"Membrane Current" simulator
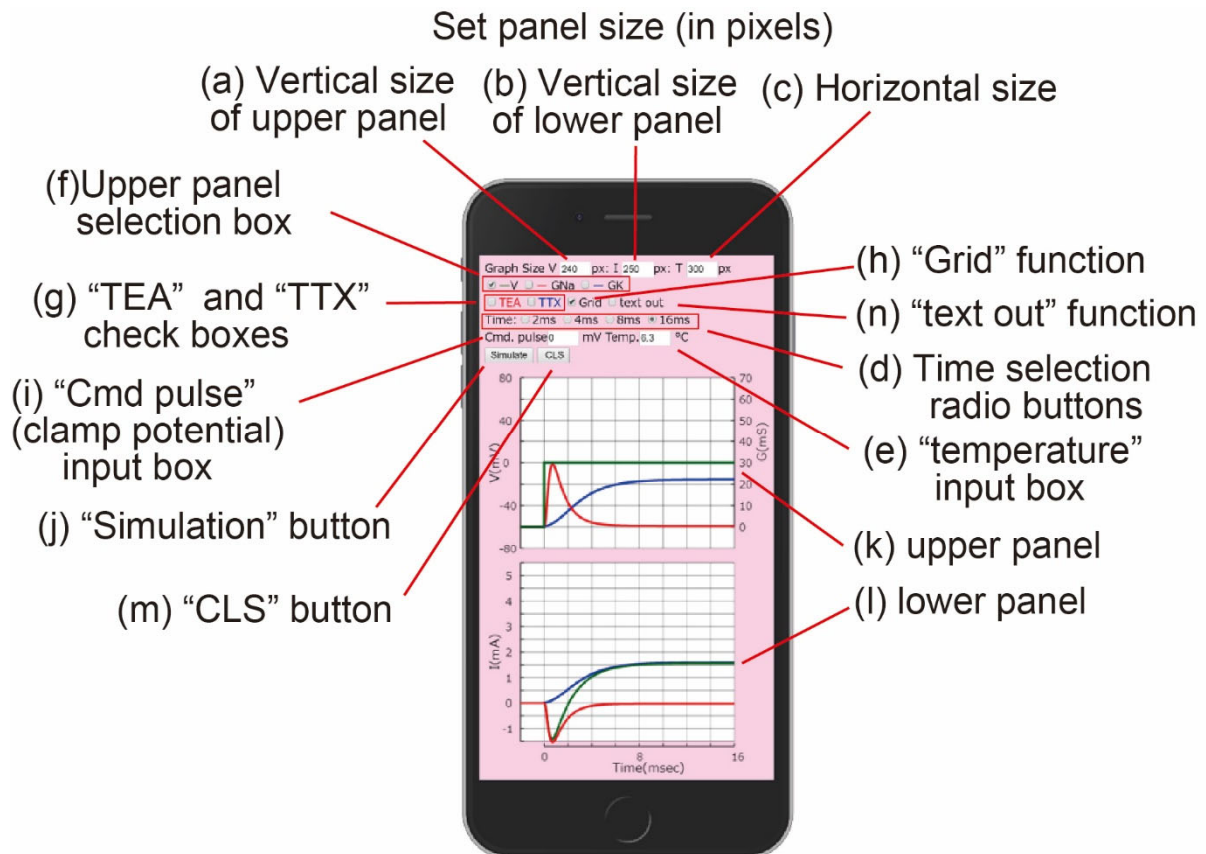

(1) Since different devices have different screen sizes, enter the size in pixels to get the appropriate panel size.   Vertical size of upper panel (a).   Vertical size of upper panel (b).   Horizontal size of panels (c).

(2) Select simulation time with radio buttons (d)

(3) Enter the temperature in the "temperature" input box. (e)

(4) In the upper panel (k), membrane potential (V), potassium conductance (G_K), and/or sodium conductance (G_{Na}) are displayed depending on which box(es) is /are checked (f).   V is traced by a black line, G_{Na} conductance by a red line, and G_K by a blue line.

(5) If TEA is to be activated, check the "TEA" box, and if TTX is to be activated, check the "TTX" box. (g)

(6) In lower panel (l), sodium current (red line) is traced if "TEA" box is checked, potassium current (blue line) is traced if "TTX" box is checked, or total membrane current (black line) is traced if both boxes are unchecked.

(7) If you want the panel to display a grid, check the "grid" function (h).

(8) Enter the voltage of the "command pulse" (clamp potential) in the input box (i).

(9) Click the "Simulation" button to run the simulation. (j)

(10)   To clear the panel traces, click the "CLS" button. (m)

(11)   If you check "text out" (n) and simulate, it will be displayed in CSV format text.