Subject: Tektronix 564B Split-Screen Storage CRT
Posted by Getter on Sun, 04 Nov 2012 00:23:49 GMT
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Wer Probleme mit Englisch hat, kann mich um Übersetzung bitten, ansonsten würde ich mir gerne die Doppel-Tipperei sparen.
Wer sich für diese Geräte interessiert, wird ohne gute Englisch-Kenntnisse ohnehin scheitern, da sämtliche Schaltungsbeschreibungen, Kalibrieranleitungen, etc. zu diesen Geräten ausschließlich in Englisch verfasst wurden. Da diese anspruchsvollen Geräte ausschließlich für den Bereich Wissenschaft / Forschung / Entwicklung gebaut wurden, waren keine Übersetzungen in andere Sprachen nötig.

Just took a few pictures while replacing such a CRT. This happened a while ago, so sorry for the poor images, didn't yet own a better digicam those days.

The 564 Storage oscilloscope was introduced in 1963.
Pictures show the 564B CRT which looks almost the same. (There was no 564A)

An amazing artwork. World's most advanced technology available in the early 1960s.

Nothing could compare to Tek's Split-Screen Storage CRTs those days. The only company that could be considered a serious competitor in this field and in those days was HP. But HP was still unable to offer any storage scope those days. Their very first storage scope, the 141A, appeared in 1966 (according to my information) but could store for only very short periods of time (ranging from seconds to around a minute), while the 564 allows viewing of stored pictures for one hour or even longer.

This CRT allows to be set up in 4 different ways : Upper half displaying a stored waveform, lower half displaying the current waveform. Or - Lower half displaying a stored waveform, upper half displaying the current waveform. Or - Both halves displaying a stored waveform Or - use as a conventional Scope without storing anything.
This image shows three sections - the slim, vertically oriented section on the left is reserved for special purposes, without impact on stored information :

The tube also allows at any time adding information (traces) to the information that already has been saved in the storing section, but you cannot delete traces separately, only the entire information in the respective section or in both sections simultaneously.
This CRT contains three cathodes, but has nothing in common with a color CRT. While a color CRT contains three writing guns, one for each color, this CRT contains one writing gun plus two flood guns for viewing the stored information.

The storage tube enables viewing fast, non-repetitive signals as well as signals evolving in a very slow way. Or comparing a stored waveform for alignment work against a current waveform present in the device under service. Plus many other purposes... usefulness limited only by the user's abilities.

File Attachments

1) 564BCRTA.JPG, downloaded 1630 times
2) 564BCRTB.JPG, downloaded 1756 times
3) 564BCRTC.JPG, downloaded 1745 times
4) 564BCRTD.JPG, downloaded 1761 times

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