

Preface

The built-in ROM 'operating system' within the Amstrad CPC464 computer can be considered to be split into a BASIC interpreter and the 'firmware'. The firmware is a collection of low level routines responsible for all the hardware driving, screen handling and real-time event handling. The current volume describes the firmware; a companion technical manual describes the BASIC language.

Our design aim at Locomotive Software was to produce the most sophisticated computer possible within the twin constraints of minimum hardware cost and a very limited timescale. We were also determined to make all the features of the machine available to a BASIC program. We recognized, however, that much software would be written in machine code and made all the firmware routines available to an assembler programmer. It was always intended that any or all of the features within BASIC language should be simple to provide in games, applications or indeed other programming languages.

This manual was written by one member of the software team with assistance, corrections and comments (usually constructive) from the others. Thus you will find it to be accurate, authoritative and also capable of giving clear insights into the design of the machine. The manual describes not only what the firmware does, but how it does it, why it does it and what it is intended to be used for. No apology is made for the level of detail that is sometimes descended to; we are proud of our design and we hope that with this manual you will be able to use it as fully as we intended.

**Locomotive Software
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