

Image Orthicon

LONG-LIFE NON-DETERIORATING TARGET

MAGNETIC FOCUS

MAGNETIC DEFLECTION

For Outdoor and Studio Pickup with Black-and-White TV Cameras.

The 5820A/L is Directly Interchangeable with the 5820 and 5820A in All Cameras.

The 5820A/L is the same as the 5820A except it utilizes a longer-life non-deteriorating glass target.

The sturdy, long-life, non-deteriorating, glass target of type 5820A/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 5820A/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 5820A/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

Do's and Don'ts on Use of RCA-5820A/L

Do's

1. Allow the 5820A/L to warm up prior to operation.
2. Hold temperature of the 5820A/L within operating range.
3. Make sure alignment coil is properly adjusted.
4. Adjust beam-focus control for best usable resolution.
5. Condition spare 5820A/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. Cap lens during standby operation.

Don'ts

1. Don't force the 5820A/L into its shoulder socket.
2. Don't operate the 5820A/L without scanning.
3. Don't operate a 5820A/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.

