## Image Orthicon

LONG-LIFE TARGET MAGNETIC FOCUS

MAGNETIC DEFLECTION PRECISION CONSTRUCTION TYPE

For Studio Pickup with Color and High-Quality Black-and-White TV Cameras. The 7513/L is Directly Interchangeable with the 7513 in All Cameras.

The 7513/L is the same as the 7513 except utilizes a longer life non-deteriorating glass target.

The sturdy, long-life, non-deteriorating, glass target of type 7513/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 7513/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 7513/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-7513/L

- 1. Allow the 7513/L to warm up prior to operation.
- 2. Hold temperature of the 7513/L within operating range.
- 3. Make sure alignment coil is properly adjusted.
- 4. Adjust beam-focus control for best usable resolution.
- 5. Condition spare 7513/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 7513/L.

## Don'ts

- 1. Don't force the 7513/L into its shoulder socket.
- 2. Don't operate the 7513/L without scanning.
- 3. Don't operate a 7513/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 photo-cathode, grid No.6, target, dynodes, and anode during warm-up or standby operation.