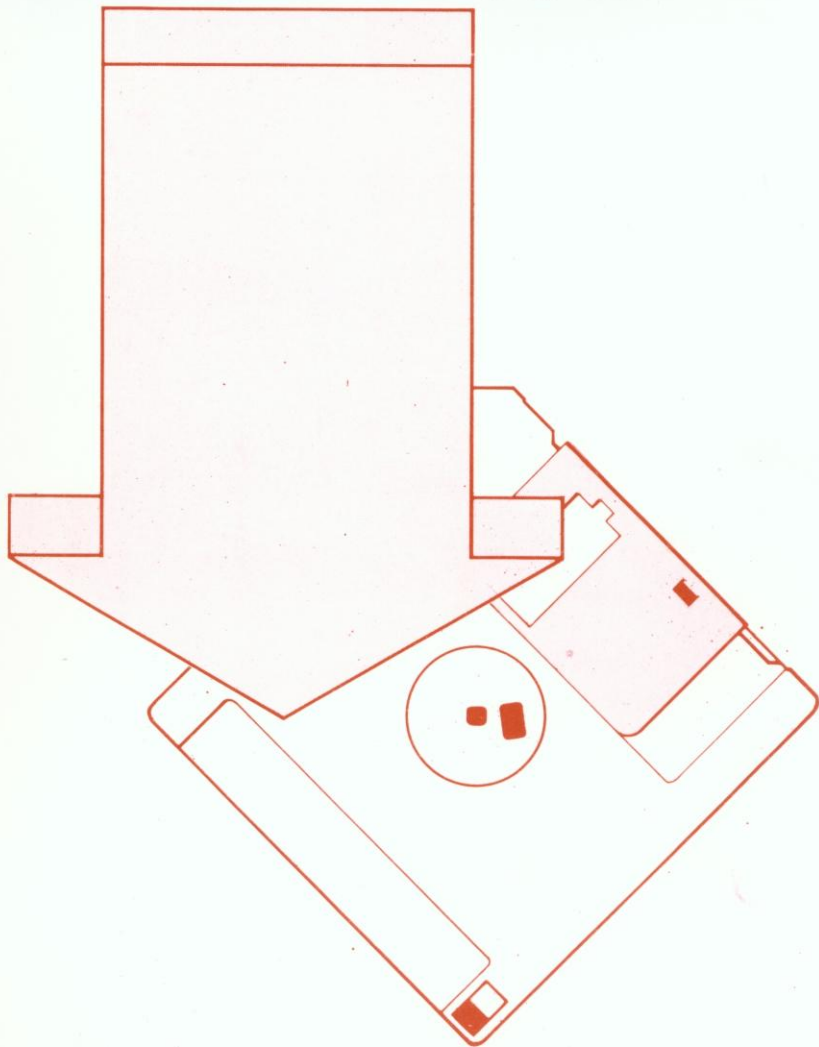


ATARI ST

# MICRO-TIME CLOCK CARD



**microdeal**





## INSTRUCTIONS FOR INSTALLING THE MICRO-TIME ST BATTERY-BACKED INTERNAL CLOCK CARD.

IMPORTANT: Installing this clock card may, in some cases, invalidate your guarantee. Always remove clock card before returning your computer for servicing.

This package contains :- Instruction manual  
Micro-Time clock card  
Battery Pack

Tools required :- Small Phillips-head screwdriver  
Small Slot-head screwdriver  
Portable light or torch.

PLEASE READ THESE AND ALL INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO CARRY OUT ANY WORK ON YOUR COMPUTER.

Installation of the MICRO-TIME ST clock card is a relatively easy procedure, but like anything else if you are careless you might break something. The instructions will make every effort to steer you away from danger areas by alerting you with 'CAUTION' warnings. Please pay particular attention to these warnings, but do not let them scare you.

CAUTION: You will be required to handle computer chips, and while they appear to be sturdy, they can be damaged if exposed to magnetic fields or static electricity. Be sure that none of the tools that you will be using are magnetized. You can check this by placing the tool next to a sewing needle. (Note, some types of sewing 'pins' are actually made from aluminium and therefore cannot be trusted for this test.) If the needle is attracted to the tool, then the tool is magnetised and should not be used. The best way to avoid a static electricity discharge, is to

ground yourself first by touching the nearest electrical wall socket attachment screw.

Right, let's get started.

1. Make sure that all of your computer's systems are working correctly before proceeding (disk drives, monitor, mouse, keyboard, etc.).

2. Switch off and unplug ALL cables that are attached to main computer unit.

3. Turn the computer onto it's back and remove the screws that attach the case halves. The 520ST has six (6) screws, and the 1040ST has seven(7). Refer to figure 1 for the locations of the screws.

Note: Some screws may be different lengths and must be returned to the same positions when you reassemble the computer case. Normally the short screws are at the front of the computer.

4. Hold the top and bottom halves together and turn the computer back over so that the keyboard is facing up with the space bar towards you.

5. Lift off the top half of the computer cover and put it aside, out of the way. You will now be looking at the keyboard assembly resting on a metal shield.

6. Carefully lift up the keyboard assembly and turn it upside down, so that the wires coming out of the keyboard assembly are pointing towards you.

CAUTION: It may be necessary to unplug the

keyboard assembly from the main computer . If so, make a note of the orientation of the plug so that you can reinstall it correctly. To remove the plug in the main computer body, grasp ALL of the wires at the same time as near to the plug as possible, and ease the plug from the socket. DO NOT PULL ON INDIVIDUAL WIRES.

7. Place the keyboard assembly so that it is upside down (keys down) with the wires towards you, as shown in figure 2. Pay attention to the large dark computer chip. The following steps will tell you how to remove and replace this large chip.

CAUTION: Before removing the computer chip from its socket NOTE ITS ORIENTATION. There should be a small notch at the left end or a small indentation on the lower left corner of the chip. These are markers for the Pin 1 position. AVOID TOUCHING THE PINS ON THE CHIP.

8. Take the small slot-head screwdriver and CAREFULLY prise the computer chip out of its socket by inserting the screwdriver between the chip and socket and gently prising upwards. Alternate between the two ends of the chip so that the pins do NOT bend. IT IS BEST TO TAKE YOUR TIME ON THIS PROCESS.

NOTE: Remember to leave the anti-static foam mat in place on the plug at the end of the cable, while handling the MICRO-TIME ST clock card board.

9. Carefully insert the large chip into the EMPTY CHIP SOCKET on the MICRO-TIME ST clock card board. Refer to figure 3. Apply gently increasing pressure between fingers and thumb along the length of the chip and socket to ensure even and full insertion of the chip into the socket.

NOTE: The small indentation (or notch) on the large dark chip should be at the end of the MICRO-TIME ST card, next to the two capacitors.

10. This next step is optional, but should be considered. The charge rate for the batteries is factory set for you using your computer a few times a week. If the computer is used regularly in a work environment, 4 to 6 hours every day, the recharge rate should be slowed down to increase battery life. To do this, just use a set of diagonal cutters to clip RI from the clock card. (See figure 3). With RI removed, a complete recharge will take 12 to 14 hours.

NOTE: This should be done if the computer is in constant use daily.

11. Remove and discard the anti-static foam mat from the MICRO-TIME ST clock card slug. Carefully insert the plug of the clock card board into the empty large socket on the keyboard (the same socket from which the large chip originally came). BE SURE THAT THE PLUG IS ORIENTATED THE SAME AS THE CHIP WAS i.e. the spot on the plug is at the same end of this socket as was the large chip.

12. Turn the keyboard assembly upright (keys up) and lay it back into place in the bottom half of the computer case, bending the ribbon cable so that the clock card fits towards the rear of your computer. (See figures at the back of the manual).

13. Re-plug the keyboard assembly cable connector into the socket on the bottom half of the computer case from which it has been removed. BE SURE TO OBSERVE PROPER ORIENTATION OF THE PLUG.

14. Plug in the batteries and attach the battery

pack to the shielding towards the rear of the computer, using the adhesive strip on the battery pack. DO NOT COVER ANY OF THE HOLES IN THE SHIELDING WITH THE BATTERY PACK.

15. Replace the top half of the computer case. Turn the computer over and replace the screws. Remember it is necessary that the screws are re-inserted in their original holes.

16. Re-attach all of the cables to the rear of the computer.

17. Insert the MICRO-TIME ST disk into drive A and turn on your computer. It is important to check the mouse and keyboard to verify that they are working properly. If they are not, check the installation of the clock card and make sure that it's plug and large dark chip are seated properly.

18. Set the current date and time using the furnished SETTIME.PRГ programme. Initially, after the time is set, leave the computer on continuously for 10 to 12 hours, to ensure that the batteries are fully charged. Turn the computer off for a few minutes and then turn it back on again, to see that the time is still set correctly. You can now carry on and use your computer as normal. If R1 has been removed, you will need to leave the computer on longer to fully charge the batteries. A full charge should keep your MICRO-TIME ST clock card running for at least a week, even without operating the system.

19. If the above test fails, it is possible that the batteries are not fully charged. Leave the computer on for a longer period of time and repeat the test. If problems persist, contact MICRODEAL.

## MAKING A BOOT DISK

Even though the MICRO-TIME ST clock card keeps the time and date always present, the ATARI ST needs a programme to check the time and date at power-up. ON YOUR MICRO-TIME ST disk, there are a few programmes and accessories that you can choose to accomplish this. IT IS IMPORTANT THAT YOU READ THE INSTRUCTIONS FROM THE README FILE ON THE DISK.

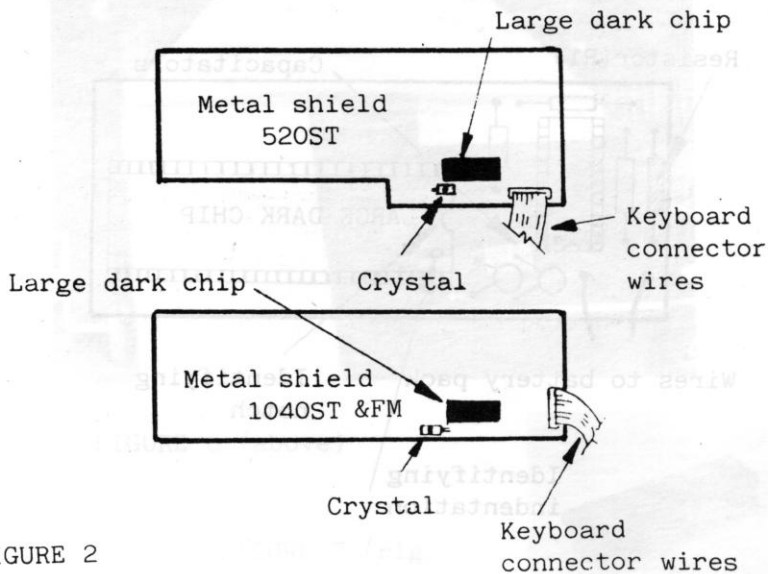
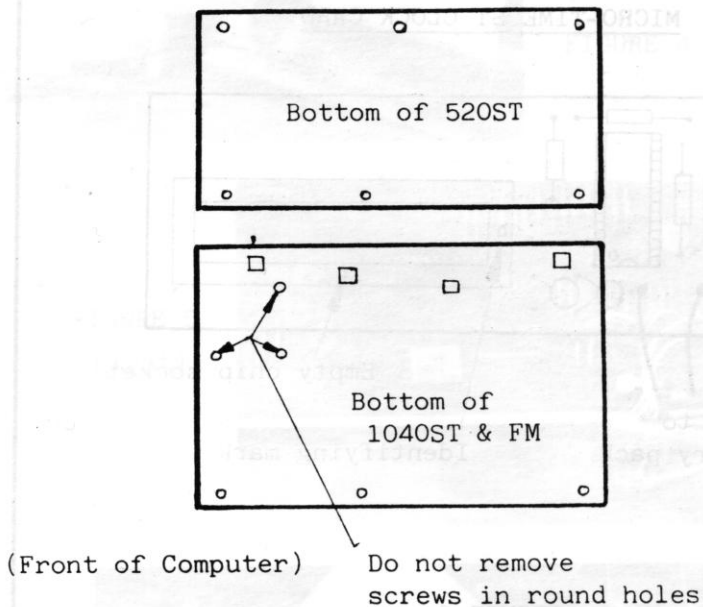
Double-click on the README file. If you have a printer, click on the PRINT option to print out the instructions. If you do not have a printer, click on the SHOW option and read the instructions. Press the space bar after you read each screen.

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## INSTALLATION INSTRUCTIONS



# MICRO-TIME ST CLOCK CARD

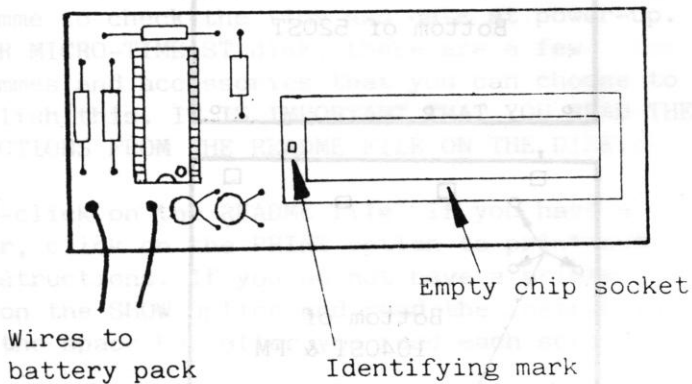
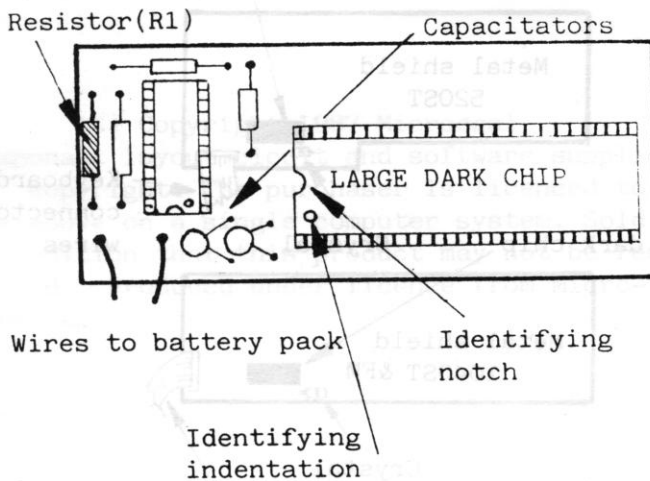


FIGURE 3



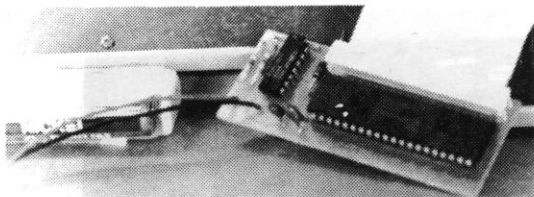


FIGURE 4 (left)

FIGURE 5  
(right)

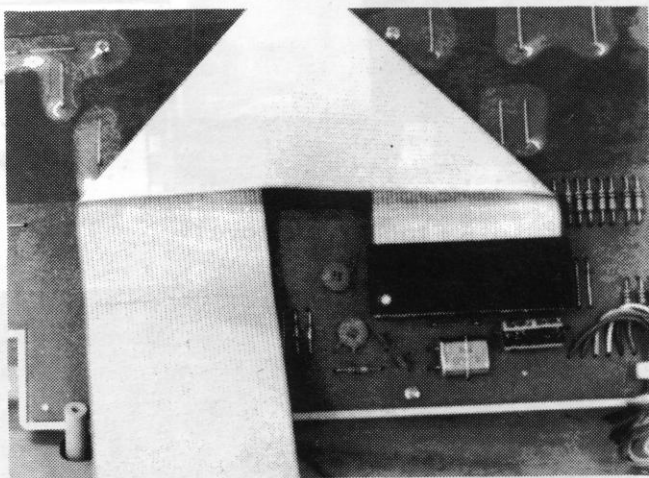
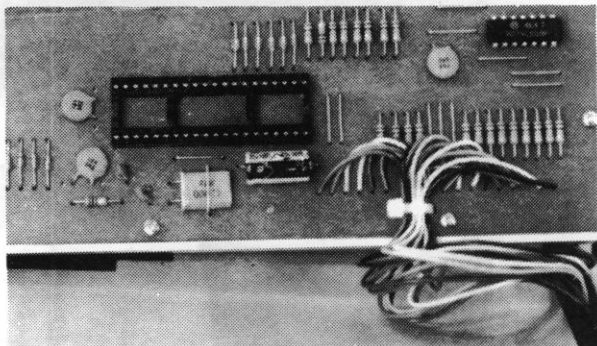
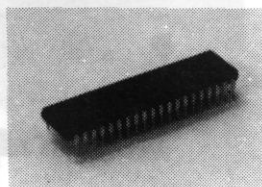


FIGURE 6 (above)

FIGURE 7 (right)



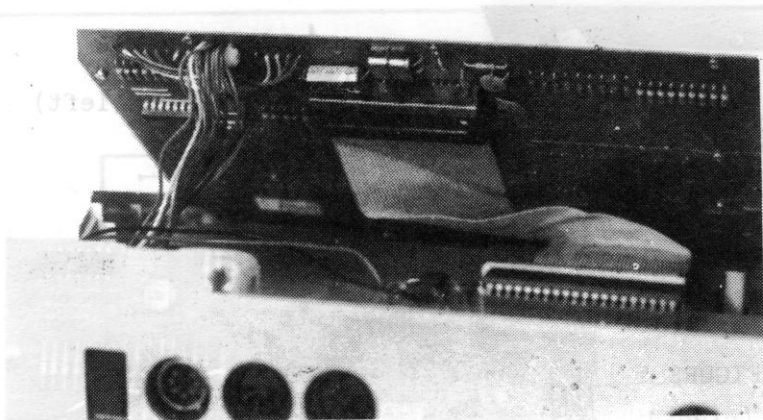


FIGURE 8 (above)

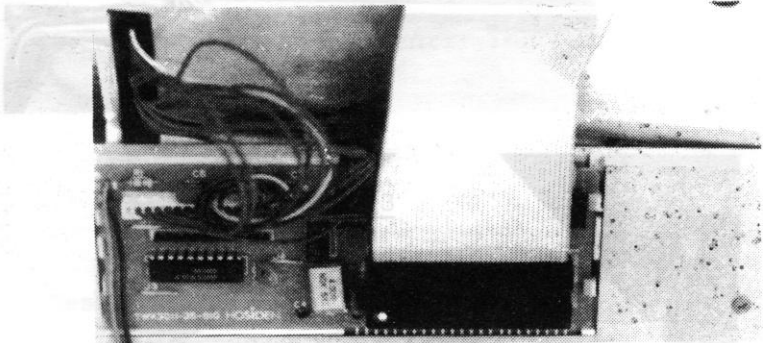


FIGURE 9 (above)

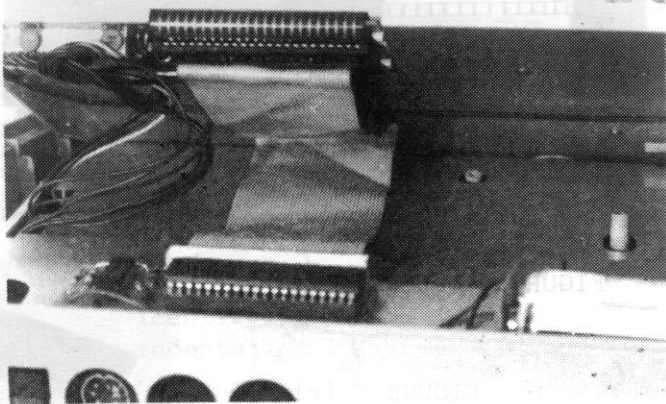


FIGURE 10 (above)

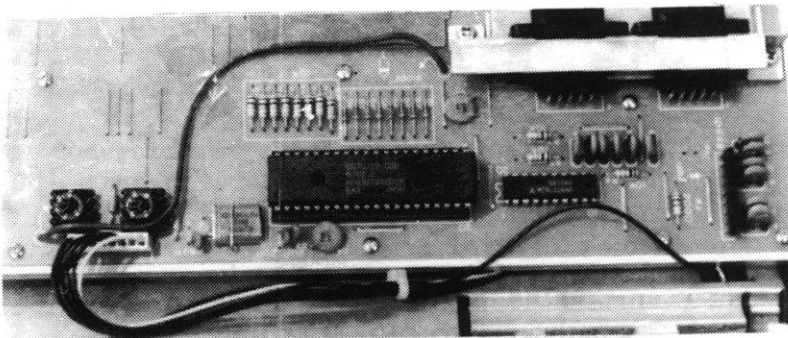


FIGURE 11 (above)

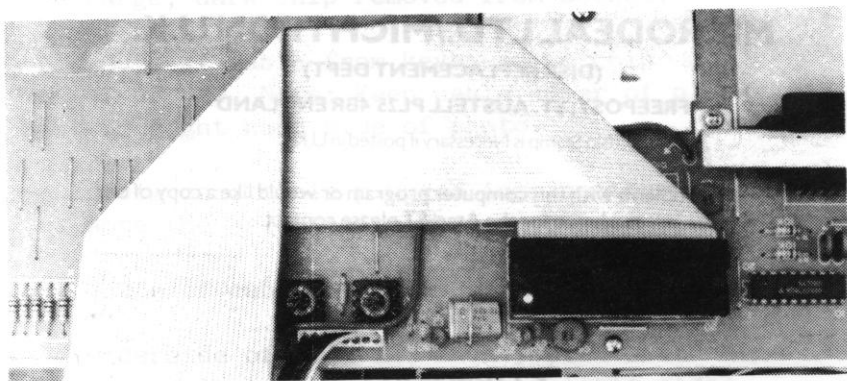


FIGURE 12 (above)



FIGURE 13 (above)

# **IMPORTANT**

IF THIS DISK FAILS TO LOAD PLEASE RETURN

JUST THE DISK TO

**MICRODEAL LTD./MICHTRON U.K.**

**(DISK REPLACEMENT DEPT)**

**FREEPOST, ST. AUSTELL PL25 4BR ENGLAND**

(No Stamp is Necessary if posted in U.K.)

If you have problems with this computer program or would like a copy of our catalogue for the Atari ST please contact:

**MICRODEAL LTD**

**BOX 68**

**ST. AUSTELL**

**CORNWALL**

**PL25 4YB**

**TEL. 0726 68020**

**OR DIAL UP OUR 24 HOUR BBS ON**

**0726 65422**

**(300/300, 1200/75, 1200/1200)**

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Made in England.

## DESCRIPTION OF FIGURES

FIG. 4 Clock card with large, dark chip fitted.

FIG. 5 Underside of one model of 520 keyboard with chip fitted.

FIG. 6 Clock card cable plugged into this model of 520 and bent to route card to back of computer. Note the orientation spot on plug.

FIG. 7 Large, dark chip removed from socket.

FIG. 8 Route of cable from keyboard to chip on this model of 520. Note: Keep cable clear of plastic post on right hand side of photo.

FIG. 9 Clock card cable plugged into another model of 520. Note the orientation spot on plug.

FIG.10 Route of cable for this model.

FIG.11 Underside of 1040 and FM keyboard with chip fitted. Note orientation spot on chip (left side).

FIG.12 Clock card plug installed in 1040/FM. Note spot and route of cable.

FIG.13 Clock card installed in 1040/FM. Note cable must not be trapped under post on right hand side of photo.

NOTE: On some clock cards the plug is light grey with a black orientation spot.



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