

Image Orthicon

For High-Quality Pictures in Black-and-White TV Service Using Conventional Lighting Facilities and Ordinary Operating Techniques. The 8093A/L is Directly Interchangeable with the 8093 and 8093A in All Cameras.

The sturdy, long-life, non-deteriorating, glass target of type 8093A/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 8093A/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 8093A/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.

Dos and Don'ts on Use of RCA-8093A/L

1. Allow the 8093A/L to warm up prior to operation.
2. Hold temperature of the 8093A/L within operating range.
3. Make sure alignment coil is properly adjusted.
4. Adjust beam-focus control for best usable resolution.
5. Condition spare 8093A/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 8093A/L.

1. Don't force the 8093A/L into its shoulder socket.
2. Don't operate the 8093A/L without scanning.
3. Don't operate a 8093A/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.

