



FITTING INSTRUCTIONS FOR External PCW Disc Drive

Part No. EXT8-9B

G V L Microform

191 Watling Street Road, Preston. PR2 4AE

Telephone: 0772 - 701248 Fax: 0772 - 703131

PLEASE READ ALL THESE INSTRUCTIONS CAREFULLY BEFORE STARTING THE INSTALLATION

1. CHECK LIST:

- 1 External 9512/8256 'B' Drive
- 1 Internal 9512/8256 Lead
- 1 Stanley knife (not supplied)
- 1 Philips screwdriver (not supplied)
- 1 Small flat bladed screwdriver (not supplied)
- 1 Small file (not supplied)
- 1 Blanket or table-cloth (not supplied)

2. SUITABILITY:

The EXT8/9B Drive is suitable for all PCW9512s (Not Plus Models), and PCW8256s, with one single 'A' drive fitted. The instructions below apply to fitting an External 'B' Drive.

3. INSTALLATION:

1. **UNPLUG THE PCW FROM THE MAINS POWER SUPPLY.** Unplug the keyboard and printer, and any other peripherals that may be connected to your PCW.

2. Turn your PCW round, so that the back is facing you.

IF YOU ARE INSTALLING TO A PCW8256 GO TO STEP 12

3. Remove the six screws from the cabinet. The casing of the PCW is marked with arrows to show where the screws are located. Two are covered by a white plastic cap. These are removable. Pull off the brightness and contrast knobs from the left hand side as you are looking at the back of your PCW.

4. Very carefully lift off the rear cover by sliding it back about an inch and lift it away from the main body.

5. Locate the spare B drive cables. These will probably lie between the upper and lower printed circuit boards, and will probably be tie wrapped.

6. Cut the tie wrap, and pull the cables towards you, to a position where you can connect your new drive cables.

7. Connect the spare B drive 26 way black connector which is the spare ribbon cable that you located in step 5, to the 26 way connector on the internal ribbon cable supplied with your new drive. **MAKE SURE THAT THE COLOURED STRIPS ARE AT THE SAME SIDE.** To do this you may need to cut off one or two keying tabs with a Stanley knife or a small file. **TAKE CARE NOT TO CUT INTO THE**

RIBBON CABLE.

8. Connect the spare B drive power supply connector, which is the 4 wire white connector, to the 4 pin brown connector on your new drive. This should only fit one way round. You may find that one or two of the wires from the white connector are not connected to a wire on the 4 pin brown connector. This is normal as your new drive does not need the extra voltage needed by the 3" drives.

9. Now feed the blue centronics connector on the internal lead through the parallel printer port hole in the rear cover of your PCW. This is the long one at the side of the round hole.

10. Now replace the back cover by moving it downwards into position, squeezing it slightly, and slide it forwards into position. Replace the six screws, brightness, and contrast controls.

11. Your new drive installation is now complete. **GO TO TESTING YOUR NEW DRIVE.**

12. Place your PCW face down on a blanket or table cloth, to protect the screen, and remove 6 screws holding the rear cover on. There is one in each corner, and one at each end of your expansion port. Carefully remove the rear cover.

13. Feed your new internal ribbon cable through the printer port hole in the rear cover. Only one end will go through.

14. You will see your A drive with a ribbon and power cable connected to it. Locate the spare B drive ribbon cable and power cable. These will probably be hanging down from your A drive, and will probably be tie wrapped.

15. Cut the tie, and connect the spare B drive 26 way black connector into the 26 way connector that you have just fed through the rear cover. **MAKE SURE THAT THE COLOURED STRIPS ARE AT THE SAME SIDE.** To do this you may need to cut off one or two keying tabs with a Stanley knife or a small file. **TAKE CARE NOT TO CUT INTO THE RIBBON CABLE.**

16. Connect the spare B drive power supply connector, which is the 4 wire white connector, to the 4 pin brown connector on your new drive. This should only fit one way round. You may find that one or two of the wires from the white connector are not connected to a wire on the 4 pin brown connector. This is normal as your new drive does not need the extra voltage needed by the 3" drives.

17. Now replace the back cover by moving it downwards into position, squeezing it slightly, and slide it forwards into position. Replace the six screws.

TESTING YOUR NEW DRIVE:

1. Turn your computer towards you and plug in your keyboard, and your new External 'B' drive. Plug into the mains and **SWITCH ON**.

2. **DO NOT INSERT YOUR START OF DAY DISC YET.**

3. Check that the lights on your drives are **NOT** brightly lit. If they are - **DO NOT WORRY**, you have done no harm. **SWITCH OFF YOUR PCW**. Remove the back of your PCW and reverse the ribbon cable connection. Replace the back, and switch on again. The light on your drives should just glow dimly.

4. Insert your CP/M start of day disc, and watch for the initialisation message. It should read....'2 Disc Drives,...k Drive M:'.

5. If you do not get this message on the screen, and the screen remains blank, remove the back again and check the power connector.

6. Your new drive will be much faster than the 3" drive that you have just replaced.

7. All 3.5" discs will have to be formatted prior to use. Use DISCKIT to format your 3.5" discs. The discs will format to 720K. **FORMATTING** and **VERIFYING** a disc is the best way to test that your new drive is working correctly, as all heads and cylinders on the disc are checked for **READ / WRITE** integrity.

NOTE: You would be prudent to copy **ALL** your 3" discs on to 3.5" discs. Then if your 3" disc drive goes faulty you will still have your 3.5" discs to work with.

DISCLAIMER

You will do no harm to your PCW by following these instructions. The company accepts no responsibility whatsoever for any damage of any kind caused during or after the installation of this disc drive.

3½" DUAL-MODE DISC DRIVE

Our 3½" Dual-Mode Disc Drive is unique amongst CPC disc drives in that it can be used both as an 800k megadrive and as a perfectly standard B drive. Because 3½" discs are not made to turn over like 3" discs, only one side of each disc can be used in Amsdos (178k free) and CPM (169k free). That is true of all available 3½" and 5¼" CPC drives *except ours*, although we are sure that others will soon follow suit. The unique SIDE SWITCH, located at the rear of the drive, allows both sides of a 3½" disc to be used in Amsdos and CPM. Now, instead of turning the disc over, as the 3", you simply flick the switch to access the other side. For the first time ever a 3½" drive can be used as a standard B drive on the CPC. That is mode 1.

Mode 2 is, of course, the 800k megadrive which can be achieved in conjunction with Romdos, Ramdos or Rodos.

CONNECTING THE DRIVE

664 and 6128:- plug the drive's 34 way female edge connector to the disc drive port at the rear of the computer so that the ribbon cable leaves on the underside. If the connector is especially marked, the mark should be on the top.

464:- plug the drive's 34 way connector to the spare connector on the DDI-1's cable. It will only fit one way round.

All CPCs:- plug the 35mm jack plug into the drive's power socket and the mains adapter into a mains outlet. Your disc drive is now ready for use. Always power up the disc drive before the computer and power down after the computer.

When using the drive for the first time, switch everything on but do not allow Romdos or Rodos to initialise and don't run Ramdos. CAT a disc in drive A. If the computer 'hangs', switch everything off, turn the 34 way connector over and try again. In some circumstances this will be necessary but no harm is done to either the disc drive or the computer whilst the drive is connected upside down. When the A drive is accessed successfully, make sure that the side switch points upwards and type 'b' (| is obtained by pressing SHIFT and @ simultaneously). In a few seconds you will get the Ready prompt on screen. The B (3½") drive is now the default drive and any attempt to access a disc will access the B drive. Format a disc in the 3½" drive using your usual Amsdos formatter and save a small program to it. e.g.

10 PRINT "This is a test"

Type NEW to clear the program from the computer's memory and run the program from the B drive. If all is well, you can be sure that the 3½" drive is connected and functioning correctly. Flick the switch and format its other side. Save a different small program to it (or at least a different filename) and test in the same way as the first side. You can designate sides A and B to

be whichever switch position you wish but the switch in the up position is probably the best for side A since that is the position for the 800k mode.

This has been a step by step method of testing that all is well without too many 'new' untried things being tested simultaneously. If a fault occurs at any stage, you will know exactly what caused it.

That done, reset the computer, allowing Romdos or Rodos to initialise or run Ramdos. Follow your program's instructions to format a fresh disc. You can test again by writing and saving a short program to it but, when that's all done, you are ready to use the 3 $\frac{1}{2}$ " drive exactly how you wish. To get back to the A drive at any stage type !A.

TIPS

When using the drive in mode 1 (normal 8 drive), don't allow Ramdos Romdos or Rodos to initialise. Otherwise strange readings may be obtained from one side of the disc.

Mark your 'normal' and 'mega' 3 $\frac{1}{2}$ " discs clearly to avoid any confusion.

Some software will not recognise alternative disc formats. e.g. Multiface II will only save to the A drive but not to an alternative format.

You might have seen advertisements for a new product called 'De Cable'. It has two switches and is fitted inside the CPC leaving its two switches sticking out of the disc drive port. One of its switches is to swop the drives around, making the B drive the A drive and vice versa. Its other switch is the same SIDE SWITCH that is fitted as standard to our drives. De Cable costs £24.95. We thought you'd like to know that. It's advertising is somewhat misleading though as it seems to suggest that a 3 $\frac{1}{2}$ " drive's full capacity (800k) can be achieved without the use of additional software but, alas, this is not so.
