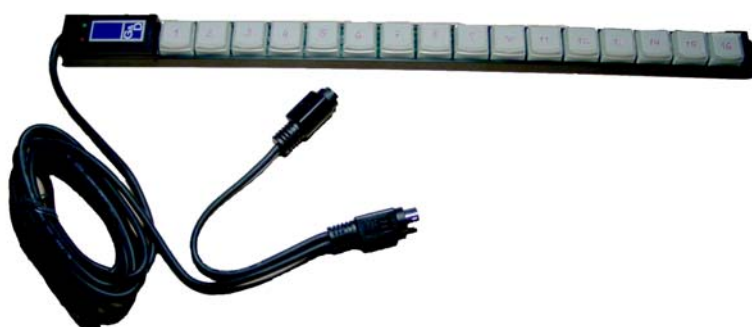# *I-Key*

Installation- and Operation manual

I-keys PS/2 Programmable Keyboards - Quick Start

Compatibility:
The PS/2 I-keys will work on any system with a PS/2 keyboard port. This includes the vast majority of Windows based PCs as well as some Unix based systems.

How to Install Your PS/2 I-keys Device:
1. Turn off your computer.
2. Unplug your PS/2 keyboard.
3. Plug your keyboard into the female end of the cord on the I-keys.
4. Plug the male end of the I-keys cord into the keyboard port of your computer.

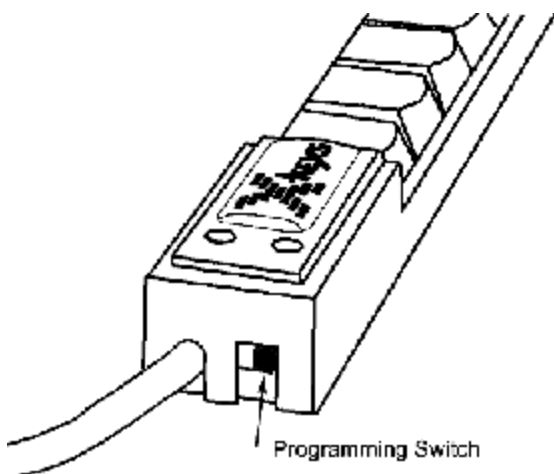## How to Program Your PS/2 I-keys Device:

| 1	2	3	4	5
Slide programming switch up (red dot showing)	Press a key to program on the I-keys	Type	Press the same key to end programming on that key	Slide programming switch down (or select another key to program).

On the I-keys Stick, the programming switch is located on the end nearest the cord. Slide the switch toward the cord for Programming Mode, and away from the cord for Operating Mode.
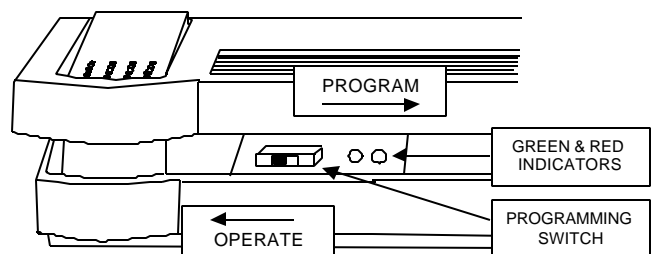
On the I-keys Foot Pedal, the programming switch is located under the center pedal, about an inch left of center. Use a non-metallic object like a Popsicle stick to slide the switch.

How to Use Your I-keys:

Each key on the I-keys can record a series of keystrokes or key combinations, as they are typed on the keyboard and accurately reproduce the sequence every time the key is hit. From your computer's point of view, playback from the I-keys is the same as rapid typing from the keyboard.

Programming Tips:

The I-keys records the exact sequence of each key pressed and released while it is programming. Since the I-keys does not record the time between keystrokes, you may type slowly and accurately. When typing key combinations, it is very important to get the sequence correct. Just as typing an uppercase C requires that the C key is pressed before the Shift key is released, so does the keyboard shortcut Ctrl + C require the C to be pressed before the Ctrl key is released. If the Ctrl key is released before the C key is pressed, the I-keys will record them as separate keystrokes, and not a key combination.

Reprogramming the Keys:

Reprogramming a key is as simple as reselecting it. Follow the same steps you use for programming.

Identifying the Keys:

The cardstock grid included with your I-keys is provided for hand written legends. The keycaps snap off with a fingernail or small screwdriver. Fit the label under the keycap, and replace it. To print legends on a laser or inkjet printer, go to our web site (www.xkeys.com) for templates formatted for popular applications. The key caps hold a legend 0.575" wide and 0.5" high (14.6mm x 12.7mm).

Horizontal and Vertical Double-keys:

Horizontal and/or vertical double-keys can replace two single keys on the I-keys Pro and/or I-keys Desktop. Remove two adjacent keys, with the provided key-puller by positioning the key-puller teeth under the key and pulling straight up on the key cap. Press the double-key in place over the two exposed switch stems.

NOTE: If the individual keys were programmed before, erase both before installing a double-key.

Programming a Second Layer:

Each key on the I-keys can have two separate functions, one on the green layer, and another on the red layer. The I-keys has green and red layer indicators to show which layer is active. The green layer is active by default. To use the red layer, you must first program a "layer toggle key," and switch to the red layer. To program a layer toggle key, see the "**Single Key Special Programming Features**" instructions below.

Special Programming Features:

All special programming features on the I-keys are accessed by the same steps:

1. Slide the programming switch to put the I-keys into programming mode (the layer indicator will blink).
2. Tap the key that you want to program (the layer indicator will double-blink).
3. Press and hold the Esc key.
4. Press and release the associated command key (see table and instructions below).
5. Release the Esc key.
6. Confirm programming on the key (the layer indicator will blink).
7. Slide the programming switch back to the operating position (the layer indicator will glow steadily).

Once you become familiar with the special programming features on the following pages, this list of key commands serves as a useful reference.

Command Symbol Legend

℧ indicates when to press and hold a key down
⩖ indicates when to tap a key
∩ indicates when to release the key.
<> Chevrons indicate the key to be pressed

NOTE: All numbers are on the alphanumeric section of the keyboard (not the number pad).

Single Key Programming Features	
Feature	**Associated Keystrokes**
Layer-toggle	℧<Esc> ⩖<2> ∩<Esc>
Layer-shift	℧<Esc> ⩖<1> ∩<Esc>
Repeating Key	℧<Esc> ⩖<Left-Shift> ∩<Esc>
Separate Press and Release	℧<Esc> ⩖<Left-Ctrl> ∩<Esc>
Pause	℧<Esc> ⩖<5> ∩<Esc>
Erasing a Key	⩖<Esc> ⩖<Esc> ⩖<Esc>

Entire Keyboard Programming Features	
Feature	**Associated Keystrokes**
Slow Transmission Speed	℧<Esc> ⩖<3> ∩<Esc>
Normal Speed	℧<Esc> ⩖<4> ∩<Esc>
Caps Lock/Unlock Memory	℧<Esc> ⩖<8> ∩<Esc>
Caps Lock/Shift Unlock Memory	℧<Esc> ⩖<9> ∩<Esc>
No Caps Lock Memory	℧<Esc> ⩖<7> ∩<Esc>
Resetting the Keyboard	⩖<Esc> ⩖<Backspace> ⩖<Esc> ⩖<Esc> ⩖<Esc>

Backlighting on I-keys Stick	
Backlighting toggle key	℧<Esc> ⩖<B> ∩<Esc>
Default backlighting on/off	℧<Esc> ⩖<L> ∩<Esc>

Single key Special Programming Features:

All numbers referred to in combination with the Esc key are number keys on the alpha-numeric section of the keyboard (NOT the Num Pad).

*Programming a Layer-toggle Key (**Esc + 2**):*

Assigning one key as a layer toggle or layer shift, doubles the capability of the remaining keys. Each key may now have one set of commands programmed on the green layer of the I-keys, and a second set of commands programmed on the red layer. A layer toggle key must be programmed to gain access to the red layer. This key can be changed to a layer shift key when programming on the red layer is finished.

To Program a Second Layer:

After programming a layer-toggle key (see above), change to the second layer by tapping the layer-toggle key (the I-keys must be in operating mode to change layers). The green and red layer indicators on the I-keys will show which layer is active. Select the red layer and switch the I-keys into programming mode. Follow the same procedure used for programming the green layer. Do not reprogram the layer-toggle key or you will not be able to change layers.

*Programming a Layer-shift Key (**Esc + 1**):*

A layer-shift key works like the layer toggle key, only it must be held down to access the red layer. If you wish to use the red layer with a shift, rather than a toggle key, reprogram the layer-toggle key as a layer-shift key after programming the red layer.

*Programming Repeating keys (**Esc + Left Shift**):*

Keys on the I-keys are not automatically repeating keys, but it's easy to program them to repeat. To make a key a repeating key, use the Esc + Left Shift combination, then enter the key sequence or combination to be repeated.

*Programming Separate Press and Release Commands (**Esc + Left Ctrl**):*

The I-keys can generate one command when a key is pressed and another when released. This is particularly useful when a key sequence requires a single key variable or a mouse action to be entered before continuing. To create a key with separate press and release commands, start programming a key with the commands for the "press" of the key, then enter the Esc + Left Ctrl combination, then enter the commands to be sent on the release of the key.

*Programming a Pause (**Esc+ 5**):*

Regardless of the speed with which keystrokes are entered when programming the I-keys, the sequence is played back faster than most users can type. Sometimes it may be useful to pause after or between keystrokes so the associated software can register the command. This is particularly useful when the command opens a menu. To add a half-second pause to a key sequence, during programming, enter the Esc + 5 combination where the pause is needed.

NOTE: If all of the keystrokes are too fast, see the topic "**Slow Transmission Speed**" below.

*Erasing a Key (**Esc Esc Esc**):*

Reprogramming a key on the I-keys automatically erases the previously saved keystrokes. When using a double keycap, it is necessary to leave one of the keys blank so that the I-keys does not send an extra set of commands when the key is pressed. To erase a key and leave it blank, put the I-keys in programming mode and select a key, press and release the Esc key three times, and confirm programming on the key.

Entire I-keys Special Programming Features

These features affect the entire unit and include changing the transmission speed, changing the Caps Lock memory and erasing the entire unit.

*Slow Transmission Speed (**Esc + 3**):*

Some applications or systems have a slower response time and the default I-keys speed is too fast. To slow the rate at which the I-keys sends key commands, program a key with the Esc + 3 combination. The key may be reprogrammed with a key sequence, and the I-keys will retain the slow transmission rate setting.

*Normal Transmission Speed (**Esc + 4**):*

Normal Transmission Speed is the default for the I-keys. If you previously programmed Slow Transmission Speed and you want to return the I-keys to Normal Transmission Speed, program a key with the Esc + 4 combination. The key may be reprogrammed with a key sequence, and the I-keys will retain the normal transmission rate setting.

Caps Lock Features

The next three features affect how the I-keys handles the Caps Lock state of the standard keyboard, and are particularly useful if you are recording case sensitive words or commands.

*Caps Lock/Unlock Memory (**Esc + 8**):*

If you want the I-keys to ignore the Caps Lock state of the keyboard and play back the letters exactly as they were typed, turn this feature on.

*Caps Lock/Shift Unlock Memory (**Esc + 9**):*

If you are working with a keyboard which uses the Shift Key to release the Caps Lock State (French, German, etc.), and you want the I-keys to ignore the Caps Lock state of the keyboard and play back the letters exactly as they were entered, turn this feature on.

*No Caps Lock Memory (**Esc + 7**):*

If you want the case of letters coming from the I-keys to be determined by the Caps Lock state of the keyboard, turn Caps Lock Memory off (the default setting for the I-keys).

*Resetting the I-keys (**Esc Backspace Esc Esc Esc**):*

To erase the entire I-keys, put the I-keys into Programming mode and tap any key. Type, <Esc> <Backspace> <Esc> <Esc> <Esc> on the standard keyboard. Resetting the I-keys removes all programming from all keys on both layers.

*Back-lighting on the I-keys Stick (**Esc + B**) (**Esc + L**):*

The LED back-lighting on the I-keys Stick can be controlled by one or both of these settings. To create a key which will toggle the back-lighting on and off, program a key with the Esc + B combination. To turn the back-lighting on when the I-keys Stick is powered up, program a key with the Esc + L combination. To return the Stick to the default setting (back-lighting off), program a key with the Esc + L combination again.

Programming Errors:

If the I-keys encounters programming errors, the red and green layer indicators will blink simultaneously on and off. Turn the programming switch off and back on to reset the I-keys to programming mode.

Errors can occur if:

a) There is an unreliable cable connection, check all cords for proper connection.

b) The computer is not operating in a mode to accept the entered commands (for example, pressing <Ctrl>, <Alt> and <Delete> may cause a PC to reboot and the *I-keys* will not boot-up in programming mode).

c) Memory in the I-keys is exceeded. The entire I-keys will memorize 800 to 1,000 keystrokes depending on the device and the keystrokes. If you think you have exceeded the memory capacity, contact our tech support department for tips to conserve memory on the I-keys.