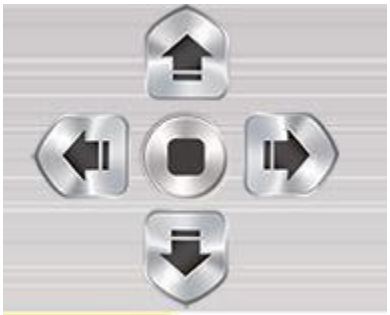
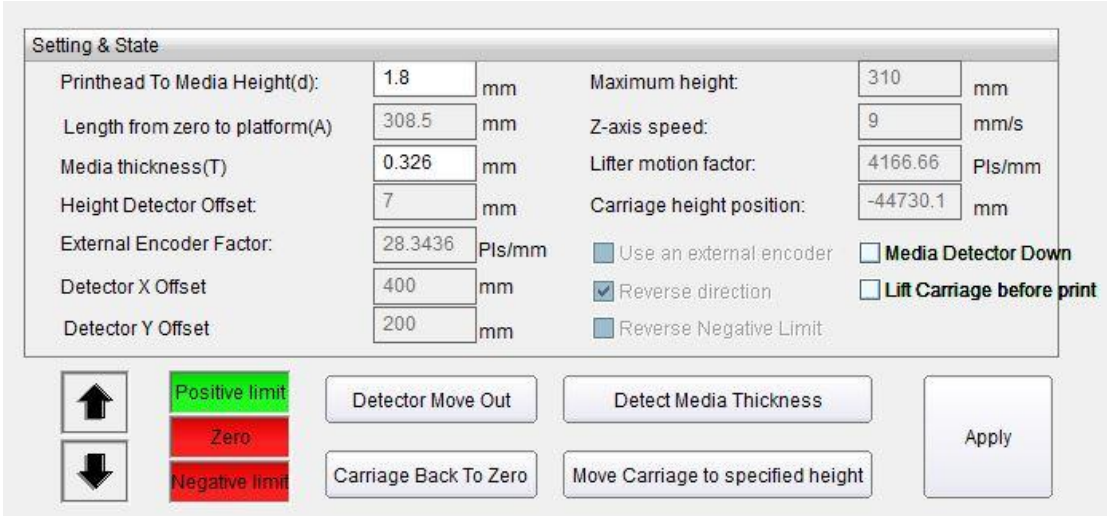
DCS Printer Control Software

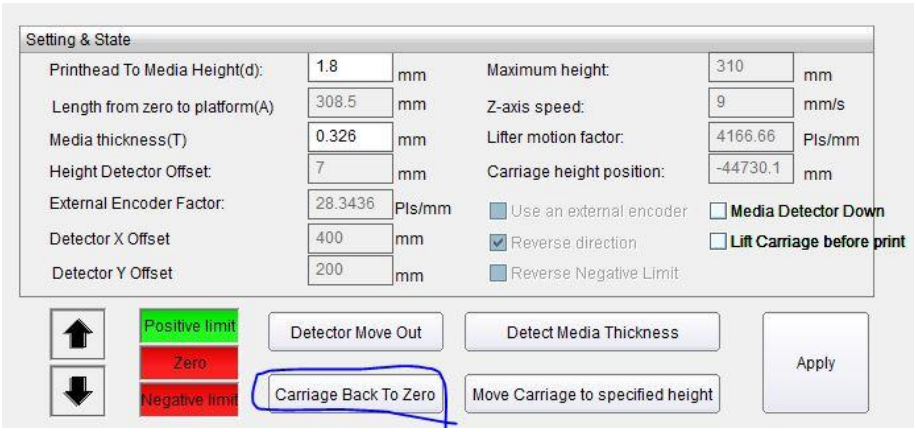
- **Safety**
    - Always make sure that a print job is completed in the RIP software before putting any body part in the path of the carriage.
    - The emergency stops either do not work at all or they only work conditionally
        - When detecting the media thickness the emergency stop button doesn't work (on ours at least).
        - If the printer needs to be stopped hit the power button.
            - Be careful to do this when it is at a slowed down part of its pass because when the rail shuts off the carriage keeps its momentum and will just slam into the stopper at full speed.
    - The crash bars are haphazard.
        - They will stop the printer carriage if they hit something, but on more than one occasion I have had them stop the printer and then within thirty seconds had the printer start up again.
        - It is best when the crash bars hit to raise the carriage, cancel the process, and then immediately cancel the print.
            - Raise the carriage to prevent more head strikes.
            - Cancel the process so that it does not rise too far.
            - Cancel the print so that the UV lamps are not on and firing while the printer is higher above the material.
                - This can cause damage to the printheads.
        - Because of the larger tolerance between the material and the print carriage, material can sometimes hit the bottom of the carriage without striking the crash bars and stopping the machine.
            - Make sure to listen for repetitive knocking sounds as this is an indication of that happening.

- **Movement**
  - The printer moves in the X, Y, and Z direction (forward and backwards, left, and right, and up and down)
  - You can move the carriage around by holding the “Ctrl” button while using the directional keys to navigate.
  - Sometimes this doesn’t work so you will either have to restart the printer and the computer, or use the directional tool located at the top of the software window. See below.
  - 
    - This tool moves the printer carriage automatically in the corresponding XY directions.
    - The left and right are a bit finicky, and you have to press the stop button in the middle for them to stop moving the carriage or it will just move all the way to the end of the rail.
  - 

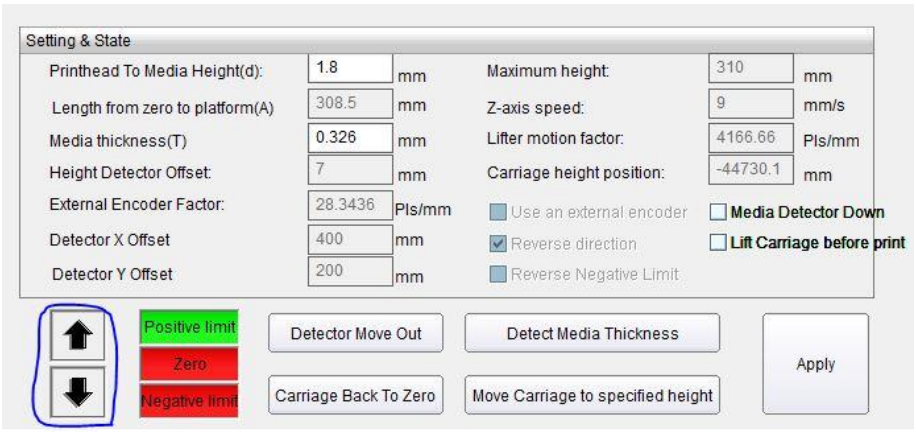


    - When using the settings in this tab do not touch any of the settings on top

- To send the carriage to the topmost position press “Carriage Back to Zero”

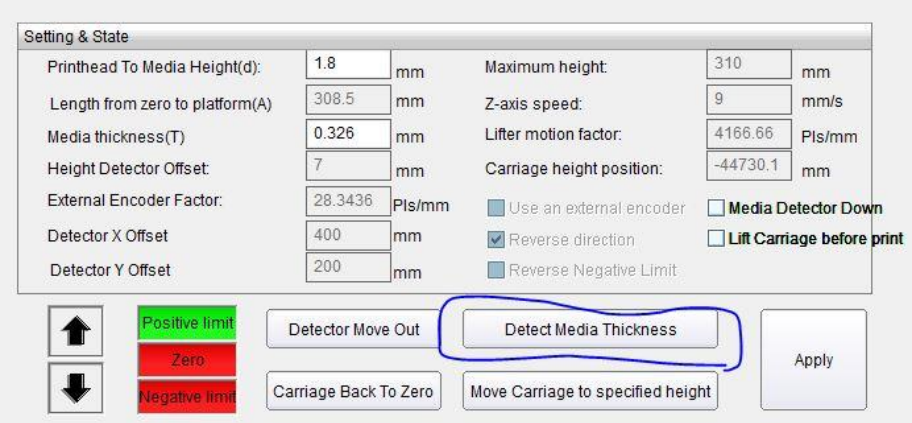


- To move the carriage up manually click the arrow buttons



  - I have yet to see the downward arrow work to move the carriage down, but I would not suggest doing such a thing anyway.
- To measure the material thickness, first move the carriage up higher than the material
  - This can be a significant amount
  - It is good practice to send it back to zero before measuring height to zero the carriages position before printing and give you a chance to clean the printer before printing.

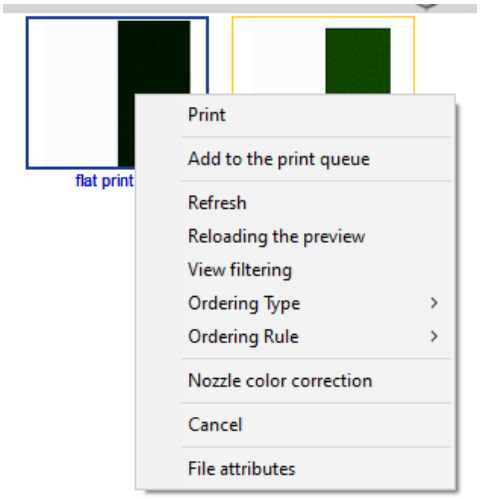
- Next make sure that the sensor pin is positioned squarely over the material you are measuring
    - The sensor pin is a round cylinder on the bottom of the print carriage.
    - The sensor pops out and pops back in when it detects material it is measuring.
- Click “Detect Media Thickness”



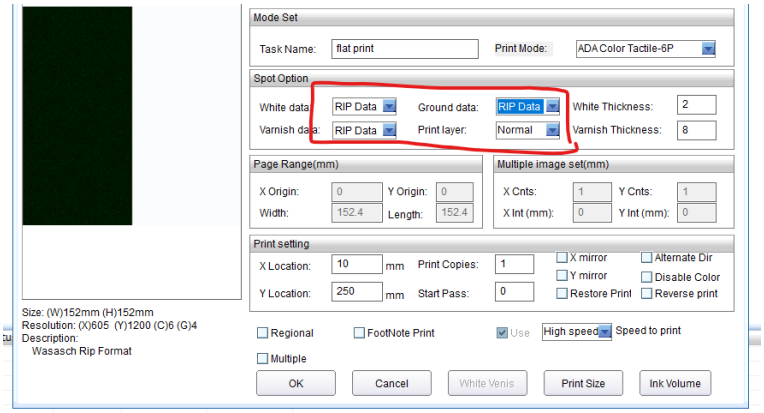
- This will begin the process of measuring the material
- ALWAYS be sure that there is nothing higher on the table than the material you are printing
- ALWAYS be sure that you position the print carriage over your material
    - When “Detect Media Thickness” is selected while the print carriage is over its home position then it will continue to lower past its limit and could be damaged.
- After measuring the thickness, position the printer carriage back over the drip tray.

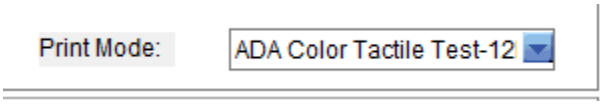
Sending for Print

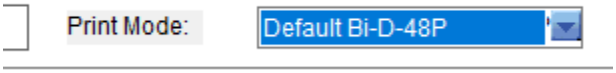
- Files are sent to the control software directly from the RIP software and will appear in whatever folder you saved them in in the RIP
- Navigate to which file you saved it in on the lefthand tree
- Once you see your file in the right window, right click it and press “Print”

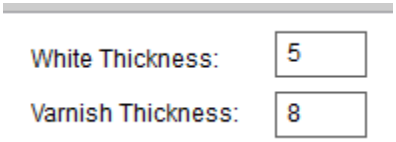


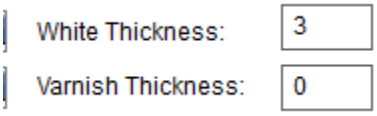
- This menu will appear



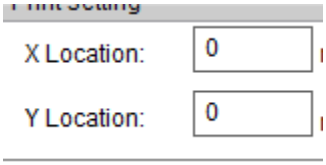
  - Make sure that the highlighted settings are set like the image
  - Next check the “Print Mode”
    - 

      - Used for tactile
    - 

      - Used for flat prints
  - Next Check the thicknesses of the varnish and white
    - 

      - For any raised Tactile
    - 

        - For any flat prints
    - Next check the x and y location



        - They should be set to 0,0
- Once all these settings are checked and set then the print will be ready to send.
    - Be sure you have measured the height of the material before you send anything to print and have checked that there is nothing higher than the material on the bed
    - Before clicking print make sure to prime and clean the material of any dust before printing
- Click “OK” and your file will begin printing