

## MASTER SERIES - BATTERY UNIT

The Master Series range of microcomputers are now fitted with a 4.5V battery unit instead of one 3.0V lithium cell. Read the following items of text in conjunction with the relevant pages in Issue 1 and 2 of the Welcome Guide:

- *Welcome Guide (inside front page), internal battery*: The warnings on handling and disposal of Lithium cells generally apply to this battery unit.
- *Welcome Guide (Page 242), replacing the internal battery*: Replace all of page 242 with the following text:

REFER TO THE WARNING AT THE FRONT OF THIS GUIDE BEFORE ATTEMPTING TO REMOVE OR REPLACE THE INTERNAL BATTERY.

The battery unit fitted in your computer is used to maintain the contents of the CMOS RAM at all times when the computer is disconnected from the mains power supply.

Under normal operating conditions the life of the battery is expected to be approximately one year. A replacement battery can be obtained from your supplier.

Removing or replacing the battery unit may corrupt the current content of the CMOS RAM. It is recommended that a copy of the settings is sent to tape or disc. Take the following steps:

- 1 Select the appropriate filing system and load a cassette or appropriately formatted disc.
- 2 Type the following:

```
MODE0          <RETURN>
*SPOOL CONFIG  <RETURN>
*STATUS        <RETURN>
```

The computer displays (and stores) a list of the current CMOS RAM settings.

- 3 Close the spool file by typing:

```
*SPOOL        <RETURN>
```

The following information tells you how to disassemble the computer, remove the old battery unit and replace it with a new battery unit. The points of the compass are used to indicate the way in which items are orientated. With the computer positioned such that the keyboard is facing you, the nearest edge is SOUTH, the rear NORTH the right is EAST and the left is WEST.

To disassemble the computer, take the following steps:

- 1 Disconnect the computer from all peripheral units and the mains power supply.
- 2 Place the computer upside down on a firm flat surface.
- 3 Locate and remove the four fixing screws, labelled "FIX", found on the underside of the unit (two at the front and two at the rear). The rear screws are longer than the front screws.
- 4 Re-invert the computer while holding the two halves of the case together.
- 5 Remove the upper half by lifting it directly upwards from the base of the machine.

The battery unit fitted to your microcomputer is one of two possible types:

- A combination of three shrink-wrapped batteries (NEW STYLE).
- A battery holder and metal plate assembly (OLD STYLE).

The NEW STYLE battery unit is located between the WEST edge of the keyboard and the WEST edge of the main case. It has no fixings (apart from the pair of red and black leads which connect between the NORTH end of the battery unit and the plug PL8 which is located on the WEST edge of the printed circuit board) and is pushed into the recess.

The OLD STYLE battery unit is located between the WEST edge of the main printed circuit board, and the EAST edge of the power supply unit. The battery unit is connected to the computer by two fixing screws, and by a pair of red and black leads which connect between the end of the battery unit nearest the keyboard and PL8.

To remove a NEW STYLE battery unit, take the following steps:

- 1 Disconnect the flying lead from PL8 taking note of the cable routing.
- 2 Carefully pull the unit up until it is free of the case.

To remove an OLD STYLE battery unit, take the following steps:

- 1 Remove the two fixing screws securing the battery holder retaining plate.
- 2 Disconnect the flying lead from PL8.
- 3 Remove the unit.

To fit a battery unit, take the following steps:

- 1 Hold the battery so that the double-height part of the unit faces the front of the power supply unit.
- 2 Carefully push the battery into the recess between the WEST edge of the case and the WEST edge of the keyboard P.C.B. Make sure the flying lead is not trapped under the unit. The battery is fully fitted when the base of the unit is flush with the bottom of the computer case. If there is a slight resistance, gently push the battery into place.
- 3 Route the flying lead EAST, between the keyboard and the power supply unit, across the SOUTH end of the case's clear area and NORTH along the WEST edge of the main P.C.B. until it reaches PL8.
- 4 Connect the flying lead to PL8. The black lead connects to the NORTH pin, the red lead connects to the central pin. The SOUTH pin is not connected. Ensure that the socket on the end of the flying lead covers all three pins of PL8.
- 5 Replace the top half of the case following the reverse of the removal procedure.

Take the following steps to restore CMOS RAM to its former state:

- 1 Connect the computer to the mains supply.
- 2 Execute a power on reset by switching the computer on while pressing the R key.
- 3 Keep the R key pressed until a message is displayed.

Continue with the instructions on page 243 of the Welcome Guide.

Part No.0443,900 Issue 1 January 1987