

LIBRARY REPLICATION

1. Place a LIBRARY COPIER™ ([VP 381](#), [VP 381A](#), [VP381A-1](#), [VP 381C](#), [VP 381D](#), [381D-N](#), [VP 381F](#), [VP 381M](#) or [VP 381N](#)) over a 96, 384 or 1536 well source plate "a" 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. (Some deep well polypropylene microplates shrink and or warp considerably causing a loose registration. If this occurs, wrap each of the legs with an equal amount of tape till the plate is centered and registered securely.)
2. Hold a sterile 96, 384 or 1536 MULTI-BLOT™ Replicator at a 45° angle to the source plate LIBRARY COPIER™ and 20° angle to the left alignment hole. Place the right guide pin into the right alignment hole. Then slowly decrease the 20° angle and place the left guide pin into the left alignment hole. Then rotate the Replicator forward until guide pins line up vertically and slide down the alignment holes and the Replicator pins drop into the wells (see diagram).
3. Hold the LIBRARY COPIER™ in one hand and mix contents of wells by raising and lowering the Replicator 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.
4. To deliver to another microplate with liquid in the wells, 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 or to the wash bath.
5. Repeat steps 2-4 for each replicate plate as needed.
6. Sterilize the Replicator by dipping in reservoir containing 10% bleach solution, blot on lint free blotting paper (VP 522) and then dip and blot twice in sterile distilled water in tip lid boxes then dip in isopropanol reservoir, flame, and place in new source plate "b."

The LIBRARY COPIER™ may be disinfected by wiping with alcohol or bleach.

** Flaming just entails igniting the alcohol on the pins and NOT heating the pins directly in a Bunsen burner which can damage the corrosion resistant properties of the stainless-steel pins.

