LIBRASCOPE

Series L107 Disc Memory System

Model L107A



TECHNICAL DATA

The Model L107A Disc Memory System, designed and manufactured by Librascope Division of The Singer Company, is the latest in small, low cost, fast random access, head per track disc file products.

With data storage of up to 7 million bits on 100 data tracks, all in a 9 inch diameter x 7.7 inch package, it is the most compact disc file system available today. Index, sector, and master bit clocks are provided. The total system weighs only 13 pounds.

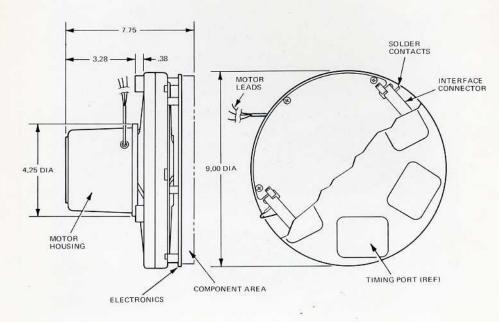
FEATURES

Model L107A memories include read, write, head select, and clock electronics. The simplified NRZ electronic interface utilizes TTL ceramic integrated circuits. The recording mode is bit serial, block alterable, and self clocked. All L107A and B memories in this series have the same electronic interface and mounting can be in any attitude.

Data is stored on an 8-inch nickel cobalt plated disc. Recording is a modified form of phase modulation. All L107A memories are expandable to the maximum of 100 tracks.

The Series L107 features long life, no preventative maintenance, high reliability, low error rate, and rugged environmental operating specifications such as 10G shock without isolators.

MEMORY DIMENSIONS



PHYSICAL SPECIFICATIONS

Dimensions ... 7.75 in. high x 9 in. dia. Weight 13 pounds (approx.).

OPERATING ENVIRONMENT

Temperature . . 0°C to 55°C.

Cross Tem-

perature

Humidity 90% R.H.

Without condensation. 10-Gs 11-msec rise time (no Shock shock isolators required).

Vibration 2-Gs acceleration max., 5 Hz to 50 Hz (no shock

isolators required).

NONOPERATING ENVIRONMENT

Temperature . . . -50°C to +75°C. 95% relative humidity, no condensation.

15-Gs 11-msec rise time

(with no shock isolators). Mil-Std-810B, Method 514, category (g) equip-

ment specification used as a guide-line. This equipment category is for shipment by common carrier, land or air.

POWER REQUIREMENTS

Disc 115VAC, 50/60 Hz, single phase

1.5A Running

Electronics....+5VDC @ 2.0A. -- 5VDC @ 0.275A.

+25VDC @ 0.2A.

GENERAL SPECIFICATIONS

MODEL L107A-8		-1010	-1020	-1040	-2060	-2080	-2100	-1016	-1032	-2064
Capacity, Bits x 10 ⁶		0.4	0.8	1.6	2.4	3.2	4.0	0.6	1.2	2.5
Data Heads		10	20	40	60	80	100	16	32	64
Bits/Track, max.	40,000									
Clock Frequency, MHz, max.	2.4									
Speed, Rotation, RPM	3,600									
Access Time, MS, ave.	8.5									
MODEL L107A-17		1010	1020	1040	2060	2080	2100	-1016	1022	2064

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	0.7	1.4	2.8	4.2	5.6	7.0	1.1	2.2	4.4
	10	20	40	60	80	100	16	32	64
70,000									
2.1						13			
1,800									
17									
-									
	2.1	70,000 2.1 1,800	70,000 2.1 1,800	10 20 40 70,000 2.1 1,800	10 20 40 60 70,000 2.1 1,800	10 20 40 60 80 70,000 2.1 1,800	10 20 40 60 80 100 70,000 2.1 1,800	10 20 40 60 80 100 16 70,000 2.1 1,800	10 20 40 60 80 100 16 32 70,000 2.1 1,800

MODELS L107A-8 AND L107A-17			
Switching Times			
Write to Read, μs	10		
Track Selection, μs	10		
Read to Write, Bits	4		
Preamble, Bits	7		
Postamble, Bits	1		
Data Bits per Block (Sector)	Customer Specified		
Blocks per Revolution	Customer Specified		
Max. Starting Time, Seconds	30		
Slip, Percent, max.	10		

SINGER

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