XF551 Control Board/Track Display

Installation Guide

This mod can be installed on the original XF551 Disk Drive mainboard as well as all versions of my reimaged XF551 Disk Drive board. The difficulty is relative.

On the original XF551 disk drive mainboard you may run into a fragile board as far as soldering is concerned. So be careful with the length of time the iron is in contact with the solder points.

On versions 1 of my reimaged boards it might be best to clip the two and three pin combos and solder the respective wires to the underside of the board as per the pictures in that section.

On version 2 you will have the easiest time with the fewest wires to solder, but you might have to fold the extra length of wiring and tape it down to keep them from interfering with the drive motor.

Please read through the document before starting so you understand the various steps.

Cable and Board Inventory

Your wires may have a different length than pictured.
Original XF551 Mainboard

XF551 Original Board Connections

Follow pic for all connections except OS
Remove current 27C64 Eprom from socket
Burn 2in1 rom file into a blank 27C64 Eprom
Bend pin 2 up and insert into empty socket
Take care that pin 2 is not inserted into socket
Solder OS wire to exposed pin 2
Connect other end of wire to OS connector on control board

Need these connections

STEP  DIPC
SIDE  TRACK00
P28  P35
P27  OS
Reset

+5V  0  0  0
Clip these connectors off the end of cables 1 and 3. Measure and cut the wire to length needed. Strip the insulation off and tin the ends of the wires.

These are the connection locations for the various wires.
I have no surviving examples of ver 1.0 reimaged XF551 mainboards. So I am using the bottom of the Diptrace board file. It does not matter whether it is the original or modern power supply version.
Reimaged XF551 Mainboard v2.0

This is the latest version of the mainboard. It does not matter whether it is the original or modern power supply version. But this picture is of the original power supply version.

These are the connection locations for the various wires.

There is one wire that you will have to solder and that is the grey wire. You will need to strip and tin the wire before soldering it to pin 32 of the IDE connector on the bottom of the board. In this case the wire is yellow, but yours will be grey.
Common Connections

Connect cable 1 and 3 per the color table below:

Cable 1:
- Black = GND
- White = +5V
- Grey = SIDE
- Red = Track00
- Blue = DIRC
- Green = STEP

Cable 3:
- Orange = P27
- Red = P26
- Brown = P35
- Yellow = OS
- Brown = RESET

Set the drive number to 4 (both dip switches up) on the back of the mainboard and remove the jumper for the OS version (Con2 on version 1.0 or JP2 on version 2.0 of my reimaged XF551 mainboards)
Connect cables 1 and 3 as pictured above. Connect cable 2 as pictured above.

Connect the other end of cable 2 as pictured above.
Connect either the drive or right panel track display ribbon cable as pictured above.

Position the control board in the case and tape down wires to keep them from interfering with the spindle wheel.
Cut out openings for RF/LF/Drive Panels so that display/controls are accessible.

Some have requested the ability to add a power switch on the front panel as well. That is why there is a hole in the LFPanel board. That should allow you to mount a toggle switch via hot glue/mounting rings to the board. You are on your own as far as how to wire the switch. Take care when you are making the connections and use relatively heavy gauge wire (18-24)