# **Image Orthicon**

## LONG-LIFE TARGET MAGNETIC FOCUS

FIELD-MESH TYPE MAGNETIC DEFLECTION

For High-Quality Black-and-White TV Pickup in Studio or Outdoor Service. The 7295C, is Directly Interchangeable with the 7295, 7295A, and 7295B in all Cameras.

The 7295C is the same as the 7295B except utilizes a stable, long-life target.

The stable, long-life, glass target of type 7295C 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 7295C 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 7295C 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-7295C

#### Dos

- 1. Allow the 7295C to warm up prior to operation.
- 2. Hold temperature of the 7295C within operation range.
- 3. Make sure alignment coil is properly adjusted.
- 4. Adjust beam-focus control for best usable resolution.
- 5. Condition spare 7295C's by operating several hours once each month.
- 6. Determine proper operating point with target voltage adjusted to the desired voltage above target cutoff.
- 7. Uncap lens before voltages are applied to the 7295C.

### Don'ts

- 1. Don't force the 7295C into its shoulder socket.
- 2. Don't operate the 7295C without scanning.
- 3. Don't operate a 7295C 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.