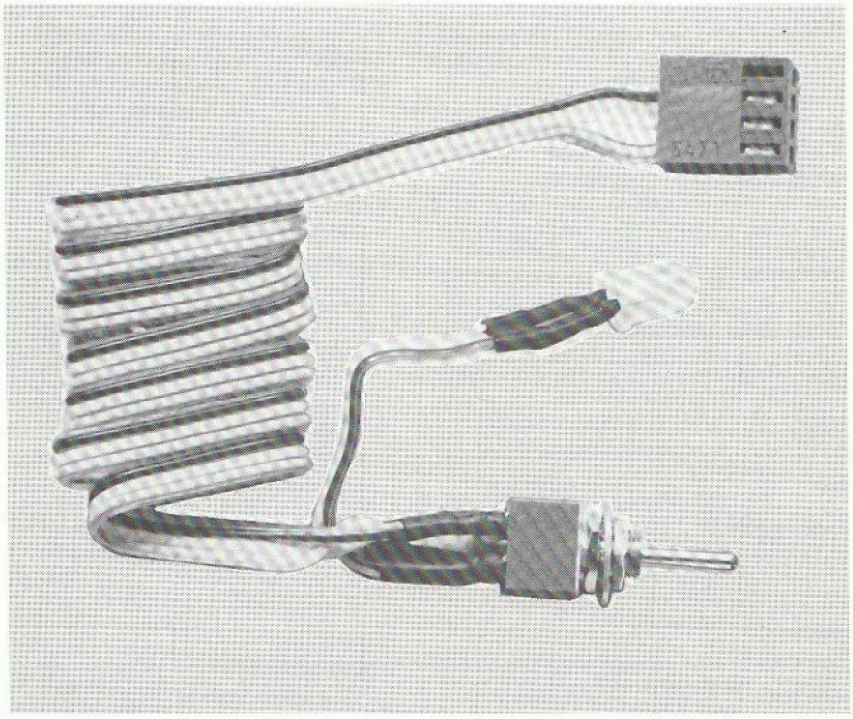
1050 WRITE SWITCH

By BUG

Before you read any further, please bear in mind that any modification or alteration to your Atari equipment, other than that completed by authorised service agents, renders any guarantee null and void. But if your equipment is more than 12 months old or you want to modify and 'risk it', then read on.

This modification to your 1050 disk drive will allow you to write to both sides of a disk, without having to remove the write protect tabs (just think, no more sticky glue marks on your disk, and you can forget about notchers, hole punchers and razor blades). It makes writing to the disk as easy as pie, but beware there is always a snag! It's so easy to use you can forget to check the LED colour and overwrite your master disk! Disaster!!

To those dedicated Atarians who are still with us and haven't decided to proceed no further, I can say that I have used this mod for the last 6 months without losing a single disk of data. In addition, many members of the Birmingham Atari User Group (BUG) constructed the mod as a club project, and there has been a 100% success rate so far, with no data losses.



Construction

A list of parts is shown in this article, descriptions are given together with quantity and the code number of each item, which can be found in the Maplin electronic component catalogue.

The first task is to construct the switch and LED wiring harness and then to fit it into the drive. Take the 1 metre length of 10 way ribbon cable and separate 3 wires from it, cut these three wires to a length of 3 inches, separate the 3 wires for about half an inch at each end of the 3 inch piece. Strip the insulation back about 5mm on each wire (at both ends) and tin the wires with solder ready to be soldered in position. Cut eight quarter inch pieces off the heat shrink sleeving, and put 3 of them onto each wire, at one end only, well back down the wire so that the tinned part still shows.

Figure 1 shows the multicoloured LED with its pins marked 1,2 and 3. Note also the position of the flat on the LED's case. Solder one end of the three wires to the legs of the LED, one wire to leg 1, another wire to leg 2 and the remaining wire to leg 3. Slide the heat shrink down over the joints, apply a little heat and the sleeving will shrink and protect each joint. Each leg of the LED must be isolated from the others.

Take the remaining length of three wires and cut off (16 inches if switch and LED are to be fixed externally) 12 inches for connections between switch and drive. Strip and tin the wire ends as before, both ends. On one end solder the three Minicon terminals and insert them into the Minicon housing. Figure 2 shows the correct positions for the 3 wires in the 4 way housing. You should now have an LED with 3 wires attached and a Minicon connector with 3 wires attached.

Now you must connect these to the switch. Referring to Figure 3 you can see where the six wires should connect to the switch. First though, locate the wire designated 2 on the LED and the wire designated 5 on the Minicon and twist the two tinned ends together, solder them into one connection. Now you only have five wires to connect to the switch which, as can be seen in Figure 3, is all you need. Take the remaining 5 sleeves and push them over the five wires (including the paired wires). Now solder each wire to the switch in its designated place. Be very careful here, make sure you get it right. As you solder each wire in place, pull down the sleeving and heat shrink in position. You should end up with a completed assembly as shown in Figure 4.

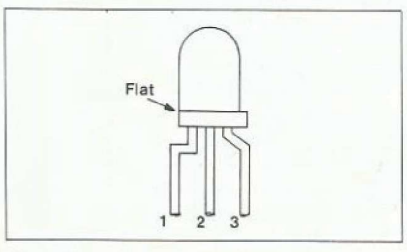


Figure 1.

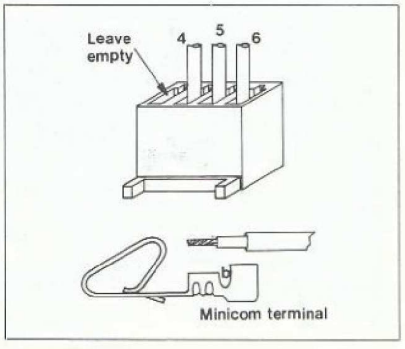


Figure 2.

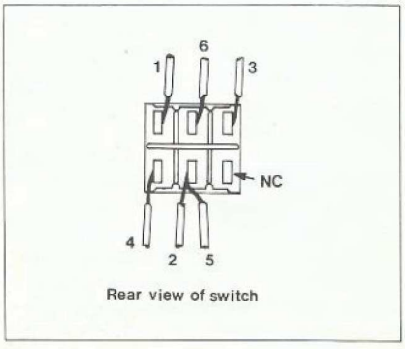


Figure 3.

Fitting

At this stage you can either fit the assembly inside the 1050 case or fit it into a box that can be attached to the side of the drive with sticky pads.

To fit internally, turn your drive upside down and remove the 4 Phillips screws in the base. Turn the drive right way up and remove the top cover by lifting from the rear. Looking into the drive from the front, you will see 5 brown connecting blocks at the left rear (they have lots of white wires on them). Locate plug J11, it's the one nearest the front. Carefully remove plug J11 with a pair of long nose pliers, do not pull it out by the wires as they are fairly delicate. Once unplugged you can just leave it disconnected, it should not interfere with the operation of the drive. You could tape it to the side if you are worried. Insert the Minicon plug you have just made into J11, ensure the pegs on the base of the Minicon housing are pointing inwards towards the centre of the drive.

Remove the dark grey front surround plate and lay to one side. Using Figure 5 as a guide, decide on the best positions for the LED and the switch. Drill a 3/16 inch hole for the switch and a 9/32 inch hole for the LED holder. Insert the switch into its hole and tighten up with the nuts supplied. Insert the LED holder into the hole, put the holder locking ring over the LED and then insert the LED into its holder, push down the locking ring and secure the LED in position. Place the front surround back in position and reassemble the drive case.

If fitting the mod externally, feed the cable from the switch around the case and enter via the drive select switch, then insert the plug as described earlier.

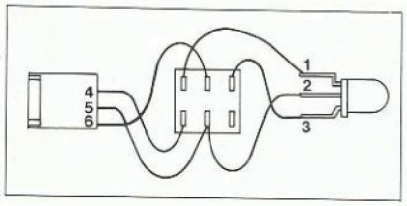


Figure 4.

Testing

Power up the drive, the LED should either be red or green. If not your connections may be suspect. Move the switch until the LED shows red. Insert a DOS disk and try to format, if all is well it won't be able to do this. Set the LED to green, now when you format all should be normal. Remember: red equals protected, green is go (you can write to the disk).

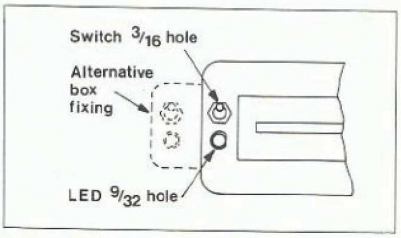


Figure 5.

Finally

All the components used are readily available from your local stockist, or you can try Maplins, as their codes have been quoted. If you are not the type to build your own, a kit of parts is available from Micro Discount, P.O. Box 946, Sutton Coldfield, West Midlands, B74 3EZ. The kit costs £3.50, or a ready assembled version is available for £5.50 (add 25p for postage).

PARTS LIST

Multicolour LED (YH75S)
LED Holder (YY40T)
Ultramin DPDT switch (FH99H)
Minicon housing 4 way (HB58N)
Minicon terminals (YW25C) 3 off
Ribbon cable 10 way (XR06G) 1 metre
Heat shrink sleeve (BF87U)

CRABAPPLE GETS CARRIED AWAY, SUES SELF

A recent unconfirmed report claims that Crabapple Computer, in a recent spate of litigation against competitors and former employees, accidentally sued itself. According to an anonymous source in the Sillycon Valley computer makers' legal department, the Alviso headquarters sued the Milpitas assembly plant, where the firm builds the Pippin computer, for trademark infringement.

"It was really funny how it happened," the source said. "About the time we were suing [ex-Crabapple Chairman Steven] Snobs, a new member of our junior staff got lost on the freeway and drove past the Pippin factory. When he got to the office, he told us how there was another Crabapple on the other side of the valley. We naturally assumed this was a new Snobs operation, so we sent a memo upstairs recommending legal action and they sent one back telling us to go ahead. Imagine how embarrassed we were when we found out we had sued our own plant!"

The source told us the suit was settled out of court. "I guess this is what you can expect now that Crabapple has more lawyers than engineers," she said.

When contacted, Crabapple general counsel Mike Mouthpiece claimed no knowledge of the incident. He also threatened to sue this reporter if any word of this story appeared in the press.