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'MICROCASE' ASSEMBLY INSTRUCTIONS

COMPUKIT VERSION

The 'Microcase' is made from top-quality ABS. It is enormously strong, yet easily drilled or cut. Its apparent flexibility does not prevent it from supporting a heavy weight, and a normal monitor or portable TV should present no problem if you find it convenient to stand it on the case.

ASSEMBLY

1.Circuit board: all necessary holes and screws are provided for fitting the Compukit circuit board. Note that the polystyrene block should be sloping at the back, not at 90° to the base. Fit the screws but do not tighten them until you have checked that the keyboard is correctly placed for the keyboard cutout in the cover. Then press the board down so that the wire ends sink into the polystyrene, and tighten the nuts.

2.Heatsink: 'Practical Electronics' has suggested that the regulator be mounted outside the case, on a suitable heatsink at the back. If you do this, attach it only to the base tray or the removable panel, or you will lose the advantage of being able to operate the Compukit with the top removed. We have not found it necessary to move the regulator on our Compukit. Using two pairs of pliers, the tall type of heatsink may be bent gently at each side, to give horizontal 'wings' that clear the case top. This seems satisfactory with the standard board: but check that the temperature does not rise enough over an extended period to damage the case, especially if drawing more current than the standard board alone.

3.Keyboard Angle: this is made slightly steeper than the slope of the case front, for comfort in use. The polystyrene block may be cut to adjust the angle (try a breadknife), and/or a thin layer of plastic foam packing may be added. Make sure it is not conductive foam, as used to pack some ICs. Spare polystyrene blocks are available.

4.Rear Panel: this is slotted so that leads may be taken through without removing connectors. For ribbon cables, slots may be joined with a saw-cut, or the panel may be left off. If the panel is inverted, the slots are hidden, and the whole area is available for your own layout of connectors and switches.

5.Spacers: the four grey spacers are to prevent over-tightening of the screws that fasten the case, and help to support the weight of a TV etc without forcing the top down over the base. Owing to slight variations in the plastics, the front edge of the cover may sometimes 'float' a little above the base instead of resting on it. This is easily cured by shortening the spacers slightly. If they are left out, the 'Microcase' will not support a weight so well.

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6.Power Supply: the base tray is easily drilled to secure the transformer as desired. The 'Microcase' is designed for personal use by the knowledgeable purchaser, and is not suitable for use in an educational environment unless the mains connections are protected. For safety's sake we recommend using a transformer with enclosed mains connections, or enclosing the transformer in an earthed cover of perforated metal.

7.Ventilation: when substantial extra memory or other heat-producing circuitry is fitted, a fan may be needed to give sufficient cooling. There is room for several types of small fan. No fan should be necessary when only one extension memory board is fitted with good spacing; but since equipment and methods of fitting are so varied, we stress that it is only good sense to check that a damaging level of heat is not produced, especially if the equipment is to be left on for long periods. We have run a standard Compukit for 24 hours with the lower ventilation slots deliberately blocked, and had no overheating problems.

8.Expansion: for a single expansion memory board, the simplest method is to cut the polystyrene block behind the keyboard area, and move part of it back to support the extension board at the same angle beneath the main board. At least an inch of space should be left. Cut away any parts of the polystyrene that would obstruct components or connections, and see that good airflow remains possible to those parts that must dissipate heat. Remember that expanded polystyrene is a heat insulator. It is best not to allow it to cover large areas of PCB copper that help to dissipate heat from components soldered to them. Metal or plastic stand-offs may be preferred to support the rear of the boards. To fit more than one extra board is possible. They can be stacked horizontally in the base tray under the main board. The number possible depends on their size. but it is not recommended to stack more than four boards altogether in the standard case height, unless they are small enough to fit side by side.

MICROCASE PRODUCTS

Our aim is to supply the best possible product, at a price compatible with the low cost of the Compukit itself. We have not skimped any effort or expense in producing this case, and we hope that you will find it entirely satisfactory. If you do have any problem, then we shall be as concerned about it as you are. Please let us know, and we will help if we can. We believe that the typical Compukit user will be able to fit much more circuitry into the 'Microcase' with no problems: but for legal purposes, our recommendation as to suitability is limited to the standard Compukit UK101 with a single extension memory board and power supply.