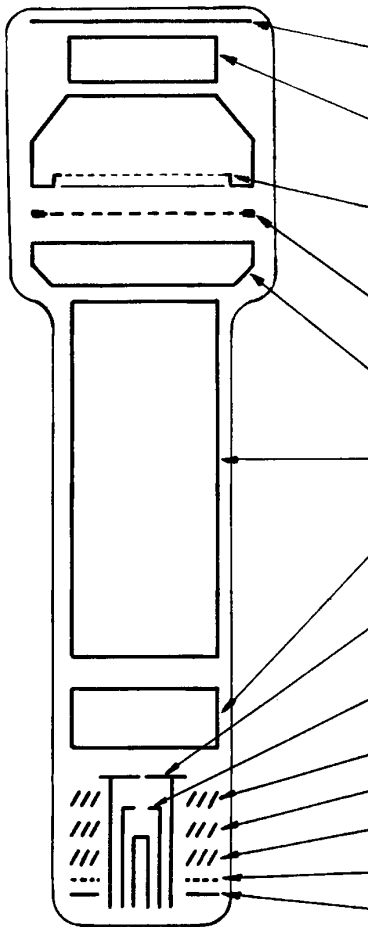


TYPICAL OPERATING CONDITIONS FOR 1/2" IMAGE ORTHICON



| ELECTRODE                 | CONTROL                        | OPERATING POTENTIAL                   | OPERATING NOTES  |
|---------------------------|--------------------------------|---------------------------------------|--|
| Photo Cathode             | Image Focus                    | -200 to -600V                         | Adjust for best focus. If more than one setting obtainable choose most negative, this gives maximum sensitivity and best resolution.   |
| G6 Accelerator            | Image Accelerator              | 40% to 80% of Photo Cathode           | Adjust to give minimum 'S' distortion. Image Focus and Image Accelerator are interdependent and must be adjusted together. Decel. must be set First.   |
| Target Mesh               | Target Bias                    | 2 to 4V +ve w.r.t. target cut-off     | Target Bias should be reduced until there is just zero output. This is target cut-off, operate 2 to 4V above this level. Blanking pulses are applied to Target Mesh and should be approx. 5V p. to p.  |
| Field Mesh                | Field Mesh Bias                | +10 to +15V w.r.t. G4                 | Adjust for minimum background shading with image section capped-up.  |
| G5 Decelerator            | Decelerator                    | +150 to +250V                         | Adjust for minimum corner shading and best geometry. Should be adjusted in conjunction with Image Accel. Some camera channels have fixed decel. potential.   |
| G4 Wall Anode             | Beam Focus                     | +80 to +200V (normally approx. +180V) | Adjust for best overall focus consistent with maximum signal and no beam flutter. If signal amplitude falls slightly at point of focus or beam fluttering occurs reduce focus potential slightly.  |
| G3 Persuader              | Multiplier Focus               | +220 to +300V                         | Adjust for least shading near point of maximum output.   |
| G2 Gun Anode & 1st Dynode |                                | +300V                                 |  |
| G1 Modulator or Grid      | Beam Current                   | -5 to -120V Never +ve                 | Adjust until all tonal shades of picture can be resolved, i.e. until all picture highlights are just discharged.   |
| Dynode 2                  |                                | +600V                                 | Electron multiplier gain nominally 1000, can be adjusted by either varying potential of one dynode or varying potential of supply to dynode chain. Set to give a particular p. to p. signal current from a correct exposed scene, normally 15µA. |
| Dynode 3                  | Dynode Gain or Multiplier Gain | +800V                                 |  |
| Dynode 4                  |                                | +1060V                                |  |
| Anode                     |                                | +1300V                                |  |
| Dynode 5                  |                                | +1250V                                |  |

ALL POTENTIALS ARE GIVEN WITH RESPECT TO THE CATHODE WHICH IS NORMALLY EARTHED