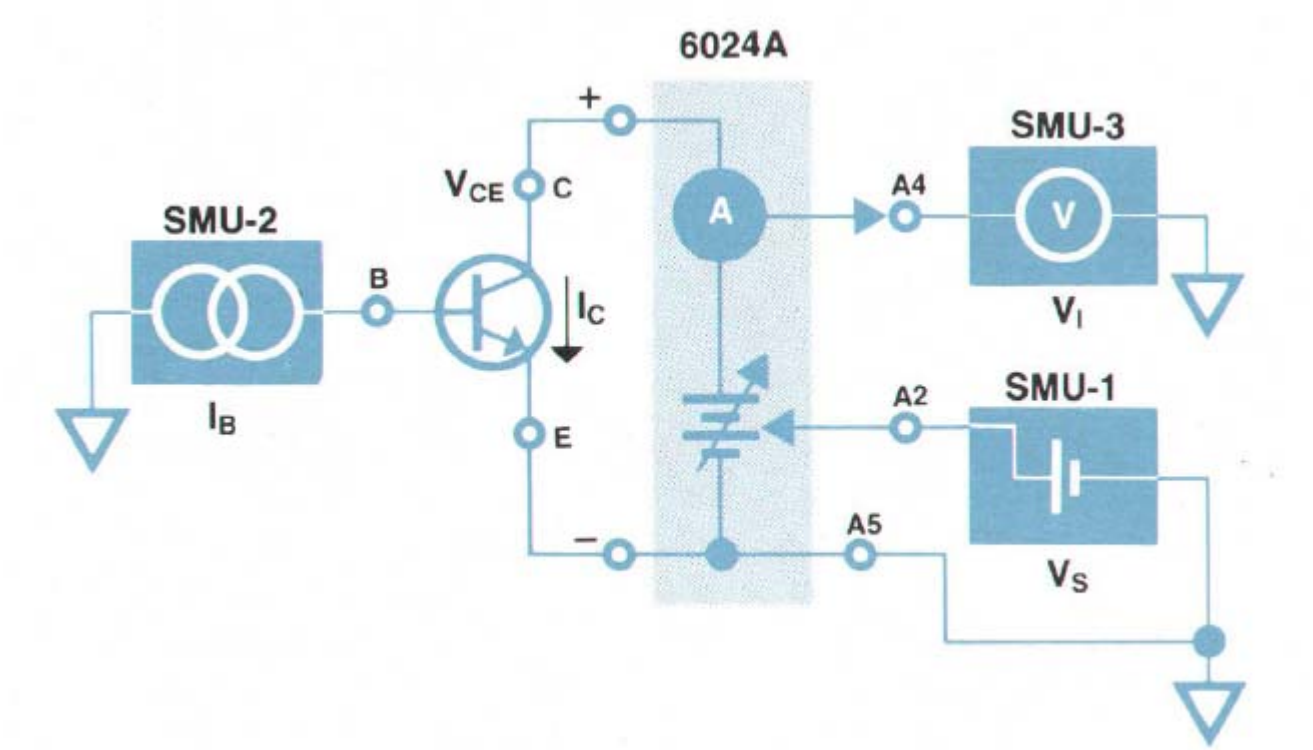
HP 4145A - Power Transistor Measurement Setup

I've been playing around with my repaired HP 4145A, and the setup to measure power transistors, as described in the issue of October 1982 of the Hewlett-Packard Journal (page 10), caught my attention.

The article doesn't provide a lot of detail on how to set up the analyzer. Since I struggled with it for a while, I will describe below how I configured everything to measure a 2N3055 transistor. Someone may find the information helpful.

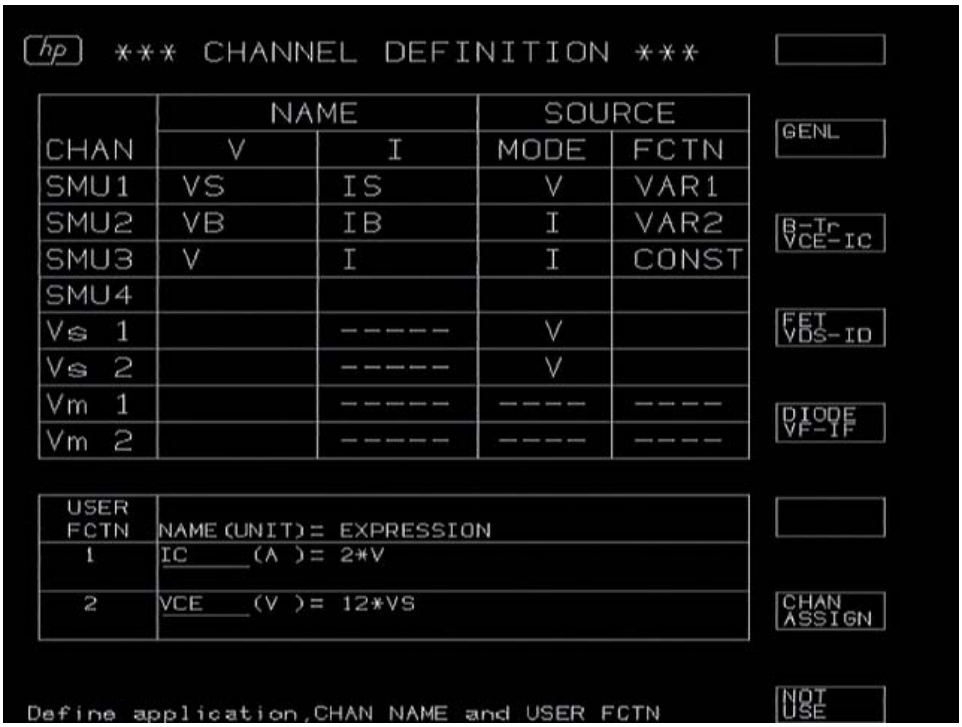
1) Hardware Setup

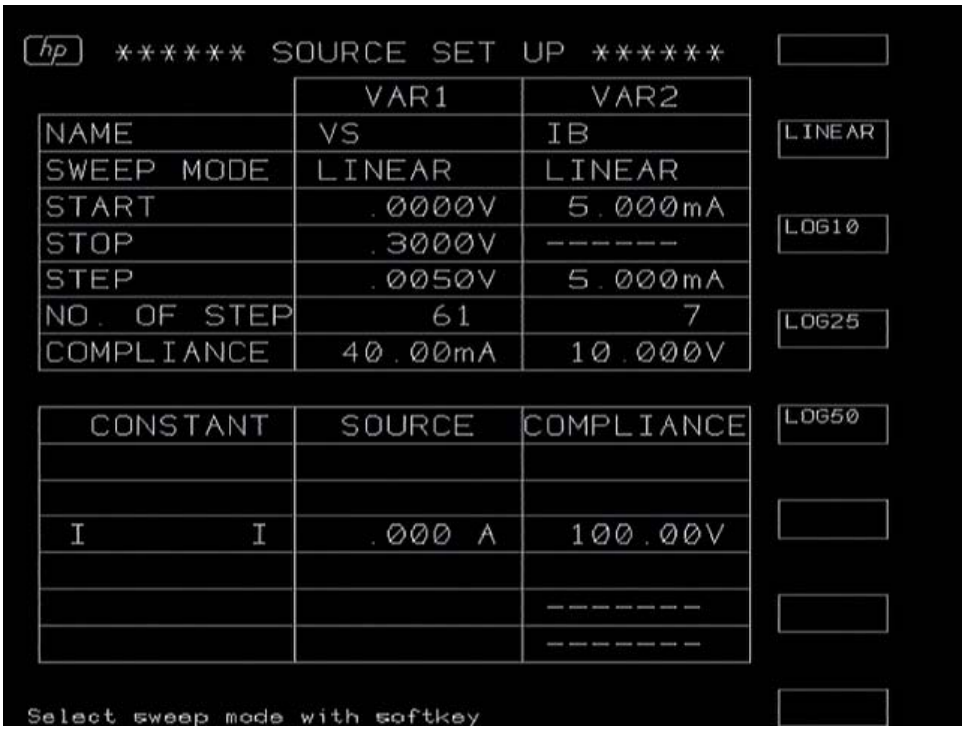
I pretty much followed the diagram in the article:



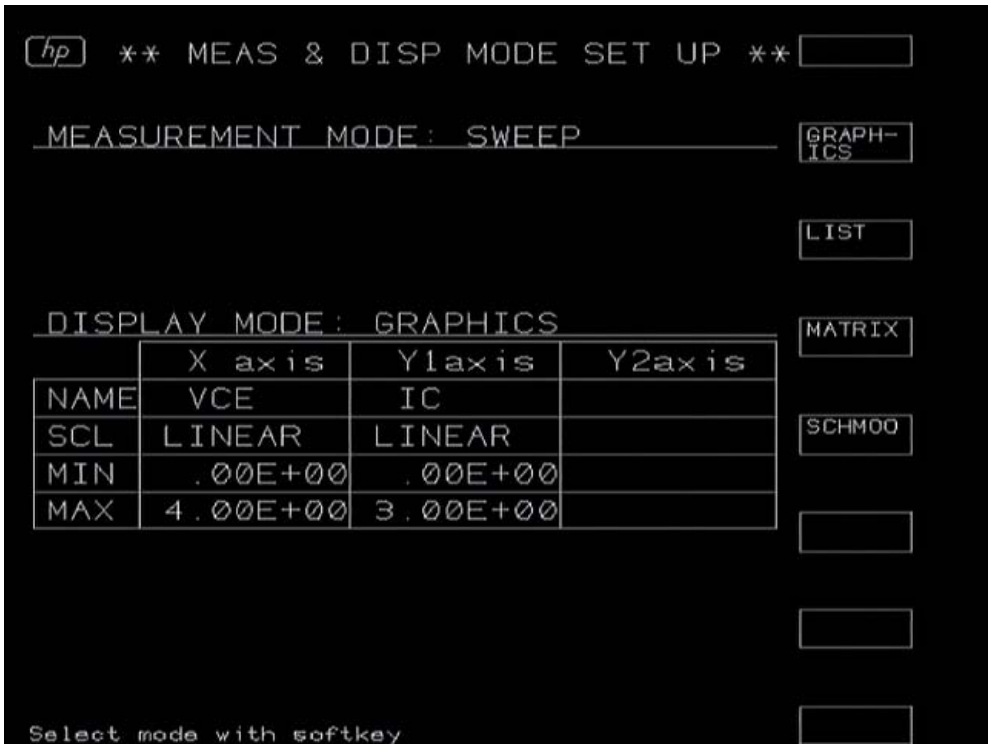
2) Configuration of the 4145A

The following screen captures show how I set up the SMUs and the calculations to convert the sweep voltage into VCE and the output current voltage of the 6024A into IC:

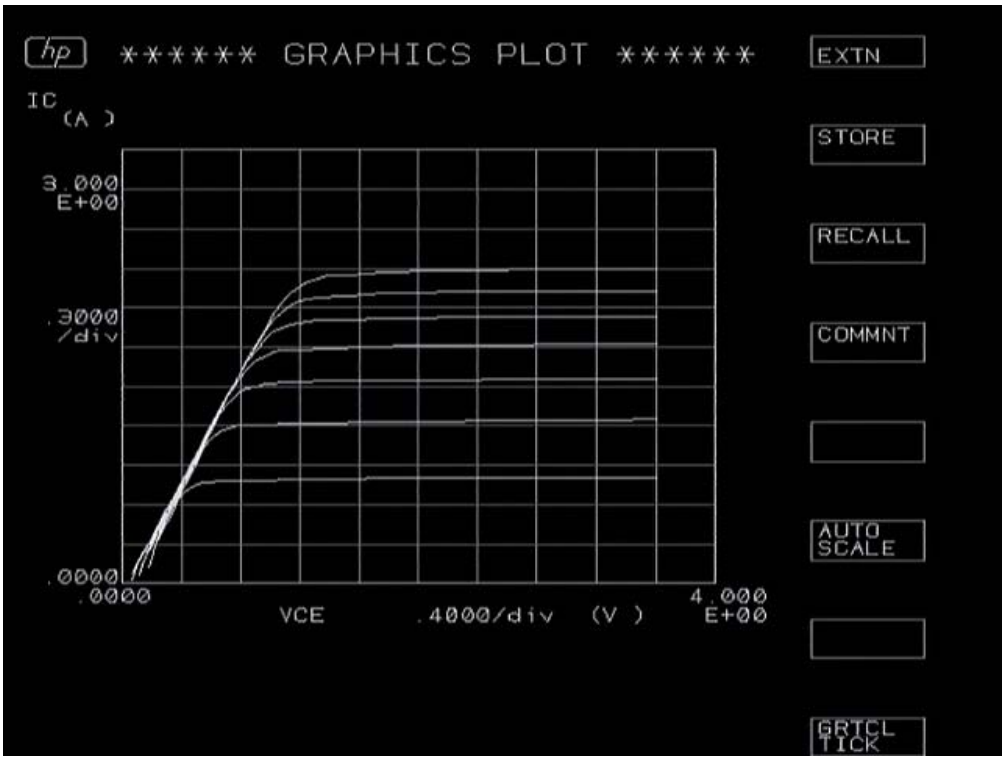




3) Display Mode Setup



This is the result (single measurement, long integration time):



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