

**Merlinco**

*Fact Sheet No.5*

***MERLINPLUS ENTRY  
(MPE)***

## 1 Overview

MERLINPLUS ENTRY (MPE) is an interactive data handling program for ASCII or column binary (card image) data. Its functions include:

- data entry
- data editing
- data verification
- data viewing
- data sorting
- data format conversion
- indexing of serial numbers

All these facilities are fully documented in a Reference Manual which can also be accessed from within MPE. Merlinco can provide training in the use of MPE, but this is not usually necessary, as most of MPE is self-explanatory.

Using MPE consists of selecting choices from menus. When entering, editing, or verifying data, records are displayed one at a time, usually in two columns down the screen, showing both question names **and** data locations.

MPE is sold as part of MERLINPLUS (see fact sheet 2), and has many features in common with this program, but it can also be bought and used as a standalone program.

Data prepared within MPE can be analysed with MERLIN or MERLINPLUS (see fact sheets 1 and 2), as well as various other analysis programs.

## 2 Further information

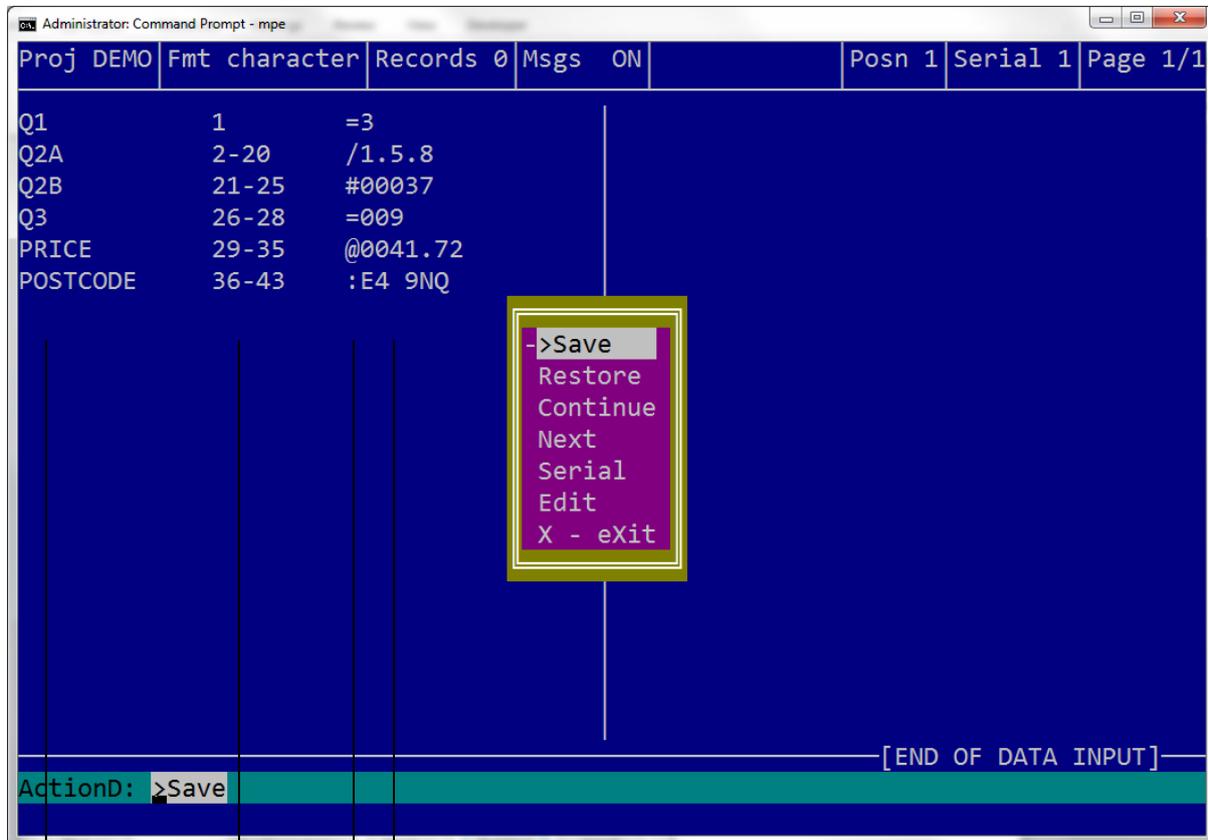
For more information on MERLIN and other Merlinco products, contact John Tebboth at Merlinco Ltd, on +44 (0)20 7709 3000 or email [info@merlinco.co.uk](mailto:info@merlinco.co.uk).

## 3 Operating environment

MPE runs under Windows Vista Service Pack and VB.NET v4.6 upwards (it may run on earlier versions of Windows but we do not support these). It interacts with Office 2007 upwards.

## 4 The data entry screen

Here is an example of the data entry screen presented when entering, editing or verifying data, overlaid with the “end of record” menu which appears when entry of a record is complete:



Legend for the data entry screen:

- data
- type symbol
- location
- question name

The type symbols indicate the type of data allowed:

- = single coded
- / multi coded
- # numeric data without a decimal point
- @ numeric data with a decimal point
- : character data (text)

- By default, the data entry screen is divided into two columns, but this can be changed to a single column display.

- If the entire record cannot fit on one screen, it is divided into “pages”, and the page number is indicated in the top right hand corner. The user can specify where the pages are split.
- Function keys allow the user to move easily to any part of the data entry screen (up and down columns, from side to side, to first and last question), or to different pages (if more than one is used).
- The user can skip manually from one question to any other (forwards or backwards) by using a function key then selecting from a menu of question names — or skips can be programmed to work automatically on every record.
- By default, any question can be skipped, but the user can set a “must answer” preference.
- Routing instructions can be programmed so that, depending on the data entered in one field, MPE may or may not allow data to be entered in a subsequent one.
- The user can duplicate any question from the previous record.
- For binary data, the user can define which keys are used to enter the codes “V” and “X”, so that all codes can be entered from the numeric keypad.
- When single coded and numeric fields are completed, MPE moves automatically to the next field. If the user moves from a numeric field before completion, the data will be automatically right adjusted and zero-filled. Numeric fields may contain minus signs and decimal points, if the specification allows, but the entry of the decimal point and decimal places is optional.
- If a character field can be accommodated on the normal data entry screen, MPE moves automatically to the next field on completion. If it **cannot** be accommodated, a “text box” will open up when this field is reached, and close when the user moves to another field.
- For binary multi coded fields, by default, the user must press a function key to indicate that the field is complete. An option can be set, however, so the field is automatically completed after entry of one code **unless** a function key is pressed **before** entering the data.
- MPE has an “over-ride” option allowing multi coded data to be entered in a single coded binary field.
- MPE flags invalid data entry, by default, with a “beep” and a message stating the valid code range. Output of messages can be switched on and off with a function key, as well as by a global option setting.
- The “end of record” menu, which appears automatically on completion of each record, (or earlier if an “escape” function key is pressed), enables the user to save or abandon the current record, and move readily to the next record in the data, or to select another one.

## 5 Data formats handled by MPE

- MPE handles data in ASCII files with a record length up to 99999 characters.
- MPE also handles column binary (card image) data, which can be stored in any of about 20 different formats. These formats include all the industry standard ways of storing card image data (e.g. “cba”, IBM column binary, Quantum format) so files may be imported from other data entry programs, and exported into other analysis programs. Most of these formats are based on 80 column card images, but some allow up to 100 columns per card image.
- MPE can treat single card images as logical records or, providing they contain serial and card numbers in fixed locations, more than one card image may be viewed as belonging to the same logical record. Card numbers must be between 1-99, using 1 or 2 columns.
- MPE can handle card image hierarchical data (trailer cards). In this case (and optionally in other cases), each card image is presented separately, rather than the entire logical record.
- MPE has no limit to the total number of records that can be handled (other than the physical size of the disk).

## 6 Specification files used to drive MPE

- MPE can be driven by a “qdf”, which is a “questionnaire definition file” generated by MERLINPLUS. This provides maximum control over the data entry and allows you to view question titles etc. during the data entry operation.
- MPE can also be driven by a “map” file, which it can convert into a “qdf”. This allows MPE to be used as a standalone program, but without the labelling facilities available to the MERLINPLUS user. Simple “map” files can be created within MPE but they can also be easily created or altered using a text editor outside MPE.
- MPE specification files allow the user to specify a name, location, and acceptable values for each question (but every question is always allowed to be blank). Optionally, the user may specify routing conditions, so entry of data is dependent on the contents of earlier fields.
- MPE can work in “unstructured mode”, which allows inspection and alteration of existing files with minimal specification.
- MPE can use different specification files within the same session, allowing the user to work on different projects without leaving the program.
- MPE can read files containing user preferences for program options, to save setting them every time. This can be done globally, or a different file can be read for each project.

## 7 The menus

The user selects MPE options by means of menus such as the one below:



- MPE menu choices are made by using the “up arrow” and “down arrow” keys (although the user may define other keys if he wishes), or by typing the first letter of the choice.
- MPE uses colour menus on DOS, the appearance of which (background colours, borders, etc) can be changed by the user.
- MPE has three main menus — “questionnaire handling”, “file handling” and “record handling” (the one shown above is “record handling”) — and the user can readily move between these three “levels”. This allows the user to work on different projects, different data files, and different operations (inserting, verifying, etc), all within the same session.

## 8 Function keys

- MPE recognises a number of special function keys throughout. The actual keys used can be redefined globally, or from project to project.
- A “show keys” key summarises all the function keys available.
- A “help key” gives specific help in various situations.
- An “escape” key allows you to recover from incorrect menu choices.
- A “display” key allows you to view lists of question and answer texts, if these have been specified. These lists can be output to the screen or a file.
- Many keys are available for entering and editing text strings — whether they are filenames etc. being specified to MPE, or they are part of the data itself.
- Many other keys are available during the data entry operation itself.

## 9 Data file handling

- MPE can read any number of data files into a single “work area”. These files must be all ASCII or all binary, but there may be different formats within these (e.g. binary files stored in different ways). Data files may be in different directories.
- MPE can write out all or any part of the work area into any of the file formats appropriate to whichever of ASCII or binary mode is being used — hence MPE may be used for format conversion.
- MPE can read invalid data into the work area — and write it out again — but it checks that all data **entered** by the user are valid in terms of the specification supplied.
- MPE has an automatic system for maintaining backups of data files.

## 10 Other facilities

- MPE can display records in horizontal format, showing data locations and codes only, and enabling more of a large record to be seen on a single screen than may be possible in other MPE operations. The display may use ASCII or binary mode, **regardless** of the format of the data.
- MPE can list serial numbers in the work area in their existing order, change any serial number, sort records into serial number order, or perform other sorts using up to three keys.
- MPE has a facility for recovering work lost due to a system failure.
- MPE keeps a complete “log” of activities, including times, number of key depressions, etc, which can be used as basis for paying data entry operators. User names can also be included.