

# ELLIOTT

# 9000

Volume 1: FUNCTIONAL SPECIFICATION

Part 3: OPTIONAL UNITS

Section 4: EXTRA STORE

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## Chapter 1: INTRODUCTION

### 1.1 General Description

Extra store modules allow the 8192 word core store of the 900 computer to be supplemented by modules of two capacities - 8192 or 16,384 word modules - up to a maximum total of 65,536 words.

The maximum extra store configuration is made up of three 16,384 word modules and an 8192 word module. Smaller configurations may comprise any combination of the 8192 and 16,384 word modules.

All modules are housed in 900 standard desks and require the appropriate number of power supply units (see Para. 2.4). Only the standard computer and store power supply unit (DPA621) is designed to retain the store contents on normal switch off and this should be specified when ordering extra store.

The access and cycle times between the 900 computer and extra store are 2.2  $\mu$ s and 6  $\mu$ s respectively.

### 1.2 Mode of Address

Extra store is addressed in the same way as the basic computer core store. In addition, addressing facilities of the extra store are extended by means of the B-register. This register enables any address to be generated and reference made to, or control transferred to, any of the 65,536 store locations available.

The mode of address and the B-register are described in Section 1.2.1 of this manual.

NOTE: The address of each extra store location is determined solely by the position of each module in the desk(s) attached to the computer, and its position within the module.

Chapter 2: PHYSICAL FEATURES AND REQUIREMENTS

2.1 Layout of Units

Extra store and its power supplies are fitted in additional standard 900 desks. The number of desks required varies according to the size of the store as shown in the table in 2.2 below. Space for power supplies is included in the number of additional desks specified.

2.2 Weights

The weights of the extra stores including the number of desks are given in the table below:-

Number of		* Weight of Additional desks					
Extra Words	Additional Desks	Desk 1		Desk 2		Desk 3	
		kg	lb	kg	lb	kg	lb
8,192	1						
16,384	1						
24,576	1						
32,768	2						
40,960	2						
49,152	2						
57,344	3						

2.3 Environmental Conditions

Extra store units have been designed to be used in the standard 900 environmental conditions which are:-

Temperature 10°C to 30°C (50°F to 86°F)  
Relative Humidity 20% to 95% without condensation.

No specific dust control other than reasonable standards of cleanliness.

Under these conditions external environmental control is not normally required.

\* As these figures were not available at the time of printing, they will subsequently be supplied by Newsletter when they do become available.

#### 2.4 Power Supplies

The number of power supply units required for all amounts of extra store up to the maximum are shown in the table below.

The following mains power supply is required for the extra store:-

230V  $\pm$  10% at 50  $\pm$  1 cycles per second.

Power consumption is as follows:-

No. of Words	Power Consumption KVA	No. of Power Units
8192	0.38	1
16384	0.43	1
24576	0.48	1
32768	0.52	2
40960	0.57	2
49152	0.62	2
57344	0.66	3