

- ▣ Target Verification: Lorad Stereotactic and Affirm Biospy Arm



Target Verification

- ▶ Target Verification is a method used to confirm targeting accuracy with stereotactic and Affirm units.
- ▶ Target Verification provides a visual confirmation to the millimeter and should be utilized before patient use to:
 - Confirm the dial in “Z” number on unit
 - Visually show needle tip position at deployment, show “unsheathing” and need to go beyond target. Great for training.

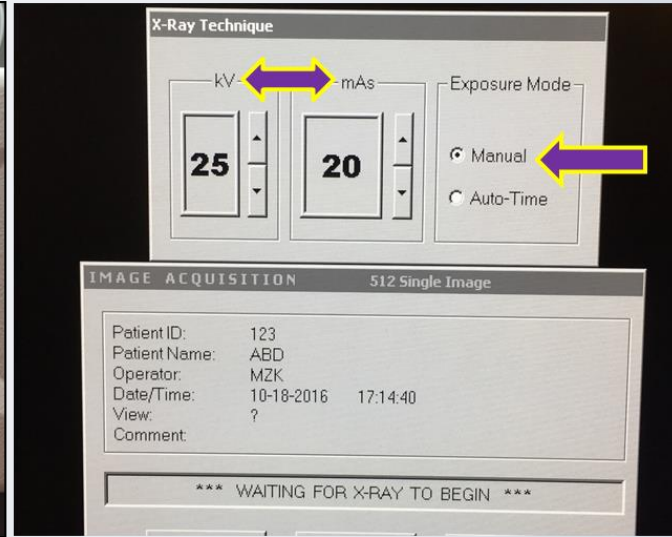
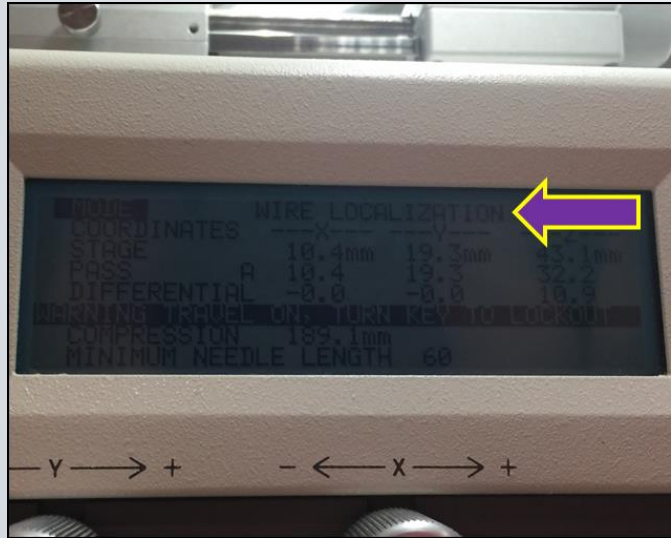


Lorad Stereotactic Unit

- ▶ Can use a targeting phantom, or even a paperclip. More than likely-account will not have a targeting phantom for these older stereo units.
- ▶ Make sure Wire Localization Mode is selected
- ▶ Ask technologist to set a manual technique. 20 mAs at 25 kvp. Phototimed exposures will not work for verification.
- ▶ Tape paperclip to backplate- center to opening in compression plate.
- ▶ Bring compression plate close to, but not touching paperclip.
- ▶ Take SCOUT image and stereo pair

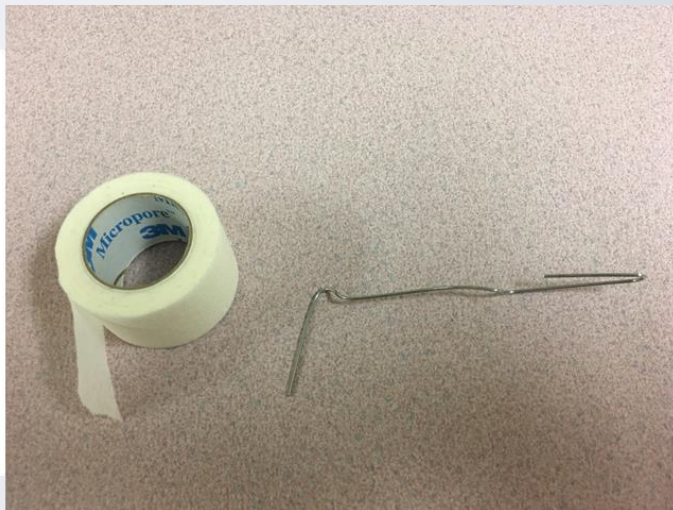


Wire Localization Mode and Manual Technique





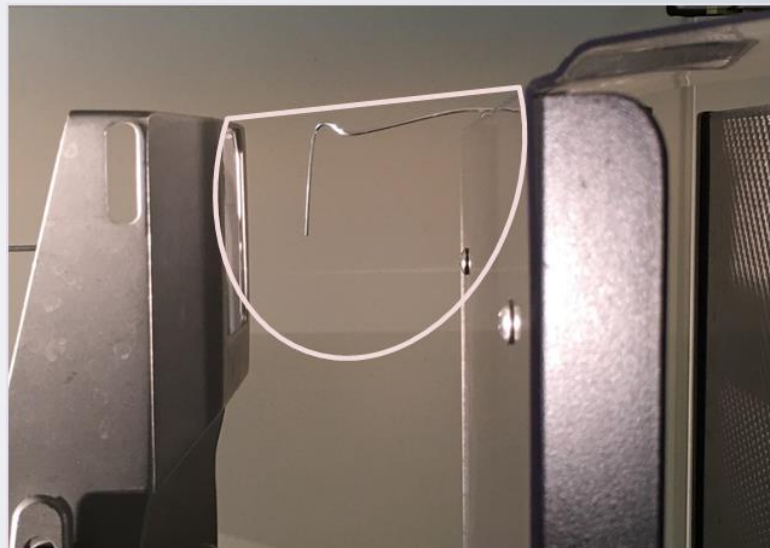
Paperclip Method





Prepare for Imaging

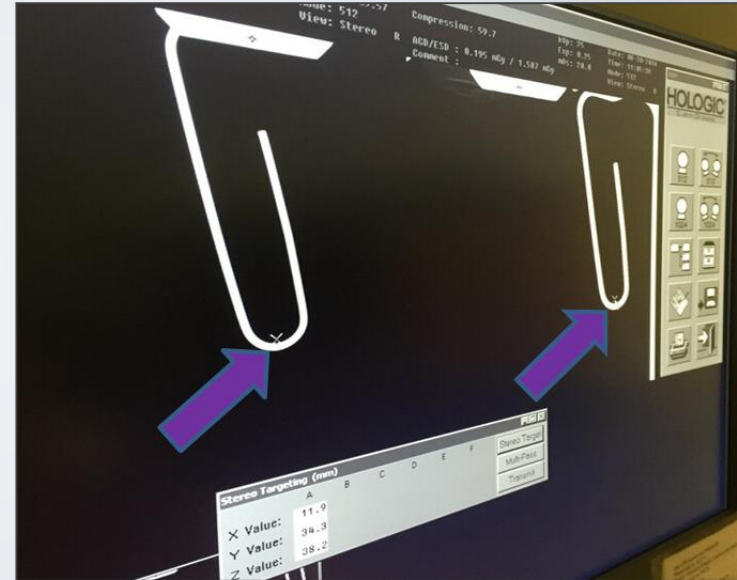
- ▶ Tape paperclip to top of backplate
- ▶ Picture tip of paperclip representing the target within the breast





Take SCOUT and Stereo Pair

- ▶ Target on tip, or same portion of paperclip in both stereo images
- ▶ Transmit and confirm coordinates
- ▶ Load a demo 10 cm introducer through 2 needle guides
- ▶ Have tech zero the needle and then go to target position
- ▶ Dial the “Z” until tip is at target (paperclip), note the “Z” this is target position.
 - Dial “Z” until needle tip is desired distance beyond target (6-8 mm), note the “Z” AS THIS IS DEPLOYMENT POSITION





Lorad Target Verification





Lorad Stereo – Confirming the “z”

- ▶ Whatever the “z” value is at deployment position, is what they will dial into with our needle moving forward.





Target Verification on Affirm

- ▶ Needle must already be programmed into unit by Hologic (10 cm only)
- ▶ Ask technologist to set a manual technique 20 mAs at 25 kvp
- ▶ Make sure our needle is selected
- ▶ Use targeting phantom or paperclip
- ▶ Position for SCOUT image and stereo pair

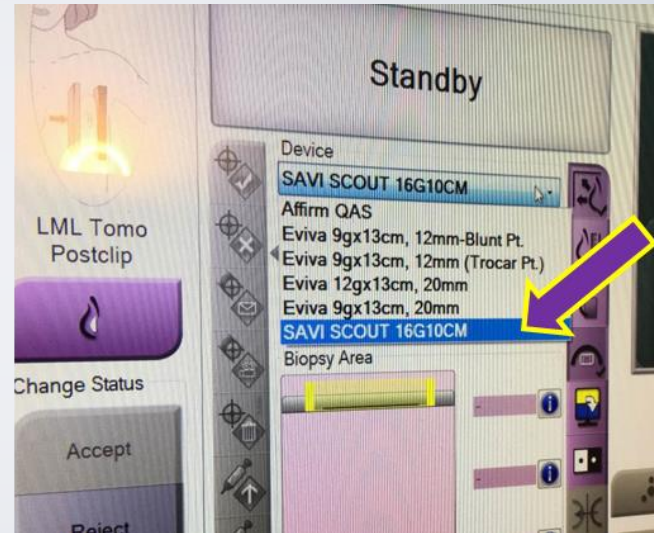
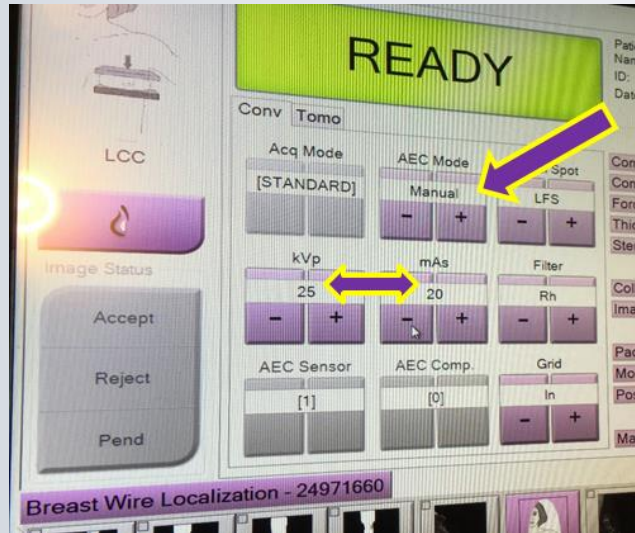


Affirm Targeting Phantom





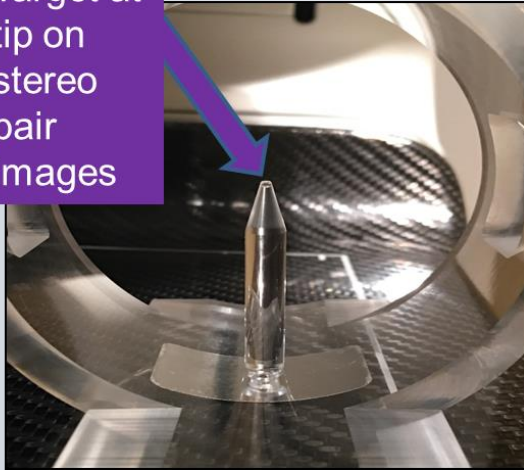
Manual Technique and Needle Selection





Take SCOUT and Stereo Pair

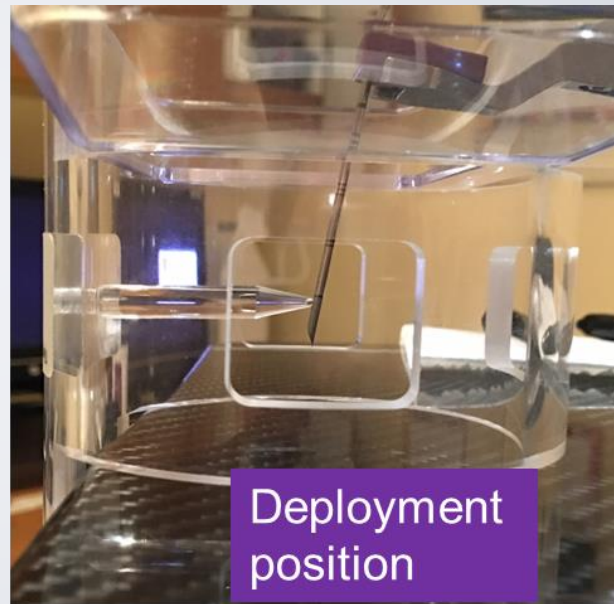
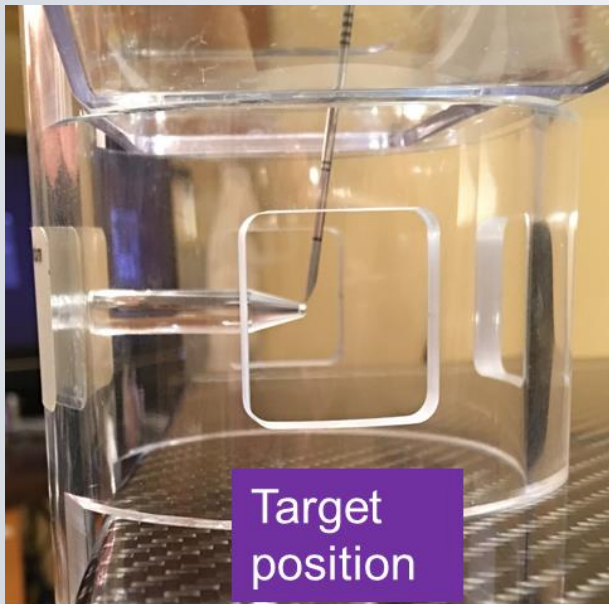
Target at
tip on
stereo
pair
images



- ▶ Target on tip of acrylic phantom
- ▶ Transmit and confirm coordinates
- ▶ Load a demo 10 cm introducer through 2 needle guides
- ▶ “zeroing” the needle is automatic on Affirm-have tech take to target position
- ▶ Dial the “Z” until tip is at target (tip of phantom), note the “Z” this is target position.
- ▶ Dial “Z” until needle tip is desired distance beyond the target
 - (6-8 mm), note the “Z” AS THIS IS DEPLOYMENT POSITION



Affirm Targeting Phantom





Affirm – Confirming the “Z”



- ▶ Whatever the “z” value is at deployment position, is what they will dial into with our needle moving forward.



Target Verification

- ▶ Can be done routinely (daily) if account desires
- ▶ **MUST BE DONE**- Prior to reflector implants at new facility, or on a unit never used for SCOUT before.
- ▶ **MUST BE DONE**- After initial needle programming on Affirm
- ▶ **MUST BE DONE**- After service on unit
- ▶ **SHOULD BE DONE**- In front of radiology team, as a visual confirmation of “Z” at evaluation or implementation training.
- ▶ **SHOULD BE DONE** as troubleshooting strategy, in account that has any placement issues (not where they thought reflector should be) to confirm accuracy of targeting coordinates.