



SW3102/1 RC BASIC/COMAL System Package

RESUME

The RC BASIC/COMAL System permits several users to enter and execute BASIC (COMAL) programs concurrently.

The RC BASIC (RC COMAL) programming language, which includes Dartmouth College BASIC as a subset, constitutes a significant extension to existing BASIC concepts, for example:

- Language structures known from PASCAL, such as IF-THEN-ELSE, CASE-OF, REPEAT-UNTIL, and WHILE-DO.
- Variable names may contain as many as 8 characters.
- Procedures can be called by name.
- Text arrays.
- Matrix routines (optional).
- Formatted printing (optional).

Some of the features of the RC BASIC/COMAL System Package are:

- Support of common devices, such as paper tape and punched or mark-sense card readers, printers, flexible discs, and various fixed or removable discs.
- Up to 32 K words of working space for each user.
- Extensive file protection facilities.
- Sequential and random access files.
- Assembler-coded procedures can be written by the user and called from BASIC (COMAL) programs.
- Normal (6 decimal digit) or extended (10 decimal digit) precision arithmetic.

DESCRIPTION

The RC BASIC/COMAL System can be used on almost any RC3600 equipment configuration.

On configurations without a disc the RC BASIC/COMAL System runs under the MUS Operating System.

On configurations with one or two flexible discs the RC BASIC/COMAL System includes a file system based on the so-called logical disc, developed for use on this medium. A flexible disc can be divided into several logical discs, each of which can be assigned to a user or a group of users.

A logical disc can be protected against unauthorized access by means of a protection key. Logical discs can contain program files as well as sequential or random access data files.

When a user signs his terminal on to the system or signs it off, the system will automatically attempt to execute a user-written BASIC (COMAL) program. By means of this facility the user can easily implement his own accounting system.



On configurations with some other kind of disc, such as fixed or removable mass storage or removable cartridge discs, the RC BASIC/COMAL System runs under the DOMUS Operating System and makes use of the subcatalog system. (A subcatalog corresponds to the logical disc described above). Furthermore the disc is used as virtual storage, so that each user has up to 64 K bytes of working space for his programs and data.

Programming in RC BASIC (RC COMAL) is easy, thanks to the powerful language structures known from PASCAL, the long variable names, and the interactive nature of the language.

BASIC (COMAL) programs can be entered from a terminal. If there is a syntactical error in a program statement, an error message is displayed immediately. Program execution takes place in interactive mode. This permits the user to interrupt execution if something goes wrong, correct the error, and then resume execution.

Programs can be entered and executed in batch mode from the mark-sense card reader. Programs can be marked along with commands on mark-sense cards. Input of the card deck is initiated by a single command from a terminal. Users working at other terminals are unaffected.

SOFTWARE PREREQUISITES

MUS Operating System Package, SW3002/1 or
DOMUS Operating and Utility System Package, SW3001/1.

DOMAC Macro Assembler Package, SW3101/1,
if the user wishes assembler-coded procedures or would like to change the device configuration supported by the system.