## — SAFETY MEASURES ——

This instruction manual contains certain

-WARNING-

and

-CAUTION-

notices which MUST be followed by the user to ensure SAFE operation and to retain the equipment in a SAFE condition

Any adjustment, maintenance and repair of the opened apparatus under voltage shall be carried out only by a skilled person who is AWARE OF THE HAZARD INVOLVED

### SECTION 1

#### SYSTEM DESCRIPTION

Sub-Section	LIST OF CONTENTS	Page No.

		1
1 2 3 4 5 6 7 8 9 10 11	Introduction Build Standard Architecture Z80 CPU System Clocks Memory Organisation EPROM Programmer (TBD) Display Handling Keyboard Handling RS232C Interface Power Supplies	1.1 1.2 1.2 1.3 1.5 1.5 1.8 1.9 1.9 1.13
Fig No.  1.1 1.2 1.3 1.4 1.5 1.6 1.7	Memory Addressing LCD Interface Timing Keyboard Matrix Interconnections Z88 Block Diagram (Part 1) Z88 Block Diagram (Part 2) Z88 Circuit Diagram Memory Card Circuit Diagrams	1.6 1.10 1.12 1.17/18 1.19/20 1.21/22 1.23/24

## 1. INTRODUCTION

1.1 The Z88 Computer is a portable laptop machine incorporating many inovative features, not least of which is the computer's ability to selectively shut down large areas of the circuitry when not required, thus prolonging battery life. This expedient is designed to provide up to 20 hours of active computing time or up to one year in the standby mode during which time the contents of the resident memory are preserved.

# 1.2 Other important features include:

- (a) 32k byte of internal RAM expandable by up to 3m byte using plug-in RAM packs.
- (b) 128k byte of internal EPROM containing the operating system, BBC Basic interpreter and a powerful suite of applications software.