Image Orthicon

"MICRODAMP" CONSTRUCTION FOR REDUCED MICROPHONICS FIELD MESH FOR REDUCED "WHITE EDGE" EFFECTS

LONG-LIFE TARGET MAGNETIC FOCUS

FIELD-MESH TYPE MAGNETIC DEFLECTION

For Extremely High-Quality Performance in Black-and-White Studio TV Cameras and Television Tape-Recording Operations. The 7389B/L is Directly Interchangeable with the 7389, 7389A, and 7389B in all Cameras.

The 7389B/L is the same as the 7389B except utilizes a stable, long-life glass target.

The stable, long-life, glass target of type 7389B/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 7389B/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 7389B/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 7389B/L

Dos

- 1. Allow the 7389B/L to warm up prior to operation.
- 2. Hold temperature of the 7389B/L within operating range.
- 3. Make sure alignment coil is properly adjusted.
- 4. Adjust beam-focus control to best usable resolution.
- 5. Condition spare 7389B/L's by operating several hours once each month.
- 6. Determine proper operation point with target voltage adjusted to the desired voltage above target cutoff.
- 7. Uncap lens before voltage are applied to the 7389B/L.

Don'ts

- 1. Don't force the 7389B/L into its shoulder socket.
- 2. Don't operate the 7389B/L without scanning.
- 3. Don't operate a 7389B/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.