine track (8-bit buffer) configurations.

The minimum length of the buffer is 512 characters. The buffer may be increased in 512 increments to a maximum of 2048 characters.

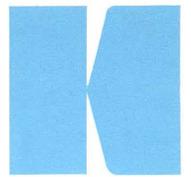
Input data to the 1708 series can be in two modes, asynchronous or burst. In the asynchronous mode data is applied as a continuous, asynchronous, uninterrupted stream. If EOR commands are not given, an internal automatic EOR is generated each time the buffer fills. Should the data stream exceed the maximum rate of the recorder, a busy signal will be presented to the interface to warn that data must be interrupted to avoid loss. This signal occurs immediately after an EOR command and not during a block of proper length.

In the burst mode, information may be applied at a maximum rate of 250K character per second. Again, the busy signal will warn to stop data to avoid data loss.

Since maximum asynchronous speed is obtained by utilizing the maximum size buffer (2048), the proper buffer size for the application can be determined by deciding on the needed data rate and solving the formula for record length.

To verify that data is being properly recorded on tape, a Read-After-Write check is available as an option. If an error is detected during a read-after-write operation, the block is automatically rewritten until an error-free block is recorded.

In addition to the write only machine described above, the 1708 series is also available in a read/write version.



**Synchronous/asynchronous
magnetic tape recorder**

Model 1708 Series



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SPECIFICATIONS / MODEL 1708 SERIES

Data Density:	200, 556, 800 cpi
Number of Tracks:	7 or 9
Tape Format:	NRZ1, IBM comp.
Recording Speed:	See formula below
Maximum Record Length:	512 characters standard with 1024, 2048 optional
Tape Speed:	15 ips
Instantaneous Speed Variation:	±3%
Long Term Speed Variation:	±1%
Interchannel Displacement Error:	150 μ inches at 800 cpi
Gaps:	Internally generated
Reel Size:	8½", 1200'
Tape Tension:	8 oz. ±0.5 oz.
Drive System:	Single capstan, 180° wrap
Rewind Speed:	100 ips
Electronics:	DTL
Physical Dimensions:	19"W x 12¼"H x 12"D
Mounting:	Standard EIA rack
Power:	115/230 VAC 48-400 Hz, 200 VA +2° to 50°C
Operating Temperature:	+2° to 50°C
Humidity:	15-95% non-condensing
Altitude:	0-30,000 feet

Data may be applied asynchronously at speeds up to 250,000 characters per second. The execution time per record, including check characters and gaps, is a function of record length, tape speed, density and gap length.

