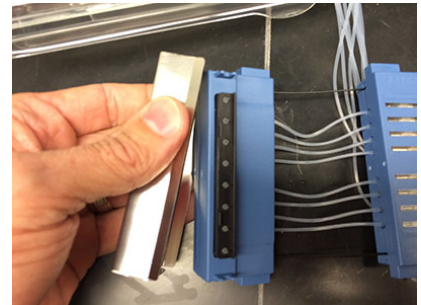
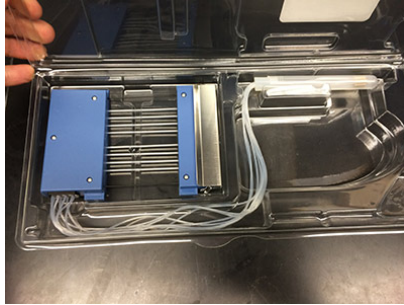
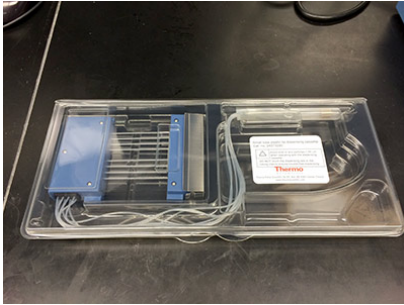
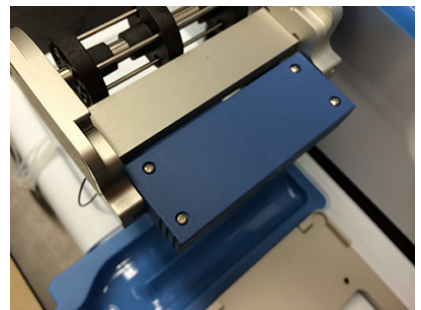
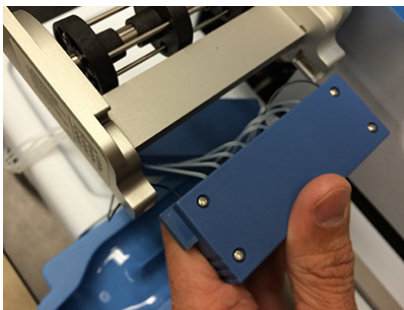


## How to Use the MultiDrop Combi

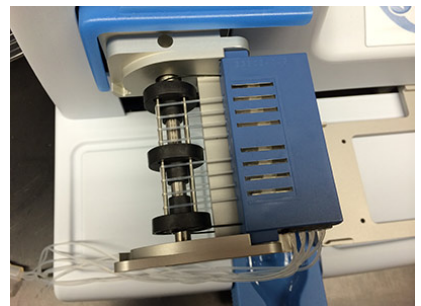
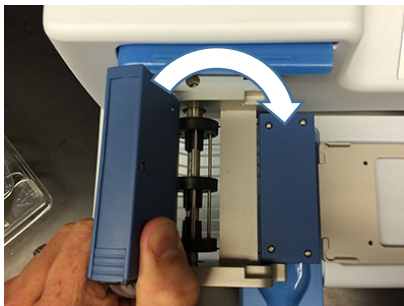
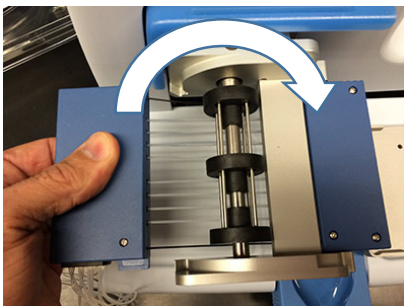
1. Remove the dispensing cassette from the package and remove the metal cover which protects the dispensing nozzles.



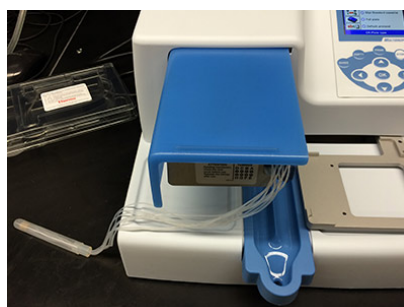
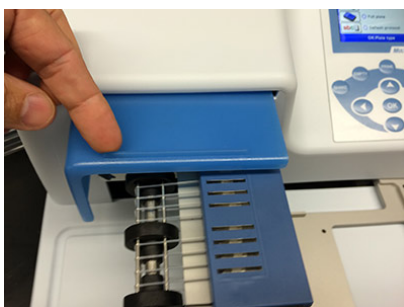
2. Insert the front of the cassette (the part with the nozzles) into the Combi. The tabs on either side of the cassette will slide into the slots. (Shown in photos below.) The dispense nozzles should be pointed downwards.



3. Next, stretch the back of the cassette (the other blue portion) under the pump, and up over the top until it is doubled over and nearly on top of the front of the cassette. The tabs should slide into the slots on the front of the Combi and keep it in place.



4. Check that there are four clear tubing channels between each of the black discs, and that the black edge cables are on either side of the outer discs. Close the protective guard by sliding it over the pump assembly. Remove the tube from the other end of the cassette and place end in your reagent bottle to be dispensed.

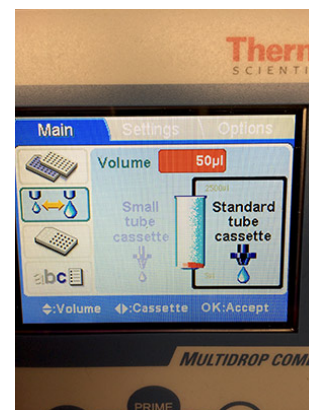
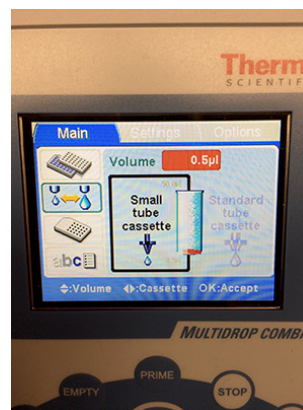


## How to Use the MultiDrop Combi

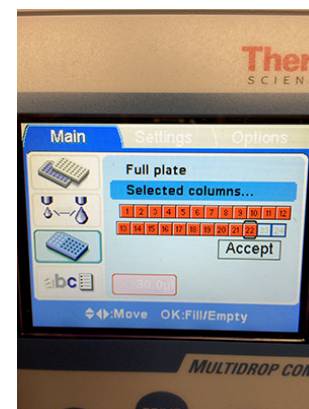
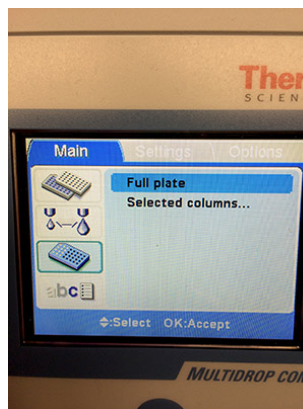
- The user interface uses arrows and an OK button to navigate the onscreen menu. To select the plate type, use the arrows to highlight the top of the list on the Main tab (depicted with the two plate icon) and press the OK button. Scroll down using the arrow keys until your plate type is selected and click the OK button.



- Next, select the volume and cassette type by highlighting the next menu option in the list (depicted with a two drops icon) and pressing the OK button. Choose the small or standard tube cassette by using the right and left arrow keys. (Unless informed otherwise, ICCB-L is providing small bore cassettes.) Set the volume using the up and down arrow keys. When finished, press the OK button.



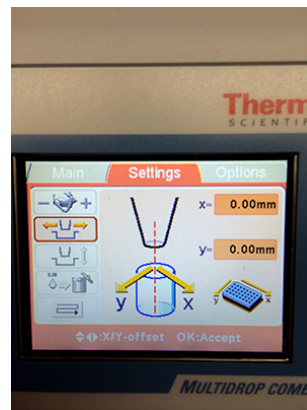
- Choose which columns to fill by selecting the 3<sup>rd</sup> option in the list (depicted with a half full plate icon) and press OK. Choose whether to fill the entire plate or select columns. If choosing columns, use the left and right arrow keys to move and the OK button to toggle on/off. The color orange indicates the column will be filled. Move to the "Accept" button on the screen using the down arrow and press the OK button to accept these changes.





## How to Use the MultiDrop Combi

8. The more advanced features of the instrument are contained on the Settings and Options tabs. Use the left and right arrow keys to move between tabs. The **Speed** setting can be set to high, medium, and low. The high setting is recommended for best accuracy. **Disp. offset** is the X/Y offset that can be set for dispensing towards the edge or in the corner of a well. The **Disp. height** allows one to adjust the height of the nozzles above the plate. **Predispense** is the amount of liquid that is dispensed between plates to ensure accurate volumes. The default value is 2 $\mu$ L. **Direction** controls whether the dispense motion is in row wise or column wise format. Please contact the screening room staff for more information about these advanced features.



9. Once the settings have been set, prime the unit by pressing and holding the PRIME button until the fluid has filled the tubing. Confirm by visual inspection that fluid is coming out of each of the dispense nozzles. If desired, you can flush additional fluid through the tubing prior to dispensing to remove residual water droplets or other liquid that may have been present in the tubing prior to priming by holding down the PRIME button.
10. Place a microplate to be filled onto the stage and press the START button. Repeat for each plate to be dispensed.
11. When finished, press and hold the EMPTY button until all of the fluid has been removed from the tubing. The recommended cleaning procedure is to prime through 50 mL each of water, 70% ethanol, and then water again. If you are using something that might clog your tips such as a protein, it is also recommended to use a 2% solution of detergent such as Micro 90 or Zymit Pro. Please contact ICCB-L staff to know where this is stored and the appropriate dilution for use.

**Note:** When not dispensing, the dispensing cassette can be rested in the slots in this intermediate position so that the tubing is not being constantly stretched.

