

# Information to the dealers

## Introduction:

The MultiSync XG Series projectors can be optimized for 3D image projection with the addition of a short persistence green phosphor tube. "Persistence" refers to the length of time the CRT phosphor glows after the electron beam has stopped projecting electrons onto its surface. Phosphors with longer persistence have a higher light output. However, long persistence also can cause a "ghosting" effect, which occurs when the phosphor continues to glow from the previous image while a new image is projected. Because 3D imaging systems have a very fast refresh frequency, they require projectors with short-persistence phosphors in the CRT. Adding the short-persistence phosphor option to the CRT of the MultiSync XG Series projectors ensures optimum performance with 3D imaging systems.

The tube is available as an upgrade for your MultiSync XG series projector (XGSPP-A and XGSPP-LC) or can be purchased with the tube already installed (model numbers XG75S, XG110S, XG135S).

## Models:

Short Phosphor CRT	
1. XGSPP-A	XG751 Green Tube Only
2. XGSPP-LC	XG1101/XG1351 Green Tube Only LC Type
3. XG75S	XG751 + XGSPP-A Factory Installed (available by special order)
4. XG110S	XG1101 + XGSPP-LC Factory Installed (available by special order)
5. XG135S	XG1351 + XGSPP-LC Factory Installed (available by special order)

## Labeling Information:

When the original Green CRT is replaced by the XGSPP-A or XGSPP-LC Short persistence CRT, please affix the supplied labels to the inside of the front panel and the label "Short Persistence Phosphor CRT Installed" to a space above the name plate label on the rear panel. This will identify that the CRT Projector has been upgraded with a short persistence green tube.

## Installation Instructions:

1. Before removing the original Green CRT, position the CRT projector for front floor projection.
2. Do not make any electronic adjustments to the projector.
3. Position the projector from the screen or wall. Set the projection distance based on the width of the screen. (See pages 5 to 10 in the Installation Manual included with the projector.)
4. Apply XGA (1024 x 768) signal from Extron VTG or equivalent.
5. Turn the Projector ON.
6. Display the internal crosshair test pattern.
7. On the wall or screen mark the center position of the green crosshair pattern.
8. Do not move the projector after marking the center position of the green crosshair.
9. Turn OFF projector and replace the original Green CRT with the Short Persistence CRT.
10. Set all CPC magnets to 0 magnetic field position.
11. Turn the projector ON and display the internal crosshair pattern.
12. Adjust the Green Raster Centering to match the mark on the screen or wall that was made earlier in this procedure.
13. Tilt the deflection Yoke until the horizontal line is level.
14. Press "CTL + Focus" and adjust the green center Astig (H/V adjustment) control so the circle pattern is the most elliptical in the vertical direction.
15. You may need to rotate the focus magnet around the neck of the tube to make the beam point vertically. When this is done, you may need to return to the earlier settings than Step 14.
16. Cancel center Astig.
17. Adjust the CPC magnets for best focus.
18. Fine adjust the raster centering.
19. Repeat steps 13 and 14 if needed.
20. Adjust Astigmatism for best overall focus.
21. CRT replacement procedure is complete.

For more information, see pages 10-15 to 10-25 in the Service Manual.

## Specifications:

### Coupling Type:

XGSPP-A Air Coupling (XG751)  
XGSPP-LC Optical coupling (XG1101, XG1351)

### Performance Specifications:

1/10 persistence time: 2.6 micro seconds

Note: Standard Green CRT persistence is 4.8 micro seconds