Procedure for Tektronix 571 Curve Tracer

Part I:
Measurement of \( I_D \) vs. \( V_{DS} \) curve for different \( V_{GS} \)
1. Connect one M4007 N-FET Gate (pin 6) to G, Source (pin 7) to S and Drain (pin 8) to D on the Tektronix 571 Curve Tracer.
2. The following is an example of \( I_D \) vs. \( V_{DS} \) curve, sweeping \( V_{DS} \) from 0-20V with different \( V_{GS} \) (0, 1, 2...10V):
   (1) Press **Menu Key**, and use ↓ and ↑ to select an item and ← and → to change value. Setup the parameter as below:

   Function: Acquisition Continuous  
   Type: N-FET  
   VDS: 20 Volt (This enables a sweep of 0-20 V on the X-axis.)  
   Is: 50mA (This sets the maximum value on Y-axis.)  
   Vg/Step: 1V (This steps gate voltage in the intervals of 1V.)  
   Step: 10V (the maximum sweep gate voltage)  
   VOFFSET: 0V (the offset voltage of gate)  
   RLOAD: 0.25 Ohm  
   PMAX: 100 Watt  

   (2) Press **Start Key** to start the voltage sweep.  
   (3) Press **Stop** to stop the sweep after the curves have been plotted on the screen.  
   (4) Press **Copy** to print a plot.

![Diagram of measured FET with Tektronix 571 Curve Tracer](Figure 1)
Part II:  
Measurement of Vt in Saturation mode  
1. Connect one M4007 N-FET Gate (pin 6) and Drain (pin 8) to D and Source (pin 7) to S on Tektronix 571 Curve Tracer.  
2. Repeat the step 2 of Part I.