

Memotron® Direct View Storage Tubes

The HUGHES MEMOTRON® is a bistable Direct View Storage Tube using electrostatic focus and deflection, intended for use as a storage oscilloscope. Featuring high writing speed, the tube is capable of capturing, storing, and displaying complex electrical traces and transients which could otherwise be analyzed only by means of comparatively low brightness CRTs and elaborate photographic equipment.

Transient waveforms may be displayed singly, superimposed, or in a series of vertically displaced traces; it is also possible to store a family of

curves, for example, to evaluate tube or transistor characteristics. Traces are displayed at uniform brightness regardless of writing speed, and the stored images have sufficient brightness to be plainly visible in high ambient light, such as that encountered in well lighted laboratories. The display remains, with undiminished brightness, until deliberately erased.

While the HUGHES MEMOTRON® Tube is designed primarily for stored display service, it can also perform as a conventional cathode ray tube, displaying repetitive sweeps without storage, but at reduced light output.

Memotron Characteristics



H-1051P31



6498

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Diameter, max., inches	5 ⁵ / ₈	5 ⁵ / ₈
Useful screen diameter, min., inches	4	4
Length, max., inches	17 ¹ / ₂	19
Phosphor type	P31	P1
Storage mode	Bistable	Bistable
Deflecting method	E'static	E'static
Spot writing speed, inches per second ^①	1,000,000	500,000
Resolution, lines per inch	25	55
Viewing time, seconds	Until erased	Until erased
Brightness, foot-lamberts	20	35
Erase time, milliseconds	500	200
Viewing screen potential, kilovolts	+4	+3
Writing gun cathode potential, kilovolts	-1.5	-3
Deflection factor, volts per inch	35	110

① With speed enhancement circuitry.