

# 7293A/L

## Image Orthicon

**LONG-LIFE TARGET  
MAGNETIC FOCUS**

**MAGNETIC DEFLECTION  
ANTI-GHOST IMAGE SECTION**

**For Outdoor and Studio Pickup with Black-and-White TV Cameras. The 7293A/L is Directly Interchangeable with the 7293A in All Cameras.**

*The 7293A/L is the same as the 7293A except utilizes a longer-life non-deteriorating glass target.*

The sturdy, long-life, non-deteriorating, glass target of type 7293A/L is characterized by high gain, resistance to "burn-in", and the absence of any granular structure. Because charge transportation through this target material is electronic rather than ionic as in ordinary glass targets, the electrical characteristics of the target, such as secondary emission and resistivity, are essentially constant and sensitivity of the 7293A/L is stable throughout life.

Other important advantages of this target are that the undesirable characteristics of scene retention or "sticking-picture" and raster "burn-in" due to underscanning are significantly reduced. The resistance of the 7293A/L to image "burn-in" provides a highly desirable operational feature because it is not necessary to use an orbiter or continually move the camera when focused on a stationary scene.

### OPERATING CONSIDERATIONS

#### **Dos and Don'ts on Use of RCA-7293A/L**

##### **Dos**

1. Allow 7293A/L to warm up prior to operation.
2. Hold temperature of the 7293A/L within operating range.
3. Make sure alignment coil is properly adjusted.
4. Adjust beam-focus control for best usable resolution.
5. Condition spare 7293A/L's by operating several hours once each month.
6. Determine proper operating point with target voltage adjusted to exactly 2 volts above target cutoff.
7. Uncap lens before voltages are applied to the 7293A/L.

##### **Don'ts**

1. Don't force the 7293A/L into its shoulder socket.
2. Don't operate the 7293A/L without scanning.
3. Don't operate a 7293A/L having an ion spot.
4. Don't use more beam current than necessary to discharge the highlights of the scene.
5. Don't turn off beam while voltages are applied to photocathode, grid No.6, target, dynodes, and anode during warm-up or standby operation.



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