

DISPOSABLE PIN TOOL OPERATION

1. Place a Pin Tool Loading Jig (VP 242 or VP 242A) on a level surface. Place a Disposable Pin Tool in the nest of the Pin Tool Loading Jig. Hold the manual Pin Tool Adaptor at a 45-degree angle over the Loading Jig and place the two guide pins in the two alignment holes on the Pin Tool Loading Jig. Tip the Pin Tool Adapter vertically and lower it into the Disposable Pin Tool. The Pickup Posts on the Adapter will slide into the corner positions on the Disposable Pin Tool. Press firmly on the adapter to seat the Disposable Pin Tool on the Pickup Posts. Lift up the Adaptor to begin operation.
2. Place a LIBRARY COPIER™ (VP 244 or VP 244A) over a 96 or 384 well source plate with the single alignment hole side of the device closest to the last row of the plate. Slide the LIBRARY COPIER™ to make sure the plate is seated within the device and therefore registered.
3. Hold a sterile 96 or 384 Disposable Pin Tool at a 45° angle to the source plate plus LIBRARY COPIER™ and 20° angle to the left alignment hole. Place the right guide pin into the right alignment hole. Slowly decrease the 20° angle and place the left guide pin into the left alignment hole. Rotate the Pin Tool forward until guide pins line up vertically and slide down the alignment holes and the Replicator pins drop into the wells.
4. Hold the LIBRARY COPIER™ in one hand and mix contents of wells by raising and lowering the Pin Tool 3X through the meniscus with the other hand. The speed at which the pins are removed from the wells on the final withdrawal will affect the size of the hanging drops and the amount of liquid on the sides of the pin. Removing the pins quickly from the source plate produces large, hanging drops on the tips of the pins and more liquid on the sides. We recommend removing the pins on the final withdrawal at a slow even speed each time (~.5 cm/sec). This action produces very uniform transfers from plate to plate and reduces the amount of liquid hanging on the tip and sides of the pins. Performing this operation with the LIBRARY COPIER keeps the pins in the middle of the well and prevents hanging drops from being accidentally touched off.
5. To deliver to another microplate in a LIBRARY COPIER, place guide pins in the single alignment holes, dip and raise the pins 3 times through the recipient plate's meniscus. Blot the pins on lint free paper to reduce carry over if the pin tool is put back into the source plate.
6. Repeat steps 2-5 for each replicate plate as needed.
7. To eject Disposable Pin Tool, simply push on the ejector button
8. The 4-alignment hole side of the LIBRARY COPIER can be used to reformat four 96 well plates into one 384 well plate.
9. The VP242, VP 242A, VP 244, and VP 244A may be disinfected by wiping with alcohol or bleach.