

THE VIGLEN MASTER SYSTEM

Congratulation on your purchase of the Viglen Master System (VMS). This is designed to enable you to house your BBC Master micro system in a professional manner. Viglen have designed the VMS in kit form so that there is plenty of scope left for the do-it-yourself enthusiasts to further develop this product.

The VMS has been designed to accommodate half height five and a quarter inch drive(s) as well as a Viglen Winchester. Provision has been made for fixing screws on the metal chassis and on the back panel of the unit for many add-ons such as the Viglen integral power supply and a cooling fan.

IMPORTANT: Viglen can not accept any responsibility for damage caused to disc drives or any other equipment during assembly of the kit. Viglen would also like to point out that the removal of the cases from the peripherals such as disc drives may invalidate the manufacturers guarantee. If you feel that you might experience difficulty during the installation operation, we suggest you consult a person qualified to carry out this upgrade.

A. CONTENTS OF KIT.

Top half of professional master console main unit.
Extension keyboard case.
Extension keyboard cable.
Keyboard and console main unit labels.
Blanking plates (Disc drive apertures and cartridge slots).
Fixing screws.
Rubber feet.
2 X 15-way connectors.
2 X 1-way switches.
Function key strip.

B. KIT ASSEMBLY INSTRUCTIONS

IMPORTANT: Read these instructions through fully before attempting to install your system in the console unit. These are guides to the installation of the kit complete with dual disc drives only. Viglen Winchester can only be fitted by our technicians, hence no fitting instruction is given.

- 1 Unplug your BBC Master micro from the mains supply.
- 2 Unscrew all four fixing screws on the bottom of the case labelled "Fix", and lift off the top half of the case.
- 3 Unplug the ribbon cables between the keyboard and the BBC circuit board. Taking care not to brake the soldrings between the keyboard and the ribbon cables.
- 4 Unscrew the keyboard fixing screws, two on the front and two at the back.
- 5 Lift out the keyboard from the BBC and locate it into the base of your new keyboard case by matching the mounting holes on the keyboard and the case. These locating holes are shown in Figure-1 and labelled as 'a' and 'b'.
- 6 Fix the keyboard in position using the three original keyboard screws. These fixing points are labelled as 'c', 'd' and 'e' in Figure-1. Do not over-tighten any of the fixing screws as this may distort the case.

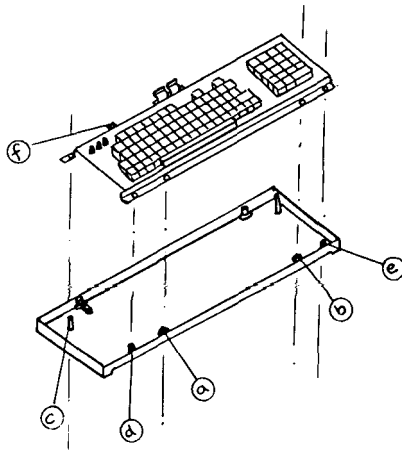


FIG. 1

- 7 To connect the extension cable to the keyboard proceed as follows:
 - i) Insert the two 15-way pinhead connectors into the sockets attached to the ribbon cables.

ii) Plug the two 15-way connectors on any one end of the extension cable into the ribbon cables in such a way that the sides of the two connectors marked black face each other.

iii) Using the nut & bolt supplied connect the insulated earth cable to the keyboard at point 'f' Figure-1. The complete assembly of the extension cable to the keyboard is shown in Figure-2.

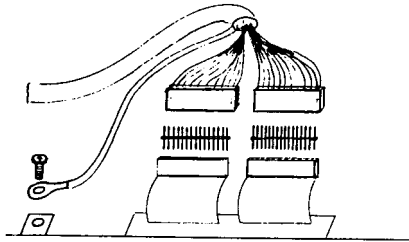


FIG. 2

- 8 Partly remove the protective backing from the left end of the keyboard label. Taking care not to crease the label, accurately place the exposed sticky area in the recess provided on the top of keyboard case, Figure-3, and gradually stick the label down while removing the rest of the backing. Using a sharp knife or a pair of scissors trim the edges of the label if required.

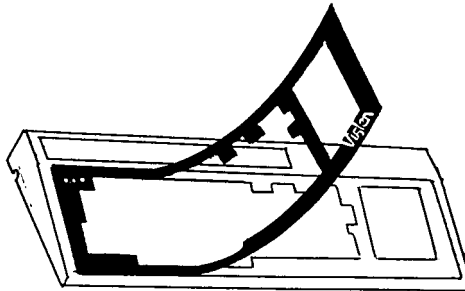


FIG. 3

- 9 Place the top half of the keyboard case over the keyboard ensuring that the LEDs are not bent under and the extension cable passes through the slot on the left hand side of the case.
- 10 Screw the top and bottom of the keyboard case together using the 4 self tapping screws provided. Again do not over-tighten the screws as this may cause permanent damage to your keyboard case.
- 11 Insert the new function key strip into the recess provided on the top of the keyboard case and affix the rubber feet to the bottom of the case.

Note: In extreme cases some keys on the keyboard will appear to jam when pressed down, this is due to the slight variation in the position of the keyboard fixing holes. However, if this is the case with your BBC remove the top cover and file away the edge of the obstructing side.

- 12 Plug the other end of the extension cable into the BBC base unit making sure that the two sides marked black face each other. Test the connections between the BBC and the keyboard by switching on the computer. If the keyboard functions correctly switch off and unplug the computer. If some keys do not function make sure that the plugs are making good contact and that the pins are not bent out. If the display is blank, the cable has been incorrectly connected. Turn off the computer unplug the cable from circuit board and turn the connectors round while keeping the two black sides together replug and retest.
- 13 Using the nut and bolt provided connect the earth cable to the side of the power supply as shown in Figure-7.

Important: Disc drives are very delicate mechanisms extreme caution must be observed when handling them outside their cases. If you are not installing drives then skip to section 23.

- 14 Unplug your drives from the mains supply if an integral power supply is used. Disassemble, remove the power cables, and noting their orientation remove the data cables leaving two bare drives.
- 15 Turn the console unit upside down and carefully slide your drives into the unit from the front.
- 16 The majority of drives can be attached to the metal plate using the (m3X6) screws provided. Match-up the four fixing holes on each drive to the slots on the metal bracket making sure that the drives are pushed as far back as possible before tightening the screws.
(Note: If these screws do not fit your drives, use those supplied with your drives originally.)
- 17 Make sure the BBC is disconnected from the mains.
- 18 To fit the power cable lift-up the power supply from your Master BBC by undoing the four retaining screws (three to the base of the BBC and one to the metal plate attached to the back of the circuit board). Plug the power supply, reposition and replace the screws. See Figure-4.

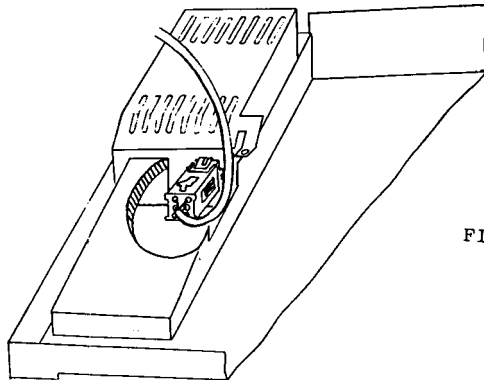


FIG. 4

- 19 To connect the data cable, remove the BBC circuit board by undoing 5 retaining screws (four through the cartridge casing and one connecting the metal plate at the back of the circuit board to the power supply). Carefully lift the board out and connect the IDC connector (BBC end) into the drive socket. Reposition the circuit board by inserting the sockets through the slots and pushing the board forward until the mounting holes on the back of the circuit board match the holes on the locating pins, then replace the screws. See Figure-5.

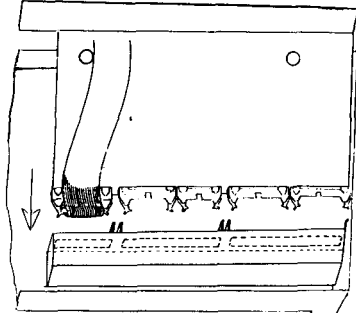


FIG. 5

Note: Difficulty may arise while inserting the drive socket at the front of the board, with the data cable bent over, through the slot. This is due to the fact that the slots are just wide enough to accommodate the sockets. However, to overcome this difficulty, put the circuit board aside and file down the edge of the slot shown in Figure-6, so that the disc drive socket with the data cable plugged into it passes through easily.

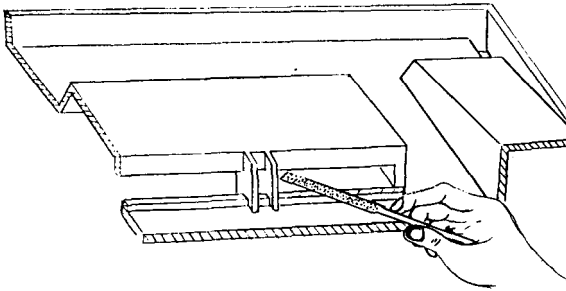
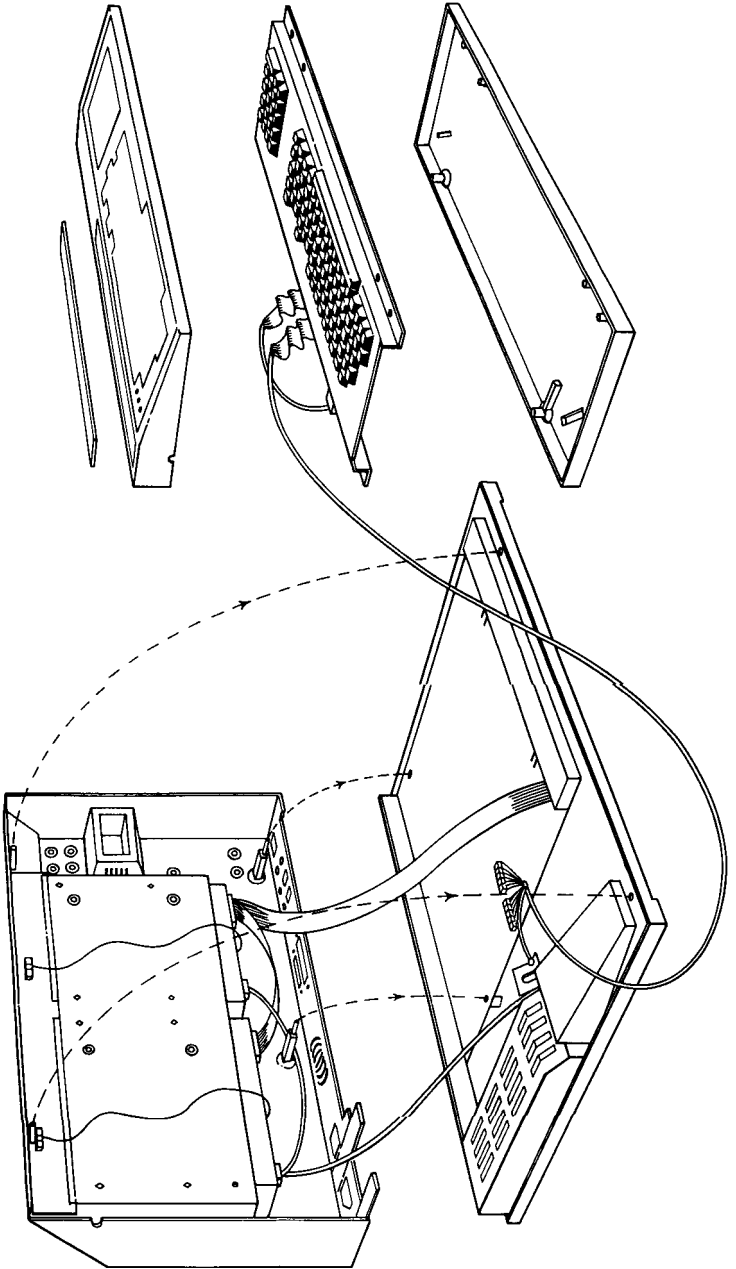


FIG. 6

- 20 Plug the power cable into the drives. The connector will only fit one way.
- 21 Connect the data cable to the disc drives, making sure the stripe matches up with the pin one of the drive. (If in doubt refer to your notes when you took the drives apart).
- 22 Existing switches on 40/80 switchable drives can be fixed to the back panel of the main unit where circular and rectangular punch-outs are provided. Alternatively the new switches supplied with the kit can be used instead, if preferred.
- 23 Gently place the top of the unit over the BBC making sure that the keyboard cable passes through the cord grip.

FIG. 7



- 24 Switch on the computer. If any part of the system fails to function, turn the computer off, go back and check all the connections. The complete assembly of the VMS is shown in Figure-7.
- 25 Use the two original short screws to fix the front and two long screws to fix the rear part of the unit.
- 26 Stick the top, front and back labels as shown in Figure-8.

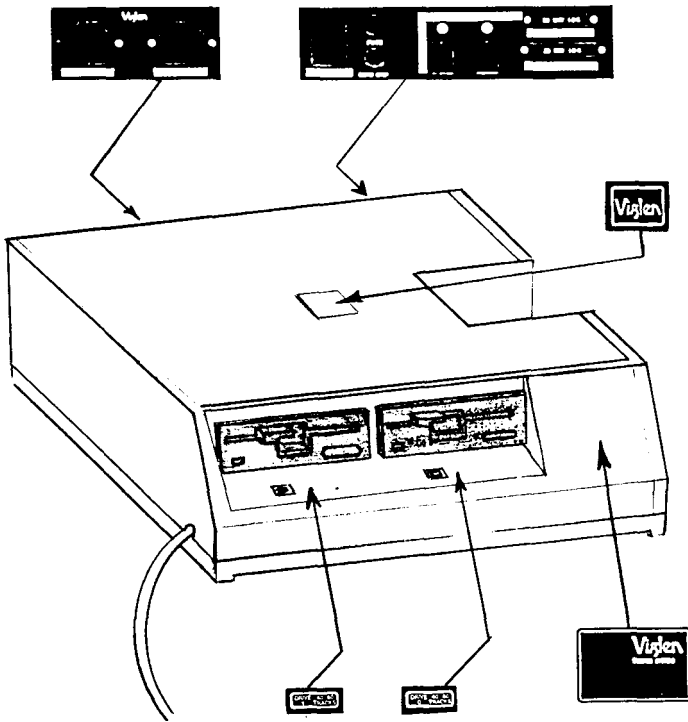


FIG. 8

Note: Care should be taken when sticking the two labels on the back panel so that the perforated punch-outs stay on the label.

C. OPTIONAL EXTRAS

1. Dual Data Cable - for two disc drives when used in the VMS (The connections have to be made internally)
2. Dual Power Cable - to link two drives to the BBC power unit. (The connections have to be made internally)
3. Integral Power Supply Unit - capable of running up to two disc drives.

Figure-9 shows the back panel of the VMS which has been specifically designed to accommodate number of accessories to be used with the Viglen Winchester.

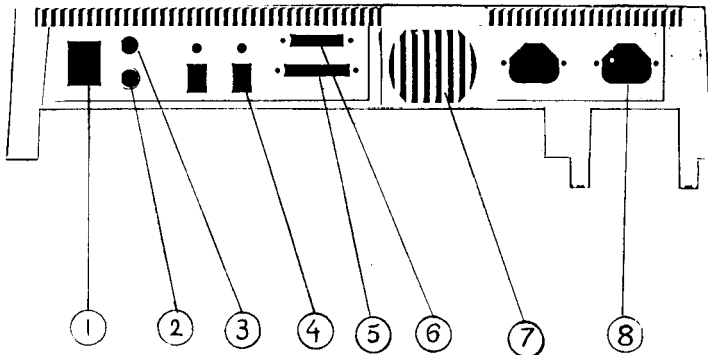


FIG. 9

Ref No	Description	Supplier	Order No	Page
1	Neon Switch	Farnell	140-615	M12
2	Strain Relief Bush	RS	543-866	26
3	Fuse Holder	Farnel	F357	F15
4	Switch Punch-Outs (see section 22)			
5	26 Way IDC Connector	Farnell	145-084	J13
6	20 Way IDC Connector	Farnell	145-083	J13
7	Cooling Fan	Viglen		
8	Panel Mounting Outlet	Farnell	L2292	J63