

PURPOSE

This procedure establishes the FUJIFILM Medical Systems USA, Inc. (FMSU) process, which all Professional Services Representatives who perform service activities at customer sites shall use to provide instructions to customers for the purpose of explaining how the new D-EVO Image Combining functionality works for scoliosis and leg length studies.

SCOPE

This procedure applies to the D-EVO detector, the upright patient stand required and imaging combining functionality.

RESPONSIBILITY

Department or Title	Responsible for...
Professional Services Department	All FUJIFILM Medical Systems USA Inc., (FMSU) Professional Service Representatives who perform service activities at customer sites are responsible for explaining the detector, an upright positioning stand and image combining functionality.

APPLICABLE DOCUMENTS

Doc. Number	Title of the Applicable Document
PFS-0020638	D-EVO and FDX Console Training Checklist
PFS-0027705-A	D-EVO Image Combining Workflow Checklist

DEFINITIONS

Term	Definition
D-EVO detector panel	The DR image acquisition device.
Upright positioning stand	The device used to accurately position the patient via patient markers and movement capabilities

PROCEDURE

- 1.0** The new D-EVO Imaging Combining functionality uses a D-EVO detector, upright positioning stand and Fuji FDX Image Combining software to stitch scoliosis and leg length images.
- 2.0** Image Combining may be accomplished with either a two full-size original or a three full-size original image stitch.



- A. The D-EVO detector sits in a cassette holder that can be raised or lowered for body height differences.
- B. The positioning stand has a clear backing that allows visibility of the detector and positioning markers.
- C. The upright positioner is motorized for raising or lowering movements.

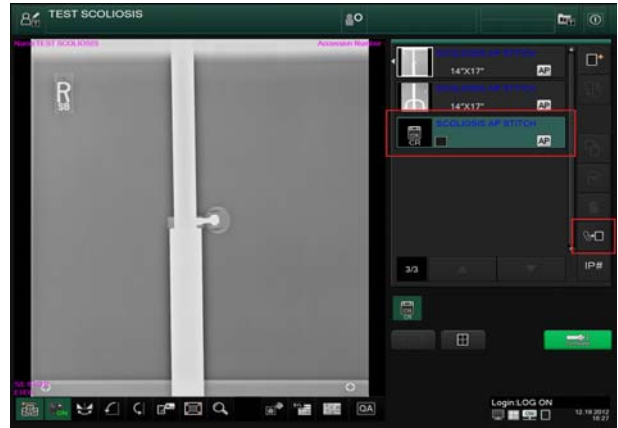
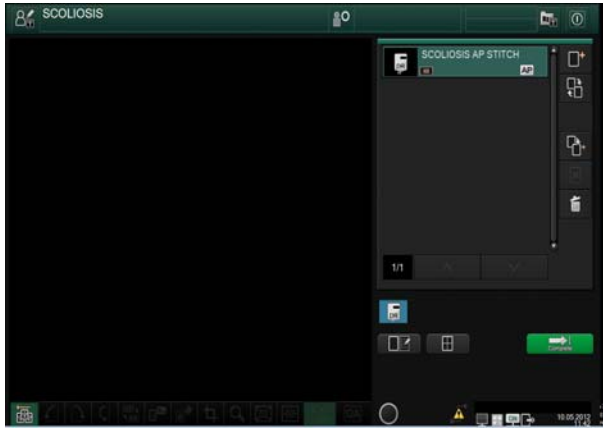



The handle is squeezed to raise and lower the D-EVO detector.



Raising and lowering the entire stand is accomplished via this controller.

3.0 Acquiring Stitched Images



- A. Initiate a study using a scoliosis or leg length menu.
- B. When the first exposure is made, two additional menus are added; one for the second exposure and one for the stitched image.
- C. If two original exposures are required, select the auto stitching icon  to stitch images.
- D. If three original exposures are required, highlight the third menu in order to enable the auto stitching icon.



The positioning stand uses a clear backing and registration markers to assure correct placement of the detector.



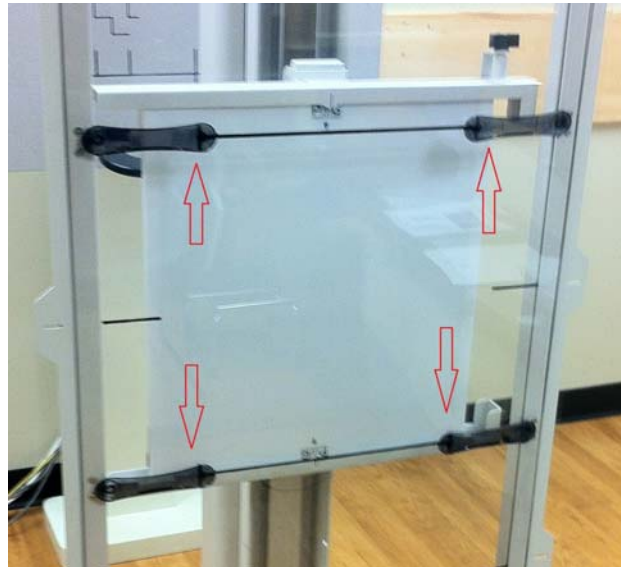
For a three-image stitch, place the detector at the center point of the desired image. Make the exposure.



Angle tube upward until the bottom of the light field includes the top portion of the markers, then raise the detector. Make the exposure.



Angle the tube downward until the top of the light field includes the bottom portion of the markers, then lower the detector. Make the exposure.

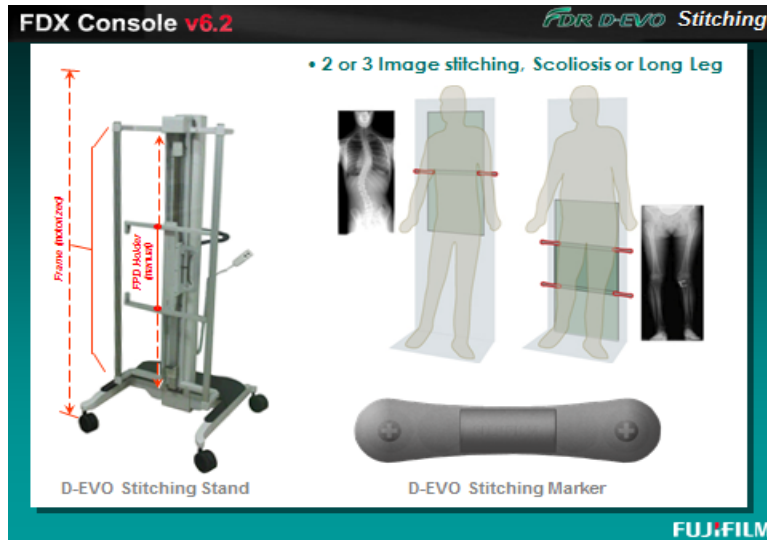


For three-exposure stitching, 4 markers are placed laterally in each of the **four corners** of the center image's field of view

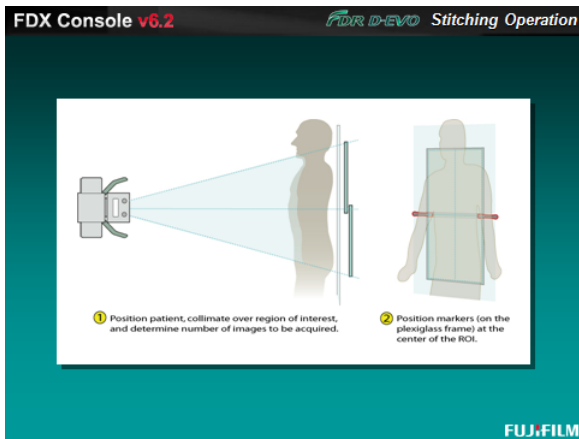
For the top image, ensure the bottom of the light field includes the top two markers. For the bottom image, ensure the top of the light field includes the bottom two markers.

For two-exposure stitching, 2 markers are required laterally, one at each end of the **horizontal center** of the field of view. For the top image, angle the tube upward so the bottom of the light field includes the top portion of the markers. For the bottom image, angle the tube downward so the top of the light field includes the bottom portion of the markers.

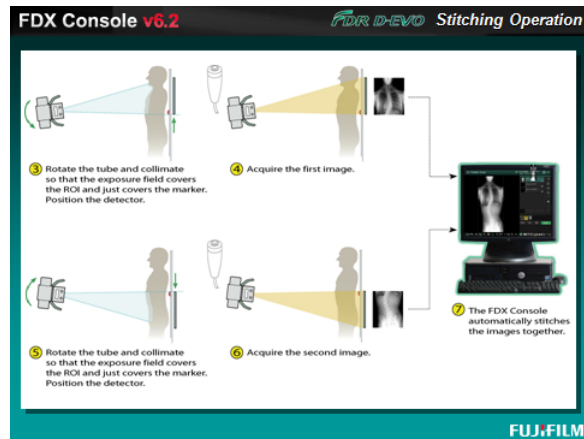
Scoliosis studies will usually imply using the top and middle segments of the stitching stand.



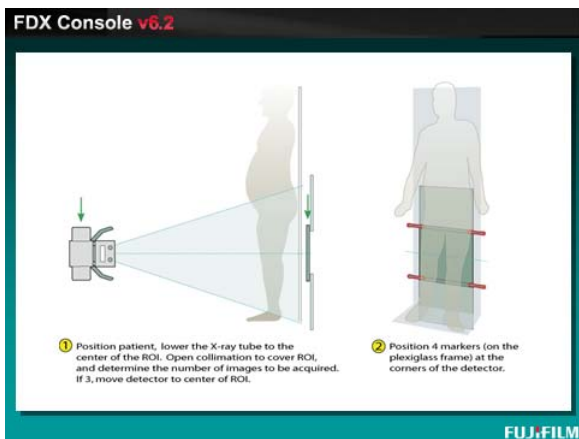
Overview of Stitching Stand, Marker and Image Stitching



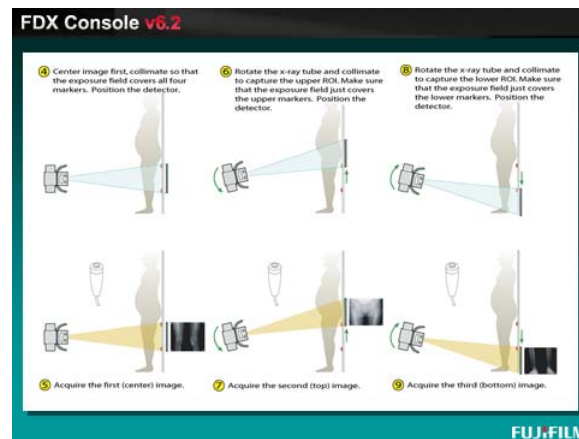
Positioning steps for 2-exposure stitching



Exposure steps for 2-exposure stitching



Positioning steps for 3-exposure stitching



Exposure steps for 3-exposure stitching

Note: If indicated, 3-exposure stitching may also be accomplished top image first, then middle and bottom.

This method would also prevent having to move images before stitching at the console.