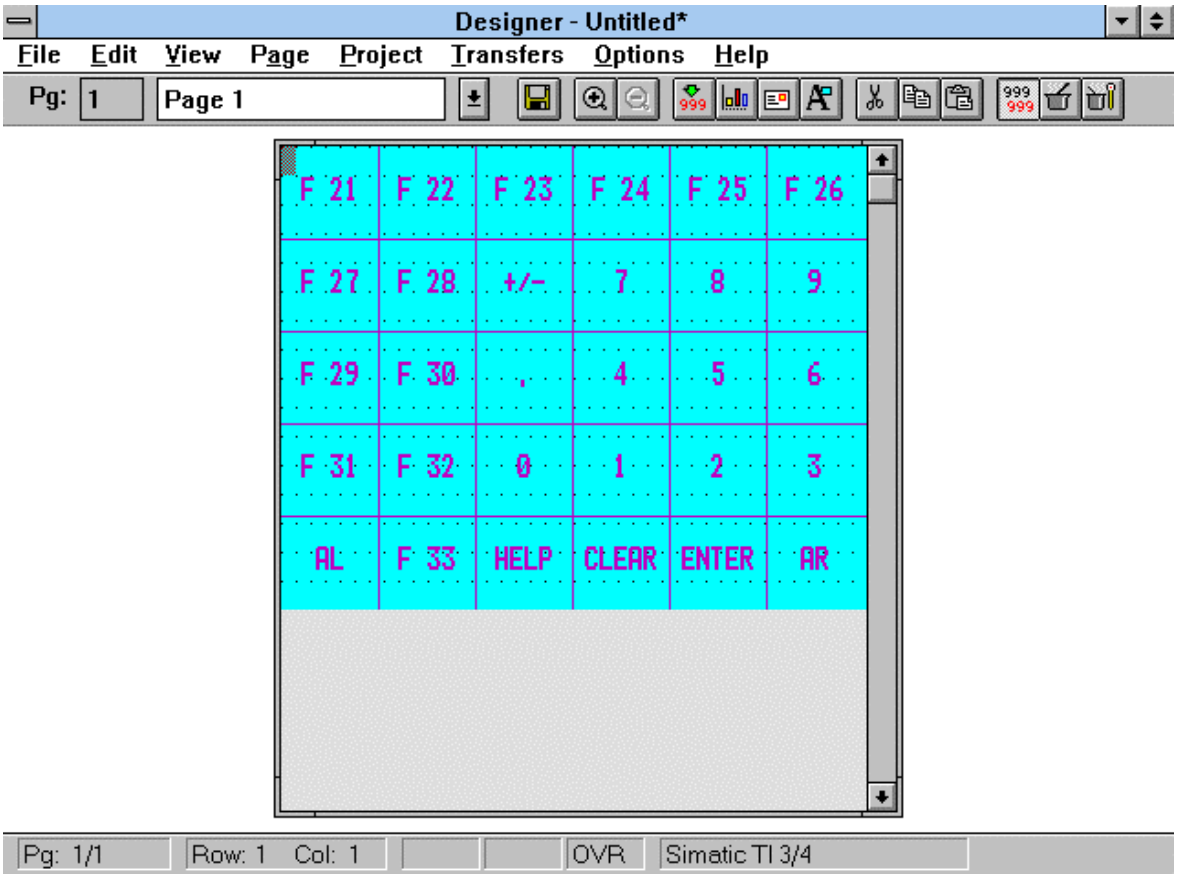
UniOP with a Digital Touchscreen

16 Line by 40 Character Digital Touchscreens

The following picture shows how the Designer for Windows display will look with the touch screen grid and key assignments overlay enabled.



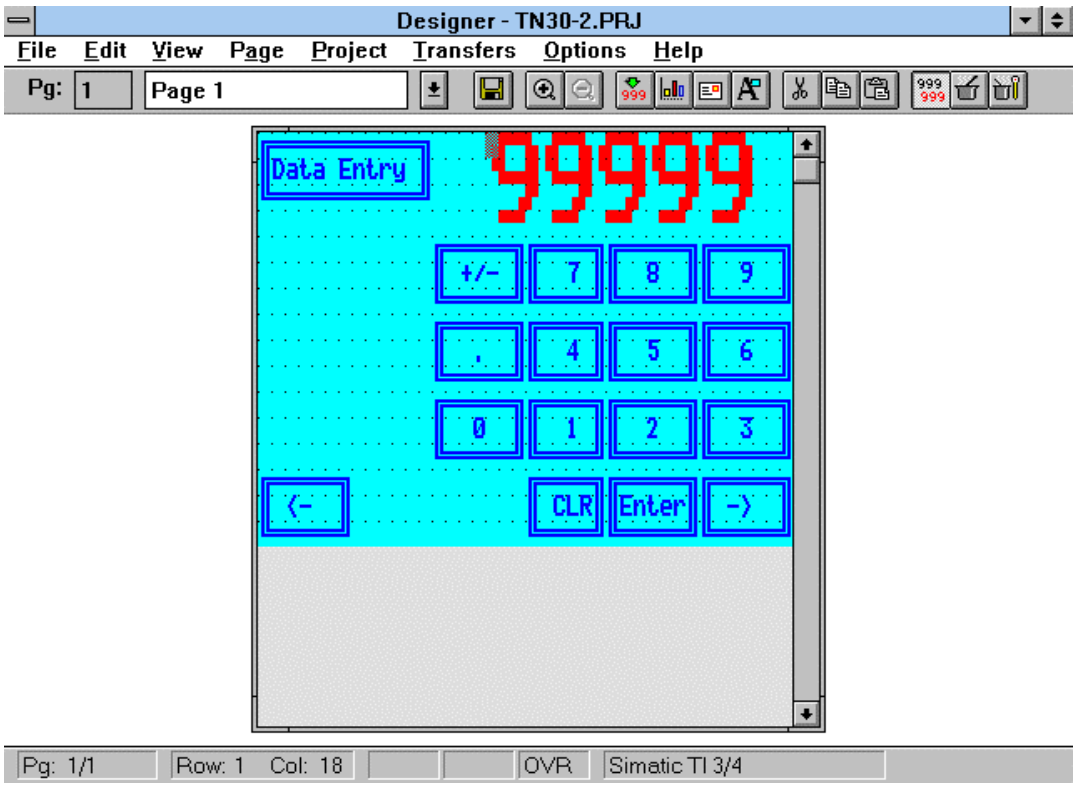
Each page is divided into a grid system. Each grid functions as a separate key and has the default key assignment as shown above. The touch screen grids are programmed with the Keyboard Macro Editor or by the ladder logic program in the PLC.

The function keys (as well as the numeric keys) can be programmed to do many different functions, such as changing pages, turning on an LED, writing a value to the controller, etc. The touchscreen grids are programmed with the Keyboard Macro Editor in the same manner as a function key or a numeric key.

Please refer to your Designer for Windows software manual or to TechNote #28 for more information on using the Keyboard Macro Editor.

Example

Let's set up a simple screen that enables the operator to enter a numeric value. After Designer is set up to create a project for a 16X40 LCD display, you can select *TouchScreen Grid* from the *TouchScreen* menu. A grid will appear that shows exactly where the grids are on located on the display. Now select *TouchScreen Grid Key Assignment* from the *TouchScreen* menu. You will see the default key assignments for each grid. These two functions are tools to help you program a touchscreen - the panel will not actually display the grid or the key assignments. Let's create the screen shown below.



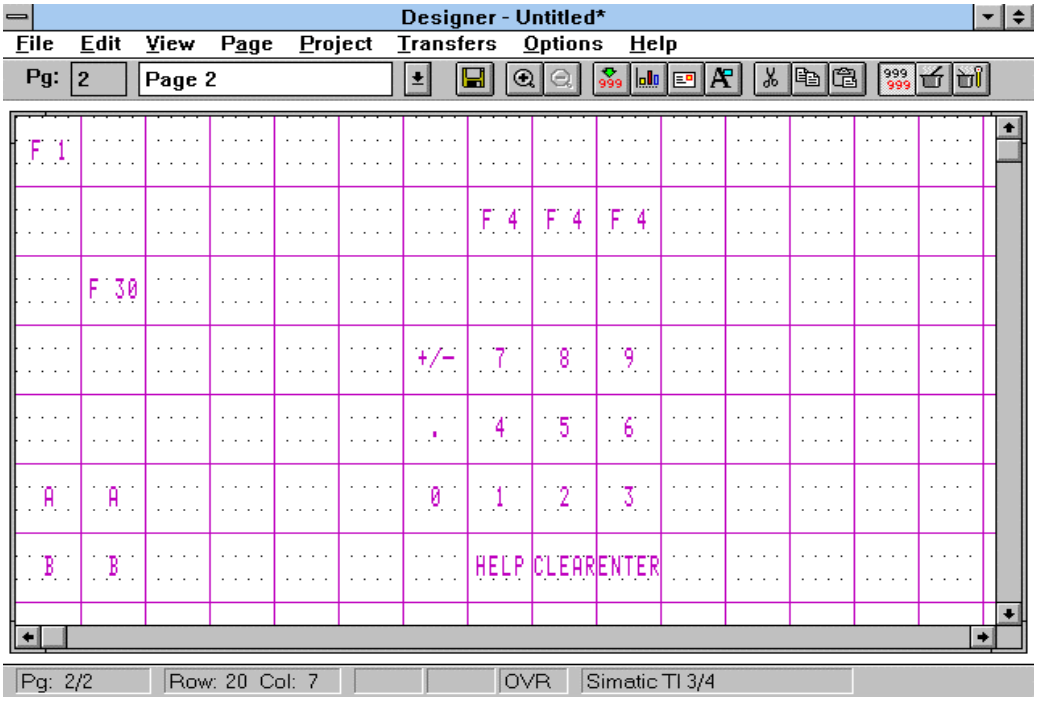
Select *Rectangles & Symbols* from the *Edit* menu. Use this tool to draw boxes on the screen so that the operator can easily tell where to touch the screen for a specific function. After you have created the boxes, simply type static text within each of the boxes to explain their operation.

Create a Read/Write Numeric field in the upper right portion of the screen. All of the keys in this example use the default functions of the keys except the Data Entry key. This means that you only need to use the macro editor to program the Data Entry key. This key is assigned to both F21 and F22. Therefore, you must program the same macro for both keys so that the operator can push either the F21 or the F22 grid. Both of these keys should be programmed to enter data entry mode.

You should now have successfully programmed a numeric entry screen for a touch screen panel.

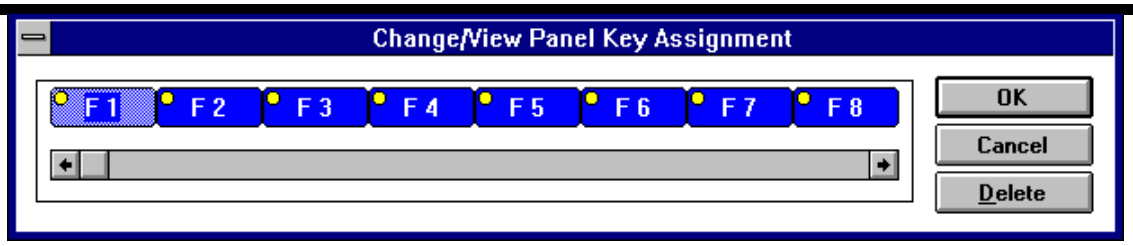
25 Line by 80 Character Touch Screens

These touchscreens are programmed similar to the smaller screens. However, there are a few differences due the fact that there are 61 different keys available that can be assigned to a possible 128 different grids. The following picture shows how the Designer for Windows display will look with the touchscreen grid and key assignments overlay enabled. **The key assignments will only be visible after you have assigned a grid or grids to a specific key.** The picture below shows how the screen will appear after assigning a few grids to keys.



The figure above shows how the dialog box will look. The delete button will only be visible after you have defined a key. This button allows you to remove any key assignments from a particular grid.

To assign a grid to a specific key, simply double click in the desired grid and a tool bar with all possible keys will appear as shown below. You can now scroll through the keys until you reach the desired key. Then highlight the desired key by single clicking on it and select *OK*.



You can program several grids to the same key. After programming the first grid to a specific key, simply double click on another grid and select the exact same key. This method allows you to assign several grids to the same key. In other words, you can make one touch area or key larger than a single grid. Therefore, you only need to program a single macro for the specified key which will control several grids. This will save you time by not having to program the same macro for several keys. All macros are then programmed in the same manner.

Note: Once you have assigned a specific key to a grid, the key will remain assigned to that particular grid on each page of the project. The Keyboard Macro Editor allows you to give each key a different function on each page if desired.

Technical assistance may be obtained :
In North America EXOR at 1-513-874-4665.
In Europe EXOR Italy at +39 045 - 8779068