bematech

KB9000 Programmable Touch Bumpbar



PROGRAMMING MANUAL

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1 Introduction

The KB9000 is a fully programmable bumpbar keypad with touch operations. With the advanced projected capacitive touch technology, the KB9000 provides reliable and durable touch operations that cannot be achieved with resistive contacts. The programming utility software described in this manual helps users to customize the bumpbar layouts to desired number of keys, key locations, key dimensions and key codes that meet the unique requirement of each application and maximize operation efficiency.

2 Software Installation

The programming utility software does not require special installation. Just copy the folder in the software package into a target folder in the computer.

For PS/2 Interface, a special driver is required for the utility to communicate with the KB9000. Following instructions below to install the driver before running the programming utility.

2.1 Turn off power of computer.

2.2 Plug KB9000 in PS/2 port, and turn on computer power.

2.3 Double click on "install.bat" to install device driver package automatically and wait until installation is complete.

or,

Double click on "LciKb_x86.msi" or "LciKb_x64.msi" directly to install device driver package. Follow the instructions on screen step by step to finish installation. There are two installation programs for 32 bit (x86) and 64 bit (x64) Windows XP/Vista/7/8. The correct one must be used for installation. If a wrong installation file is selected, the installation will fail.

2.4 Restart computer after the installation is finished.

2.5 Check under Device Manager whether the device driver installed correctly under Keyboards device class.

3 Programming the KB9000

3.1 Connecting the keyboard

For PS/2 versions: Turn off power of the PC. Connect the programmable keyboard to the PC with the special interface cable provided. Plug the standard PC keyboard to the female PS/2 connector on the interface cable and plug the male PS/2 connector to the computer.

For USB versions: Connect the programmable keyboard to any USB port on the computer.

3.2 Starting the utility

Start the Programming Utility by double clicking on the "KB9Utility.exe" icon in the folder where the utility is installed.

3.3 Preparing the template

The utility starts with a blank template (all key definitions are blank). An existing template can be brought into the utility as a starting point for editing. There are 2 ways to get existing template files into the utility -- "OPEN" from a template file stored on PC, or "READ" from the KB9000 that contains the previously programmed template. Refer to the **Utility Operations** section for details of editing key layout and key definitions.

3.4 Writing into the keyboard

It is strongly advised that the template should be first saved into a template file for future reference and for programming multiple keyboards. As legend design properties such as key colors and key labels are not saved into the KB9000, these information can only be saved in the template files. After saving the file, click "Write in KB9000" button on the toolbar to write the template into the KB9000.

3.5 Printing legend sheet

Print out the legend sheet and cut to size for installing into the KB9000. It is also possible to export the legend sheet design to a graphic image file (jpg, bmp or png) for printing or further processing by other image edit software.

4 Programming Features

- User defined key layout with rich rectangle drawing tools (alignment, grouping, moving, automatic spacing, matrix keys, etc.)
- Ruler display, grid display, and zoom in/out function for easy positioning and alignment of keys.
- Quick template design with programmable legend sheet background color, key background color, key label font size/alignment/rotation/color, key shape, key border and image superposition for direct printing of legend sheet.
- Export legend sheet design to JPEG, Bitmap or PNG format files for further processing with other graphic editing software or printing.
- Copy and paste for quick duplication of similar key designs. When copying keys, all contents of key will be copied (name and key content).
- Key content status indicators for easy identification of keys that are empty or modified in the current edit session.
- Programmable touch sensitivity and sensing delay to suit operator or application preferences on touch operations.
- Inter-character delay programmable from 1ms to 100ms to slow down output speed to match computer/application response.
- String output with capitalization not affected by CapsLock status (automatically add Shift key action depending on CapsLock status in order to reserve the required capitalization).
- Allow emulation of keyboard typing functions such as upper/lower case switching with CapsLock and typmatic.
- Flexible placement of "break codes" (for indicating release action of the key) for Shift, Alt, Ctrl & Win keys to achieve special key combination operations such as Ctrl-Shift-F2.
- Key combinations input to simulate actions of holding down up to 3 keys (other than Shift, Alt, Ctrl & Win keys).
- Programmable pause time of 0.1 sec to 9.9 sec to allow application software to response before later part of key outputs are generated.
- Macro calls to macro definitions to save programming effort and memory

space when similar sequence of key actions are required in many keys with just minor variations from key to key.

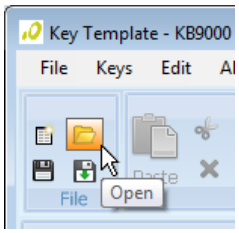
- "Repeat" function to program repeated key action multiple times efficiently.
- Programmable beep pitch and duration for individual keys.
- Direct input of key definitions from keyboard for most of the required functions. Alternatively, the on-screen keyboard can be used for input. The on-screen keyboard can also be used to enter some keys that are not possible to input via keyboard (due to editing operation requirements or Windows limitation) or not available on the keyboard.
- Test function for checking output of programmed keyboard by showing key outputs that are otherwise difficult to visualize with normal operations.

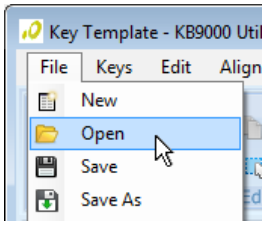
5 Utility Operations

5.1 Getting started

The utility starts with a blank template (all key definitions are blank). An existing template can be brought into the utility as a starting point for editing. There are 2 ways to get existing template files into the utility -- “OPEN” from a template file stored on PC, or “READ” from the KB9000 that contains the previously programmed template.

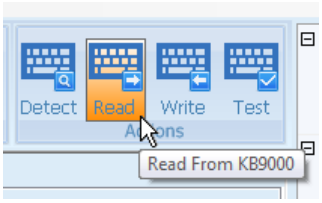
Open from template file

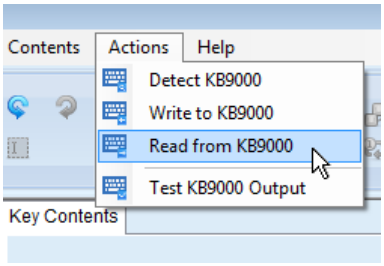




Click "Open" button on the toolbar or click "File" menu and then click "Open" on the pull-down menu. Browse for the template file required, select, and then click "Open".

Read from KB9000



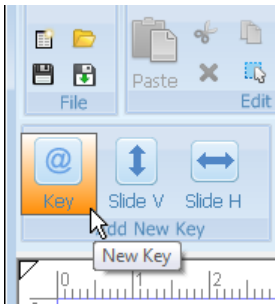


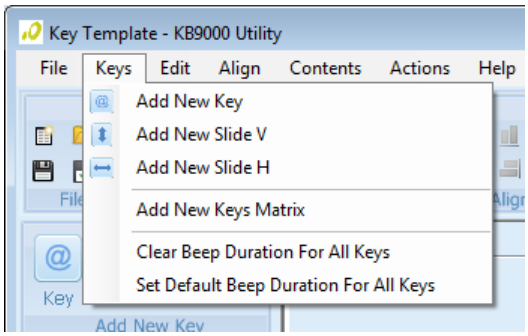
Click "Read" button on the toolbar or click "Actions" menu and then click "Read from KB9000" on the pull-down menu. As legend design properties such as key colors and key labels are not saved into the KB9000, these information can only be saved in the template files. Reading template from KB9000 will not read legend sheet and key appearance properties . Only locations, dimensions and key contents will be retrieved.

5.2 Key layout

After the blank template or an existing template is loaded from file or KB9000, the key layout can be edited.

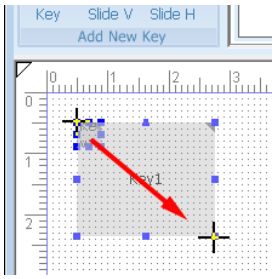
Add a new key



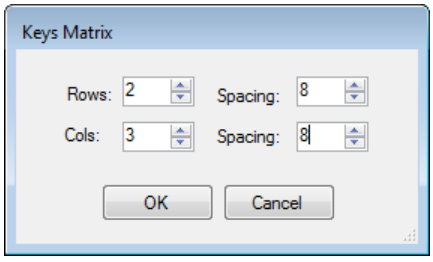


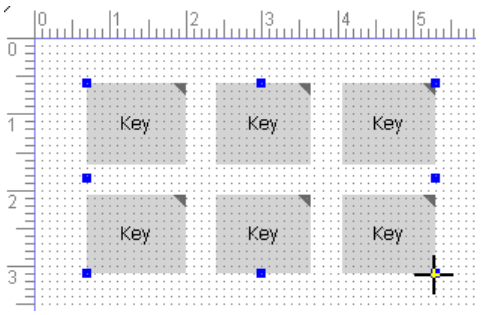
Keys can be added by clicking on the "Key", "Slide V", or "Slide H" buttons on the "Add New Key" toolbar. These functions are also accessible from the "Keys" menu. In addition, keys can be added as a matrix of keys.

After clicking on the add key buttons, move the mouse cursor to position for first corner of key to be added. Then hold down the left mouse button and drag across to the opposite corner of the key to draw it. When the mouse button is released, the key will be added to the layout.



For key matrix, a dialog box will pop up for entering the number of rows, columns and spacing between keys. The spacing count is in 0.5mm steps. For example, if 4mm spacing is needed between keys, enter 8 as spacing. Click "OK" to finish the setting and draw the matrix similar to operations in drawing single keys.



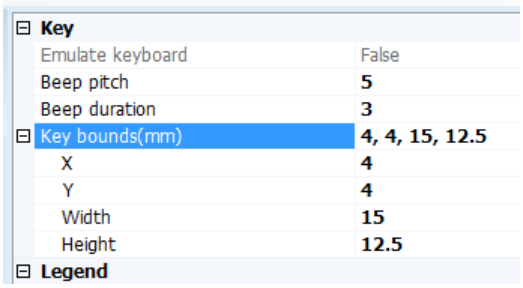


If it is necessary to break out the matrix to change keys individually, place mouse cursor on the matrix and right click. Then click "Ungroup" in the pop up menu.

Editing layout of a key

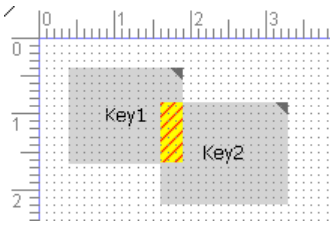
To change size of an existing key, just place the mouse cursor on one of the "handles" at corners or edges of the key, then hold down the left mouse button to drag. Releasing the mouse button will save the new dimensions of the key.

To move a key, place mouse cursor anywhere inside the key to select the key, then hold down the mouse button to drag the key to a new position (arrow keys can also be used to move the key once it is selected).

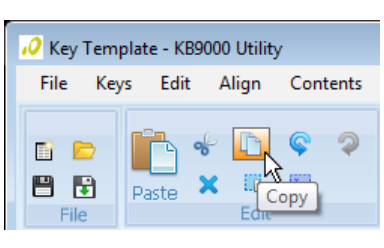


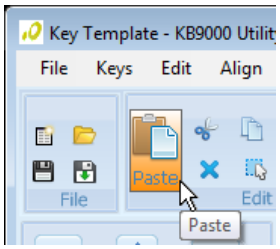
Alternatively, the key location and size can be edited by entering numerical values in the key properties. Click on the key to be edited to show its properties in the properties box. Then click in the "Key bounds" item box to edit the values. The units used are in mm.

When editing the key layouts which resulted in overlapping of keys, the overlapped parts will be highlighted as hatched yellow area. The keys must then be resized or moved to eliminate the overlaps.



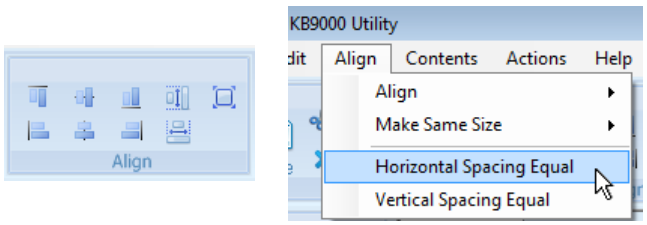
Copy and Paste





Keys can be copied and pasted for quick key placement. Click the key to be copied, then click the "Copy" button to copy. Then each time the "Paste" button is clicked, a new copy of the key will be placed on the legend sheet.

Aligning keys



The utility provides functions to align a group of keys on Top, Middle, Bottom, Left, Center, and Right. It can also make the selected group of keys (see section 5.3 "Key group selection") the same Height, same Width or both to the reference key. These functions are accessible on the toolbar and "Align" menu.

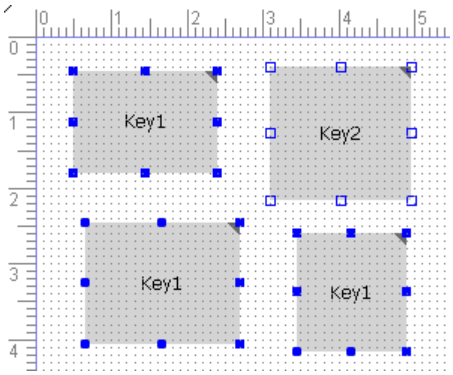
Additional function can be accessed on the "Align" menu to make equal spacing horizontally or vertically for selected group of keys.

5.3 Key group selection

Keys can be selected as a group for editing properties together, move together, or do alignment.

To select a group of keys, use the mouse to draw a bounding rectangle around the keys. Start from one corner of the bounding rectangle, hold down the left mouse key and drag across. When mouse button is released, all the keys touching the bounding rectangle will be selected.

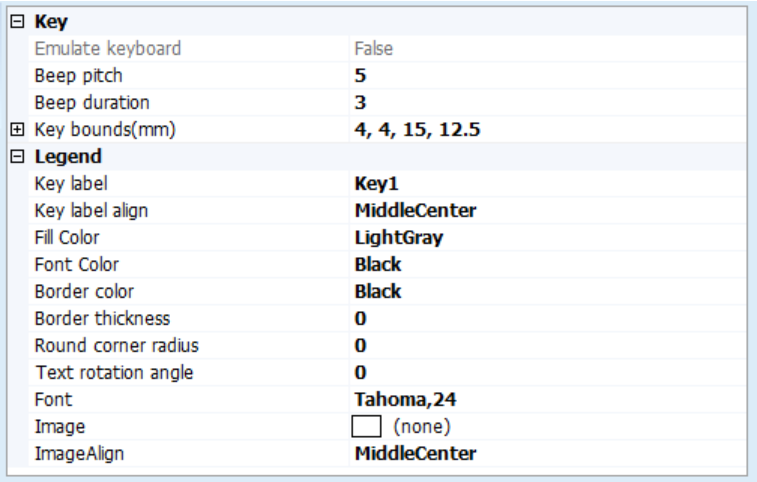
Alternatively, multiple keys can be selected by hold down the Ctrl key and click on the keys to be selected one by one. All keys clicked while Ctrl key is held down will be added to the selected group.



To select a key in the group as reference for making same height/width, click the target key in the group. The key's bounding "handles" will change to hallow shape to indicate that this is the reference key.

To unselect the group, just click on any space area on the legend outside a key.

5.4 Editing key properties and key appearances



The key properties and appearances can be edited directly in the properties box. When a key (or a group of keys) is selected, the properties will be shown in the properties box. Click on the individual item boxes to edit. Key properties are related to function of the keys and Legend properties are related to appearance of the keys when printing out the legend sheet. Note that Legend properties are not saved into the KB9000. They are only saved in the template file for printing legend sheets.

Emulate keyboard

Select whether the key will operate with keyboard behavior.

True - Key will work with typmatic and CapsLock.

False - key will not work with typmatic and output is not affected by CapsLock state.

When multiple key strokes are defined for the key, this function is not allowed.

Beep pitch

Specify the level of pitch for the audio feedback when pressing the key. Valid values are 1 to 10. The lowest pitch is 1 and the highest pitch is 10.

Beep duration

Specify the duration of beep for the audio feedback when pressing the key. Valid values are 0 to 10. Value of 0 will disable the beep. The shortest beep is 1 and the longest beep is 10.

Key bounds (mm)

Specify the location and dimension of the key as X, Y, Width, Height in mm.

Key label

Text label that appears on the key in the layout. This is used to identify the key.

Key label align

Specify how the key label is aligned inside the key outline.

Fill Color

Specify background fill color for the key (R,G,B). Click the ... button at the right side of the item box to bring up the color picking dialog box for quick pick of color.

Font Color

Specify font color for the key label.

Border color

Specify color of border for outline of the key.

Border thickness

Specify line thickness of border for the key. Value 0 means no border.

Round corner radius

The keys can have appearance of corner radii on the legend sheet although the actual key active area is rectangle. Value 0 means no corner radius.

Text rotation angle

The key label text can be specified to rotate at an angle by this property.

Font

Specify text font style used for the key label text.

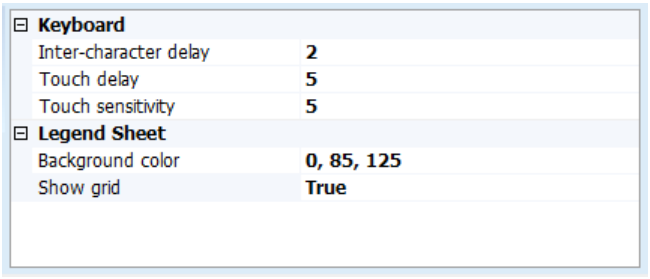
Image

Specify the graphic image to be overlaid on the key. Most common image formats are supported including bmp, jpg and png. The image sizes should be based on 300dpi to match the legend sheet physical sizes and should fit inside the key outline. If the image specified is larger than the key dimensions, the image will be stretched to fit inside the key outline.

Image Align

Specify the image alignment position within the key outline.

5.5 Editing keyboard and legend sheet properties



The keyboard and Legend Sheet properties can be edited directly in the properties box. When no key is selected (click any area on legend sheet that is outside a key) , these properties will be shown in the properties box. Click on the individual item boxes to edit. Keyboard properties are related to operation of the KB9000 and Legend Sheet properties are related to appearance of the legend sheet. Note that Legend Sheet properties are not saved into the KB9000. They are only saved in the template file.

Inter-character delay

Specify delay time between output character codes. Increase this delay time if necessary when working with computers or host controllers that cannot respond to the fast keyboard input rate. Valid values are 1 to 100.

Touch delay

Specify delay time between actual touch and recognition of the touch action. Increasing this delay time will increase stability of touch actions but may slow down operations. Valid values are 1 to 10.

Touch sensitivity

Specify sensitivity of touch actions. Adjust this value is necessary to match with operation requirements. Valid values are 1 to 10.

Background color

Specify background fill color for the legend sheet (R,G,B).

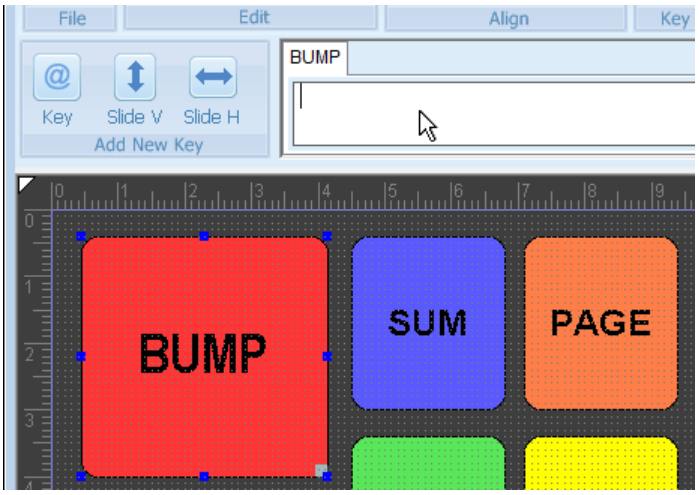
Show grid

Specify whether grid dots are to be shown on the legend sheet area on the utility display. Grid dots can be used to help positioning or aligning the keys.

5.6 Editing key contents

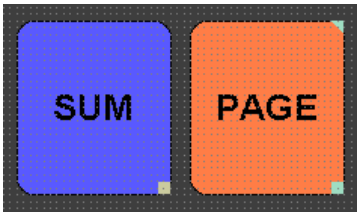
After placing layout of the keys, the key contents can be edited. Each key can be programmed with a sequence of standard keyboard key operations.

Starting the edit



Select the key to be edited and then click the edit content box on the toolbar to start entering key contents or editing. After edit is finished, click outside the key outline will register the edited content.

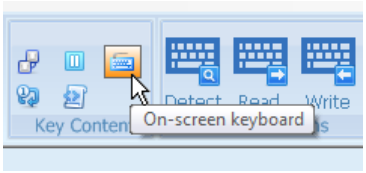
Indicators

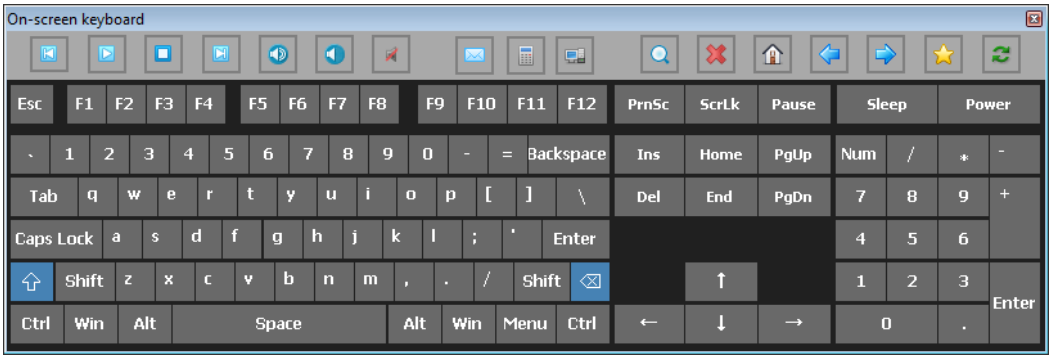


Corners of the keys may shows special markings to indicate status of the key contents. ◥ on top right corner indicates that the key content is empty. ■ on the bottom right corner indicates that the key content had been modified and not saved into template file yet. Check these indicators to verify that no accidental unexpected modifications were done before saving the template file overwriting previous file.

Entering key contents

Most of the keys on the keyboard can be entered into the edit box directly by pressing the keyboard keys. There are some keys controlled by Windows that are not passed to the utility and so not able to be captured into the edit box directly. Activate the on-screen keyboard from the utility for entering those keys.





If the key content consists of only a single key stroke, it can be enabled to emulate keyboard behavior with typmatic operation and output is affected by CapsLock state. When multiple key strokes are defined for the key, this function is not allowed. When keyboard emulation is set to false, the output string capitalization will follow the entered string in the key content independent of status of CapsLock. To enable keyboard emulation, set Emulate Keyboard property to "True".

Ctrl, Shift, Alt, Win

These 4 types of keys require special handling in the programming due to their special functions in the operating systems. Unlike regular keys which are emulated as series of key downs and key ups (key makes and key releases) in sequence automatically, these special keys are programmed in pairs of separate key down and key up actions. In the edit box, these are represented as follows.

Key-down codes	*Key-up codes*
[Shift]	[#Shift]
[Ctrl]	[#Ctrl]
[Alt]	[#Alt]
[Win]	[#Win]
[RightShift]	[#RightShift]
[RightCtrl]	[#RightCtrl]
[RightAlt]	[#RightAlt]
[RightWin]	[#RightWin]

For example, a "Ctrl-A" operation is formed with several steps:

- press and hold Ctrl key
- press down 'a' key
- release 'a' key
- release Ctrl key

Pressing down 'a' key and release 'a' key actions are easily programmed by programming the 'a' in the key content as the up and down codes are inserted automatically. However, to indicate that the Ctrl key is only released after the 'a' key, the key up code for Ctrl has to be placed at the end of the sequence. Thus the key content has to be programmed as shown below.

[Ctrl]a[#Ctrl]

The above can be entered through the keyboard the same way as how Ctrl-A would have been entered normally. For more complicated sequence operations, if it is not possible to capture the key strokes properly, enter the key up codes and key down codes in the required specific positions. Press the required key once, then both the key down code and key up code will be entered. Just use the arrow keys to navigate around and delete the codes that are not required.

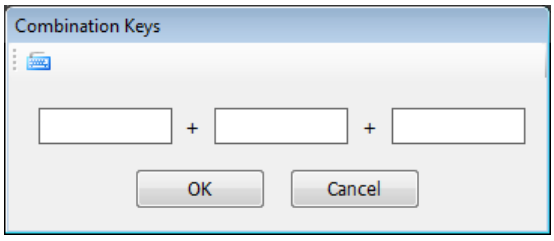
(Note: if the key only contains a single key such as Ctrl or Alt to be used as its standard keyboard key function, the up codes will not be shown).

Key Combinations

Normal keyboard operations do not require holding several keys together except the Ctrl, Shift, Alt, and Win keys. Since the regular keys will emulate key down and key up actions automatically in sequence, these keys do not operate as being held together. For example, a sequence 'abc' in the key content means the 'a' key is pressed and released, then 'b' key is pressed and released, then 'c' key is pressed and released.

If an application requires that several regular keys are pressed and held together and then released, use the Key Combinations feature to insert the sequence.





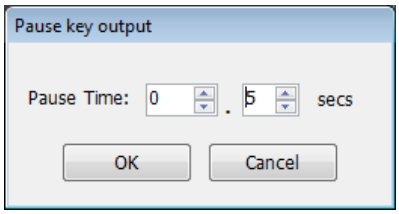
After clicking on the key content edit box, click "Insert key combination" button on toolbar to bring up the dialog box. Then enter the required keys in the boxes. If only 2 keys are needed, just leave the 3rd box blank. When finished, click "OK".

Note that the Ctrl, Shift, Alt and Win keys are not allowed in the key combinations.

Pause

If the application needs some time to bring up a new screen before continuing key operations, a pause can be inserted into the key content. The pause time is adjustable between 0.1 seconds and 9.9 seconds.

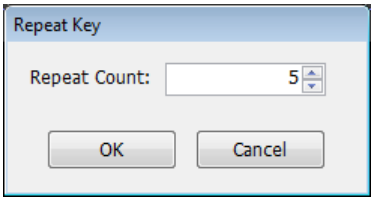




Repeat

To enter a repeated key operation for multiple times, it can be done efficiently by inserting the Repeat function.

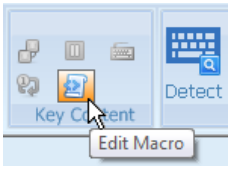


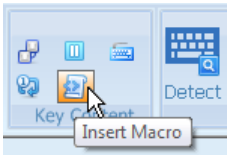


The repeat count can be adjusted from 1 to 100. After the Repeat code is inserted, the key definition following the Repeat code will be repeated the number of times as specified during actual key output. Repeat function cannot work with Key Combinations, Pause and Macro.

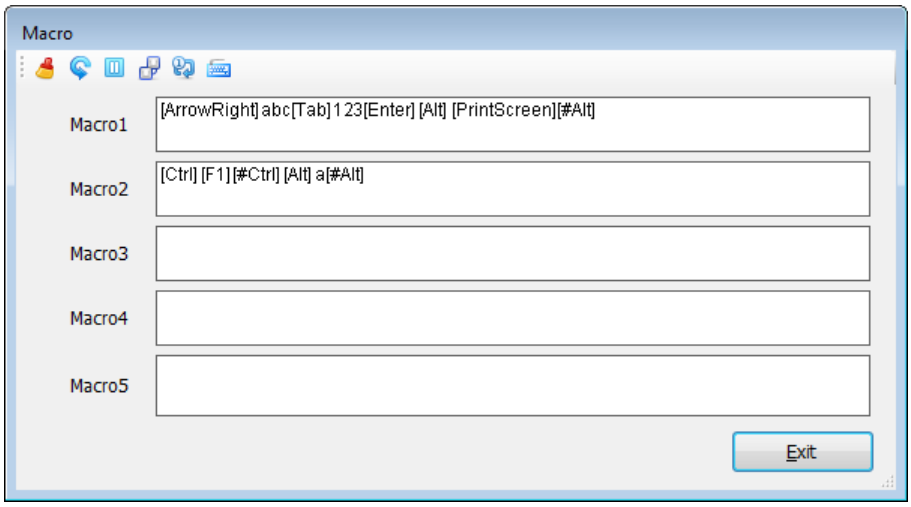
Macro

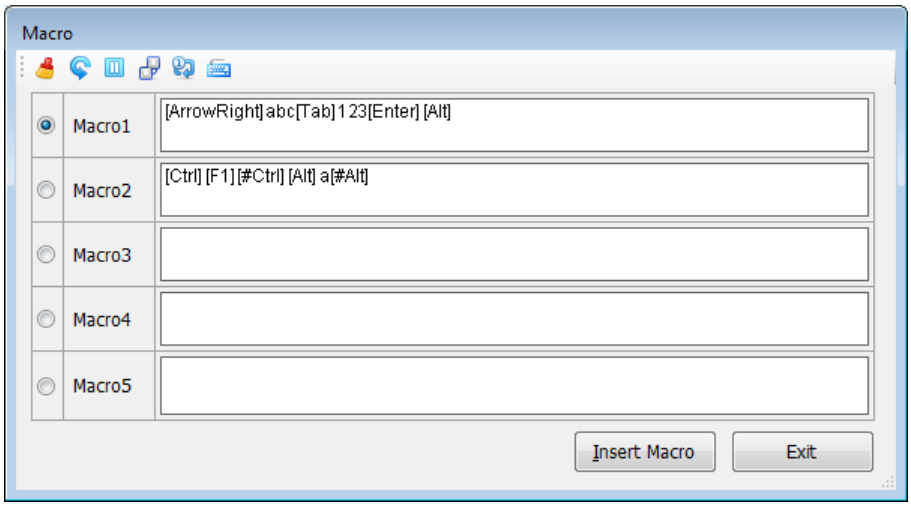
If there are key sequence segments that similar in many other keys with just variations in front of or after the segment, using Macro function can enter the contents into multiple keys efficiently. To use the Macro feature, first define duplicated key sequences in the Macro definitions, then include Macro calls in positions where the key sequence is required when editing key contents. Up to 5 Macros can be defined for each template.





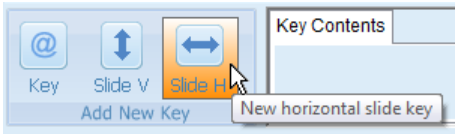
When key content box is not selected, click "Edit Macro" button to bring up the Macro dialog box for editing the Macros. If the key content box is selected, the Macro dialog box will allow insertion of Macros into the key contents.



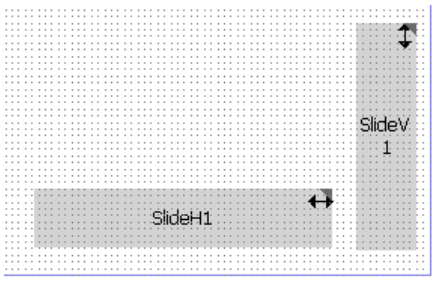


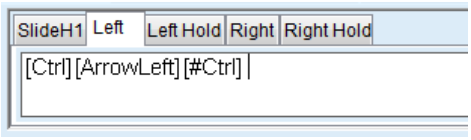
Slide V, Slide H

The KB9000 has 2 special keys that can emulate function of swiping actions on touch monitors. When sliding fingers on these keys, the KB9000 will send out different key codes depending on the sliding action to represent the required operation (for example, arrow keys, Ctrl + arrow keys, PgUp, PgDn etc. to achieve cursor movement or screen scrolling results).



The Slide V and Slide H keys are drawn on the legend sheet in the same way as regular key. Just make sure that the Slide V keys are drawn vertical to allow space for vertical swiping actions and Slide H keys are drawn horizontal to allow space for horizontal swiping actions.





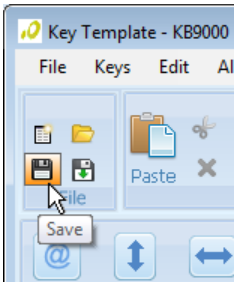
When editing the key contents of Slide keys, there are 4 tabs in the edit box to represent 4 different actions. For example, the "Slide H" key contains following tabs:

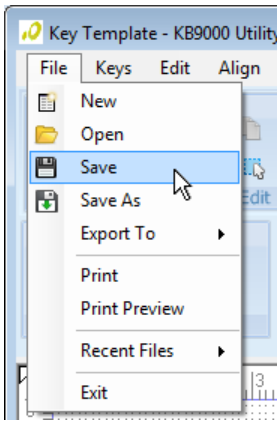
Left	Swipe to the left
Left Hold	Swipe to the left and hold finger on button at the end of swipe
Right	Swipe to the right
Right Hold	Swipe to the right and hold finger on button at the end of swipe

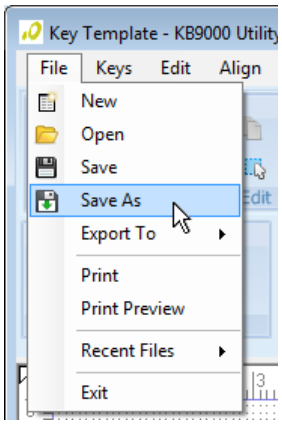
Click on the tab name to view and edit key contents accordingly.

5.7 Saving template

After editing the template, it is recommended to save it as a template file. The saved template file can be used to load into the utility for editing or printing legend sheet. Use the "Save As" menu if it is necessary to save with different name as different versions of the design.

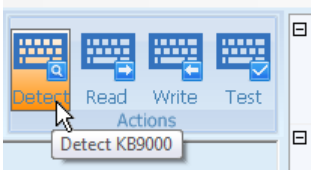


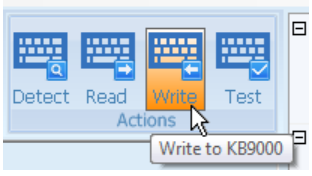




5.8 Testing template

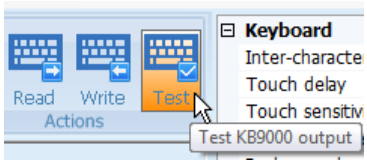
To test operations of the template, write the template into the KB9000.

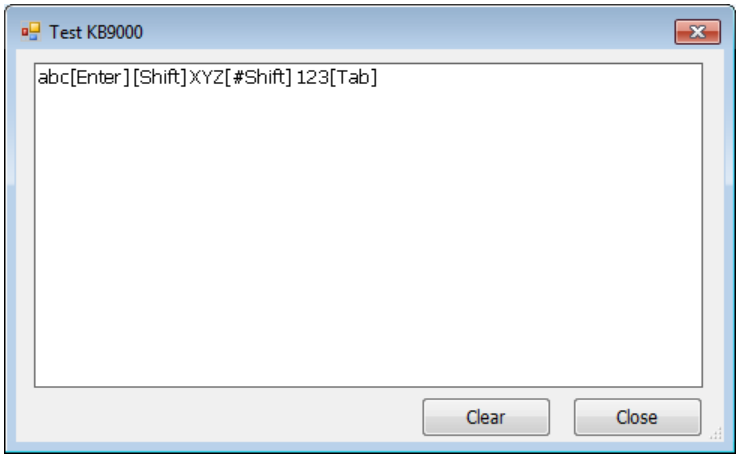




Make sure that the KB9000 is connected to the computer. Click on "Detect" toolbar button to verify the proper connection. If KB9000 is not detected correctly, check the connections again. Then click "Write" button to write the current template into the KB9000.

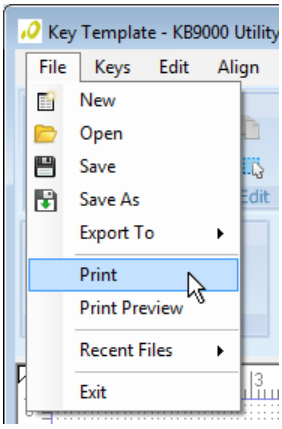
After writing the template into KB9000, click the "Test" toolbar button to bring up the dialog box. Press the keys on the KB9000 one by one and verify whether the key code outputs are correct.

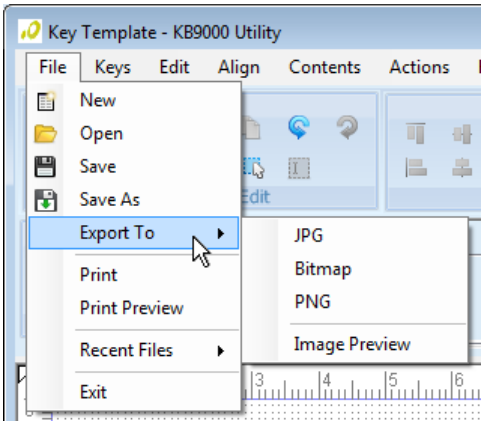




Please note that there are some keys under control of Windows that cannot be captured by the KB9000 test dialog box. Those keys can only be tested with actual application.

5.9 Preparing legend sheet





Click the "File" menu. Then click "Print" to print the legend sheet. The legend sheet can also be exported to graphic image file (jpg, bmp or png) for printing or further processing by other image edit software.

6 Key Codes

Other than regular alphanumeric keys, the key contents are shown with special key codes listed in the table below.

Symbol	Key Name
[F1]	Function key <F1>
[F2]	Function key <F2>
[F3]	Function key <F3>
[F4]	Function key <F4>
[F5]	Function key <F5>
[F6]	Function key <F6>
[F7]	Function key <F7>
[F8]	Function key <F8>
[F9]	Function key <F9>
[F10]	Function key <F10>
[F11]	Function key <F11>
[F12]	Function key <F12>
[ESC]	Function key <Esc>
[Backspace]	Key <Backspace>
[Tab]	Key <Tab>
[CapsLock]	Key <Caps Lock>
[Enter]	Key <Enter>
[Shift]	Key <Shift> on left
[RightShift]	Key <Shift> on right
[Ctrl]	Key <Ctrl> on left
[RightCtrl]	Key <Ctrl> on right
[Alt]	Key <Alt> on left
[RightAlt]	Key <Alt> on right
[Win]	Key <Win> on left
[RightWin]	Key <Win> on right
[#Shift]	Key-up code for key <Shift> on left
[#RightShift]	Key-up code for key <Shift> on right
[#Ctrl]	Key-up code for key <Ctrl> on left

[#RightCtrl]	Key-up code for key <Ctrl> on right
[#Alt]	Key-up code for key <Alt> on left
[#RightAlt]	Key-up code for key <Alt> on right
[#Win]	Key-up code for key <Win> on left
[#RightWin]	Key-up code for key <Win> on right
[Space]	Key <Space bar>
[Insert]	Function key <Insert>
[Delete]	Function key <Delete>
[Home]	Function key <Home>
[End]	Function key <End>
[PageUp]	Function key <Page Up>
[PageDown]	Function key <Page Down>
[ArrowUp]	Function key <Up Arrow>
[ArrowLeft]	Function key <Left Arrow>
[ArrowRight]	Function key <Right Arrow>
[ArrowDown]	Function key <Down Arrow>
[NumLock]	Function key <Num Lock>
[ScrollLk]	Function key <Scroll Lock>
[PrintScreen]	Function key <Print Screen>
[PauseBreak]	Function key <Pause Break>
[Menu]	Function key <Menu>
[Ctrl+PauseBreak]	Function key <Ctrl>+<Pause Break>
[Ctrl+PrintScreen]	Function key <Ctrl>+<Print Screen>
[Alt+PrintScreen]	Function key <Alt>+<Print Screen>
[PAD0]	Key <0> on keypad
[PAD1]	Key <1> on keypad
[PAD2]	Key <2> on keypad
[PAD3]	Key <3> on keypad
[PAD4]	Key <4> on keypad
[PAD5]	Key <5> on keypad
[PAD6]	Key <6> on keypad
[PAD7]	Key <7> on keypad
[PAD8]	Key <8> on keypad

[PAD9]	Key <9> on keypad
[PAD+]	Key <+> on keypad
[PAD-]	Key <-> on keypad
[PAD*]	Key <*> on keypad
[PAD/]	Key </> on keypad
[PAD.]	Key <.> on keypad
[PADEnter]	Key <Enter> on keypad

[NextTrack]	Next Track
[PrevTrack]	Previous Track
[Stop]	Stop
[PlayPause]	Play / Pause
[Mute]	Mute
[VolumeUp]	Volume Up
[VolumeDown]	Volume Down
[Mail]	Mail
[Calculator]	Calculator
[MyComputer]	My Computer
[wwwSearch]	www Search
[wwwHome]	www Home
[wwwBack]	www Back
[wwwForward]	www Forward
[wwwStop]	www Stop
[wwwRefresh]	www Refresh
[wwwFavorites]	www Favorites

[SysPower]	System Power
[SysSleep]	System Sleep

[Pause#.#]	Output pause (#.# is value from 0.1 to 9.9)
[Repeat#]	Repeat next key (# is integer from 1 to 100)
[Macro#]	Macro call (# is integer from 1 to 5)

7 Key Programming Examples

The following examples show outputs assuming no Caps Lock status and no Shift status. Note that #keyname represents releasing key "keyname". It is used here for indication of key stroke sequences. They are not part of key content keywords (except #Shift, #Ctrl, #Alt, #Win).

[Alt]Abc[#Alt][ArrowRight]

keystroke output: Alt, Shift, a, #a, #Shift, b, #b, c, #c, #Alt, ArrowRight, #ArrowRight

[a+n]aann

keystroke output: a, n, #n, #a, a, #a, n, #n

[Tab+q][w+PAD+]

keystroke output: Tab, q, #q, #Tab, w, PAD+, #PAD+, #w

\[A\]=\[App\]

keystroke output: [, Shift, a, #Shift,], =, #=, [, #[, Shift, a, #a, #Shift, p, #p, p, #p,], #]

Bem [Enter]

keystroke output: Shift, b, b#, #Shift, e, e#, m, #m, Enter

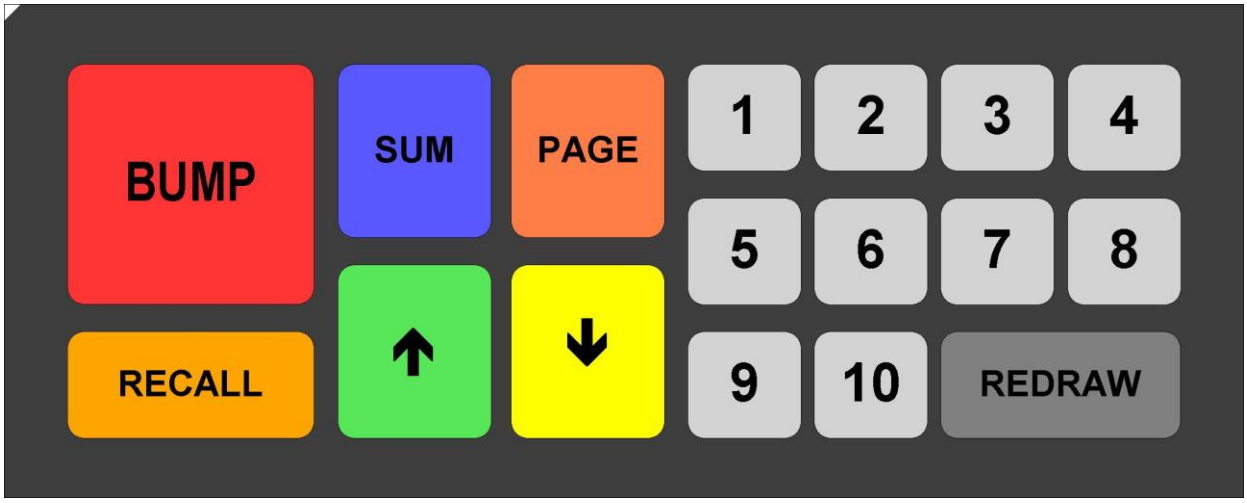
[F1]a[Enter][Tab][Ctrl]b[#Ctrl]

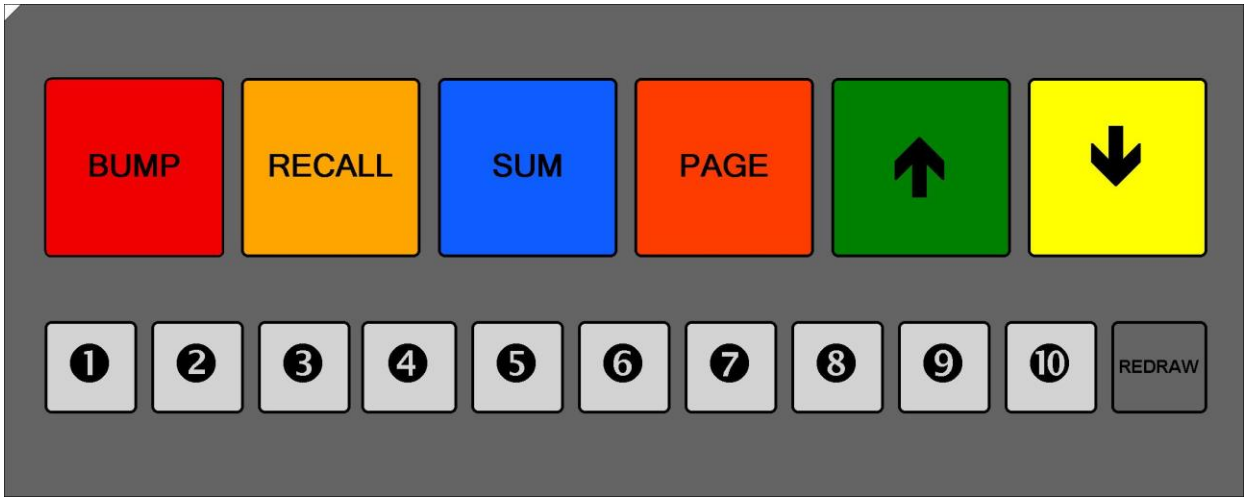
keystroke output: F1, #F1, a, #a, Enter, #Enter, Tab, #Tab, Ctrl, b, b#, #Ctrl

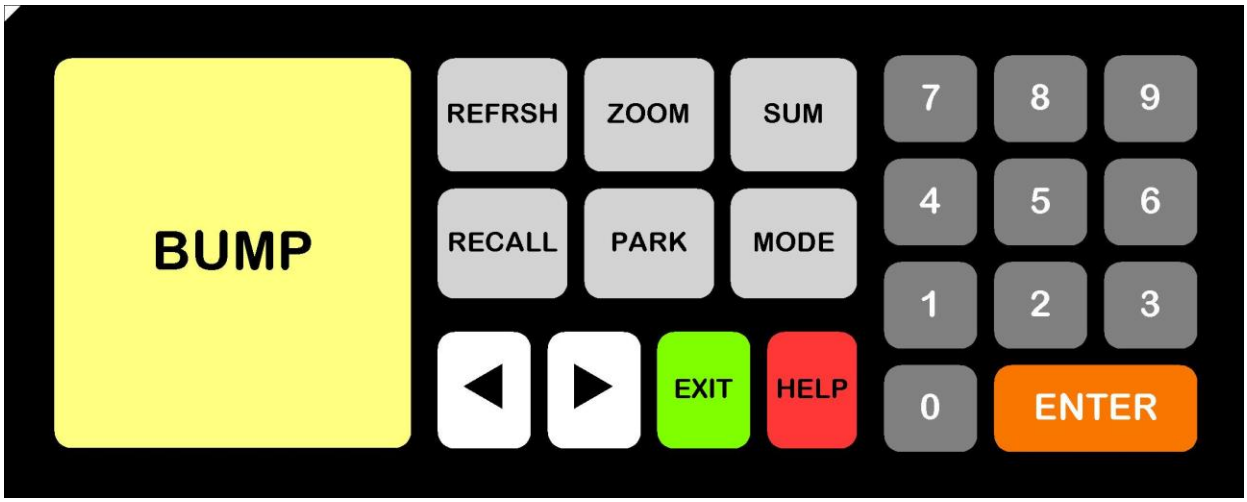
[F2][Repeat3][Tab][Enter]

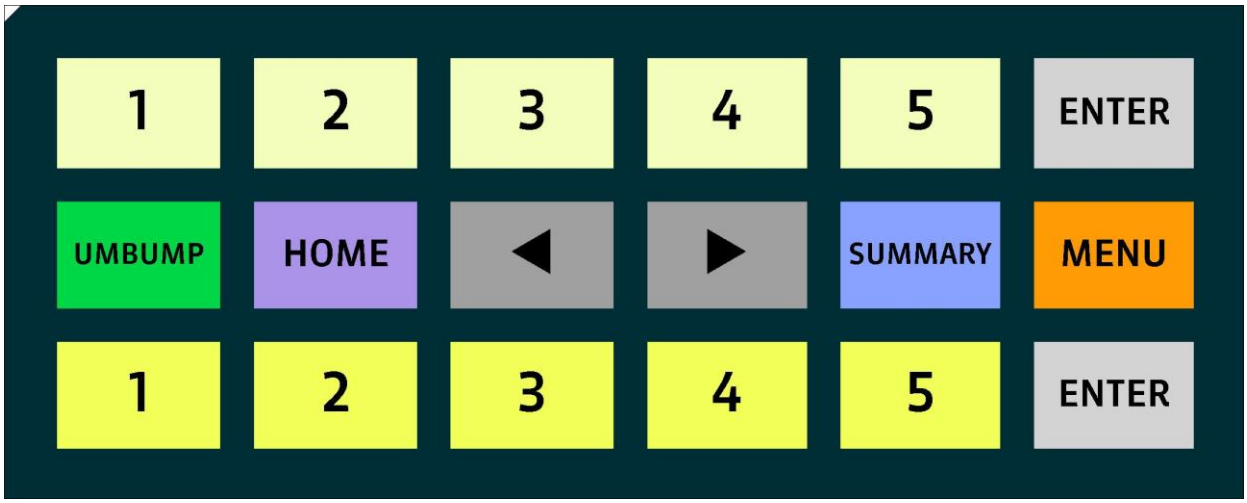
keystroke output: F2, #F2, Tab, #Tab, Tab, #Tab, Tab, #Tab, Enter, #Enter

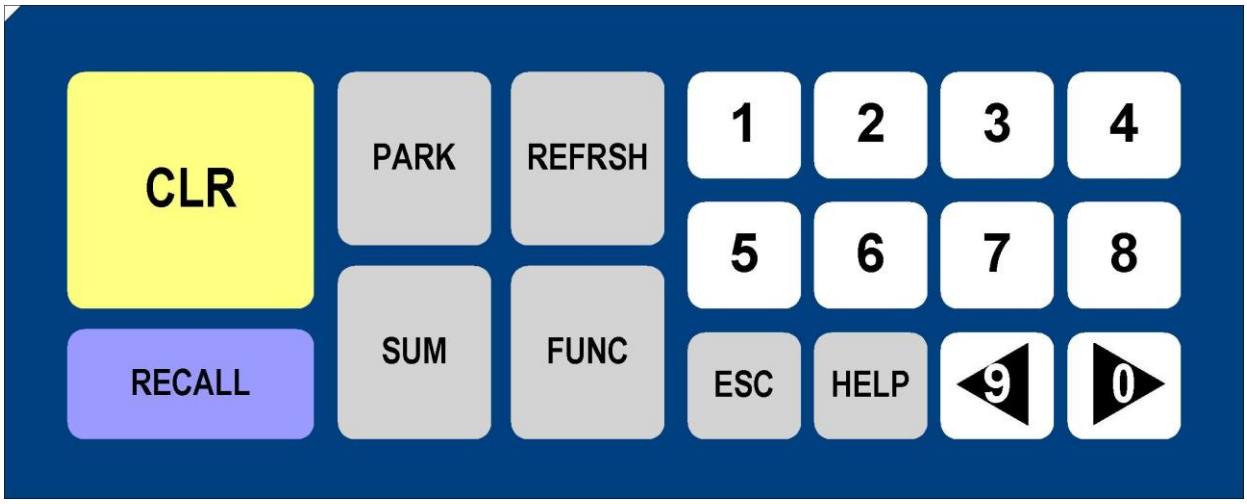
8 Legend Sheet Examples

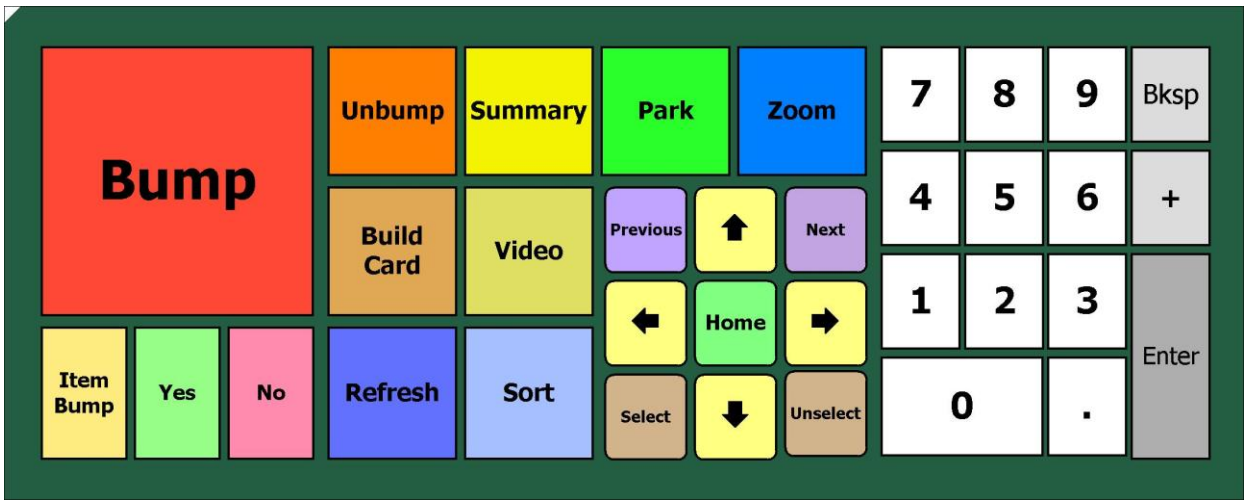







1
2
3
4
5
ENTER
UMBUMP
HOME
SUMMARY
MENU
1
2
3
4
5
ENTER


CLR
PARK
REFRSH
1
2
3
4
5
6
7
8
RECALL
SUM
FUNC
ESC
HELP
9
0


Bump
Unbump
Summary
Park
Zoom
7
8
9
Bksp
Build Card
Video
Previous
Next
4
5
6
+
Home
1
2
3
Item Bump
Yes
No
Refresh
Sort
Select
Unselect
0
.
Enter

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