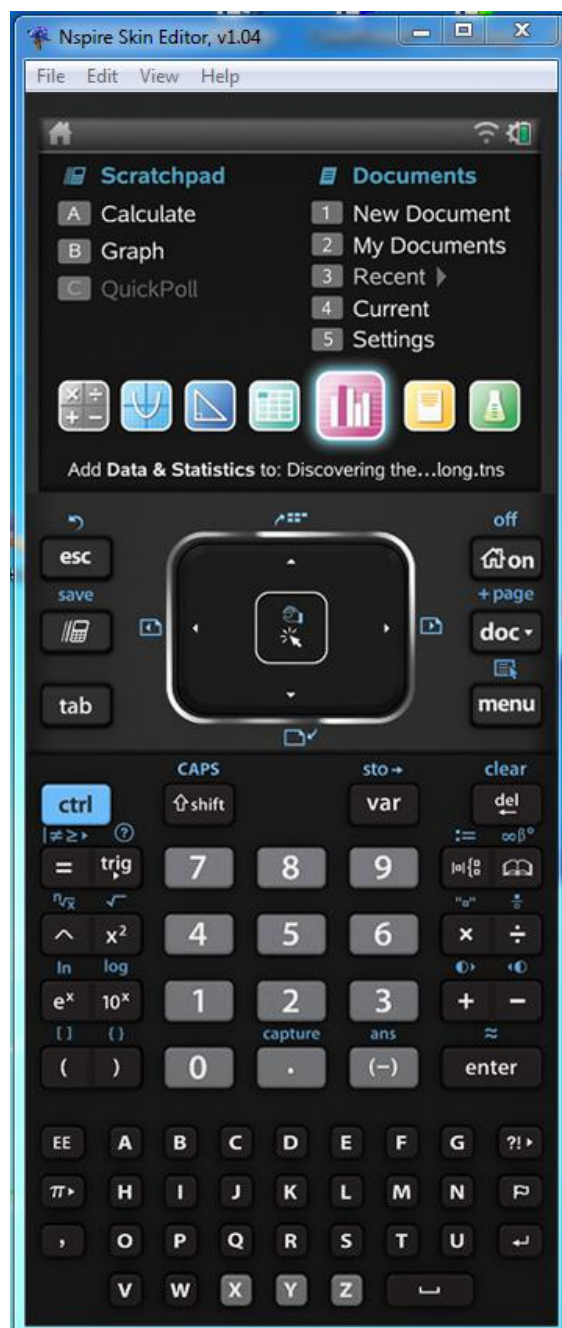# kArmTI v1.27, Quick Start - Part II - Add a Skin

1. Introduction

We'll start by learning how to make a skin from *scratch*. Later, you'll quickly realize that normally there's a faster way of forging a new skin, which basically consists in picking up an already made example, save it under a new name, and then simply move the positions of the LCD and the keys around. To create a skin we need to use a special skin editor. I've also designed such an editor specifically for kArmTI.
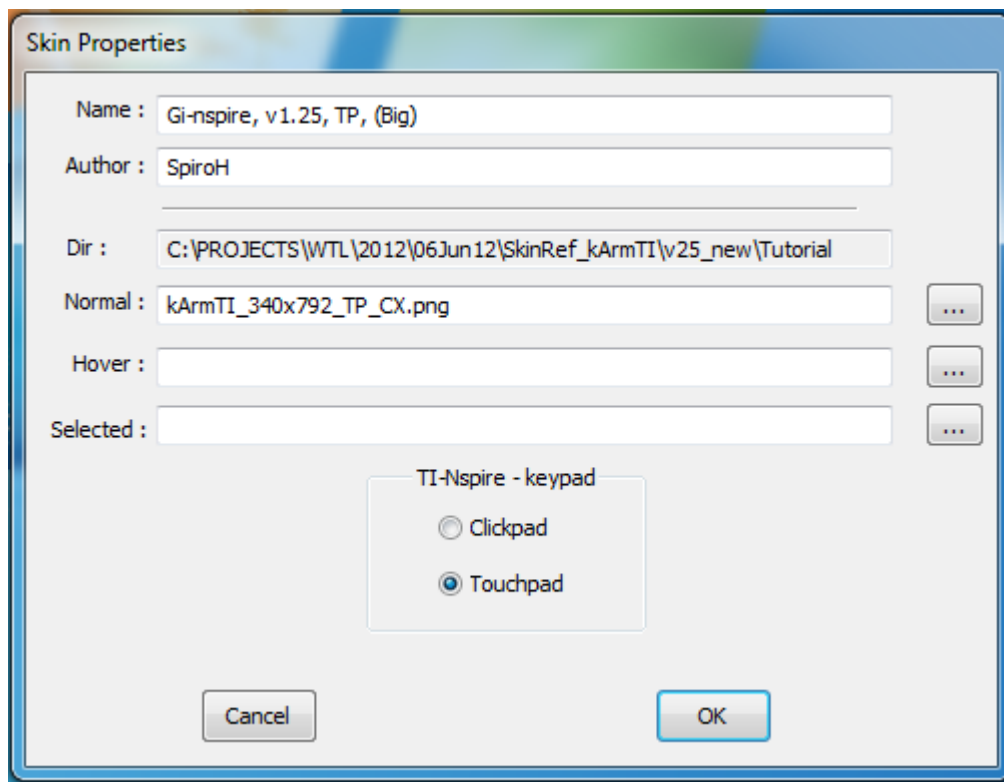
2. kArmTI Skin development

2.1 Main Bitmap

Find yourself a good skin bitmap in any format, but preferably in compressed format, eg: 'kArmTI_340x792_TP_CX.png'. Open up the kArmTI SkinEditor v1.04 and select that file. That will be shown as :

2.2 Skin Properties

A Skin Properties dialog will come up.

a. Fill the Fields:

          Name: kArmTI, v1.27, TP, (First try)
          Author: YourName/Nic (SpiroH)

The field 'Normal' will automagically be filled with the main skin bitmap filename: 'kArmTI_340x792_TP_CX.png' . Do not care about 'Hover' and ' Selected' (those fields were used for other skin types)

b. Select the desired keypad, in this case,' Touchpad'.

c. Press 'Ok'

3. Define the LCD position   Edit->LCD Position (Ctrl+L)

a. Select a point on the screen and pressing the mouse left button draw a dragging rectangle. You'll see a hashed rectangle being drawn. Notice the dimensions in the center (W:320, H:240) For this guide, the LCD is misplaced (on purpose :=().

b. Use the keyboard cursor keys to fine adjust the lcd position.
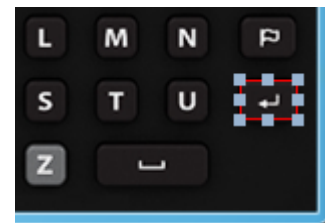

4. Save the skin file

Now is a good time to save the skin file. Select File->Save and save it as 'QuickStart.skn'

5. Define keys positions.

Press Ctrl-K to show the list of all keys for this keypad (touchpad) on the right hand side. By default the key 'ret' is the first and is also selected:

a. Define the key position: using the mouse (LeftButton) draw a drag-rectangle around the key 'ret'. You'l see a rect-tracker over the top (in red) to let you adjust the size and the position.
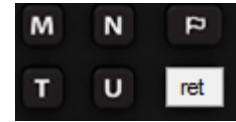

b. When your are done with the positioning, press the mouse right-button to accept it. You can change the key position later if required. To adjust, simply click over the already defined key and the red recttracker will let you adjust it. The right-click will accept it.

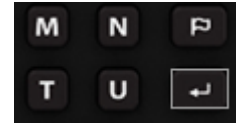**c.** Do this for ALL the keys. From time to time save the skin (ctrl+S).

 In principle, **that's it**, you've made it!

6. Review your work

a. View -> Defined Keys (shows the keys names)

b. View -> Defined Keys WF (shows the Wire-Frame around the keys - good for position fine tunning)
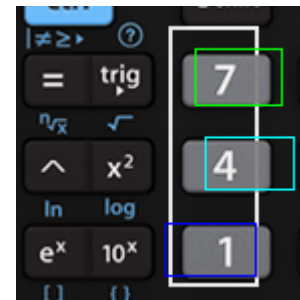

7. Arranging/Aligning keys positions.

a. Define some extra keys (eg: '7' '4' and '1') (using the above procedure, you may randomly select any key at any time on the list)

b. As you can see above, the keys are misaligned. Press Ctrl+A (Edit->Arrange keys).Draw a drag rectangle around these keys. The 'green' is the first in the selection (the alignment reference) and the 'blue' is the 'last'.

c. Let's say you want to:

    A - Make them the same Height   (Alt+H)
    B - Make them the same Width   (Alt+W)
    C - Align them on the Left   (Alt+L)
    D - Move them all to a desired position
      (use the keyboard cursor keys)

8. The final skin result (shown here for an already made example)

Of course this will require some pratice. The first one is the most difficult. Then you can copy, modify, etc. and hopefully everything becomes much smoother and easier.

There are some more details, but I let you explore them on you own.

Last but not the least (LBNL), for kArmTI to be able to recognize the skin you've just made, you need to place both files: the bitmap 'kArmTI_340x792_TP_CX.png' and the skin description file 'QuickStart.skn' inside the 'SKINS' folder. This folder path is relative to the location of 'kArmTI_v27.exe'.

9. Modifying an existing skin

In general, you don't need to go through all the above somewhat cumbersome steps. You can simplify matters in the following way:

a. Look up for a skin example in which the keys size either are a perfect or approximate match for your target skin design. Furthermore, suppose your new skin bitmap has the name 'Noob-kArmti.png'

b. Open the skin example, show its Properties and modify the 'Normal' bitmap name to 'Noob-kArmti.png'. Save the file.

c. Open the just saved file. You should see your 'Noob-kArmti.png' on which you the LCD and the keys positions appear as they were defined in your example template. Most naturally, they will be misplaced. Now, all you have to do is to select, move and eventually resize them. And your new skin is ready.

(TO BE CONTINUED...)