

Hands-Free Operation with INFINITY Cameras

For occasions when hands-free operation is critical, Lumenera recommends the use of a programmable footswitch to produce quality images. Using only your foot to activate any keyboard command, these INFINITY camera compatible devices are ideal for a variety of applications including labs, environments involving sterile procedures, inspecting delicate components that require the use of two hands such as electronics, and situations where using a keyboard or mouse to capture an image is unsafe or inconvenient.



Solution

The implementation and configuration of this footswitch is quick, simple and easy. Electronic knowledge or computer programming is not required for the operation of the hands-free device. Employ your INFINITY camera with either INFINITY CAPTURE or INFINITY ANALYZE application software, and add the footswitch to your PC.

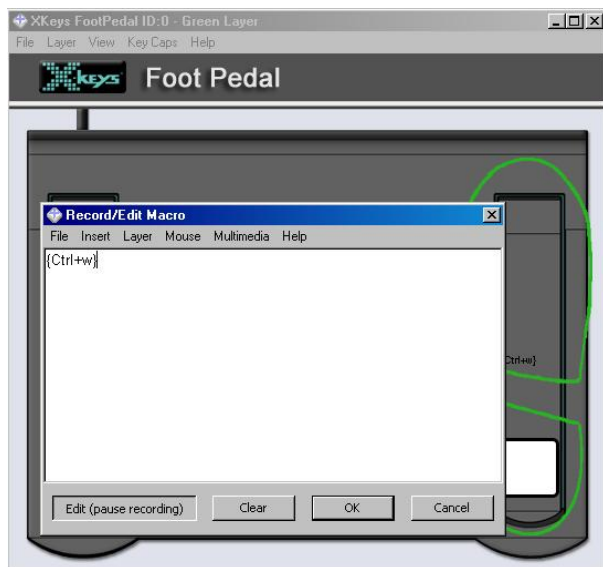
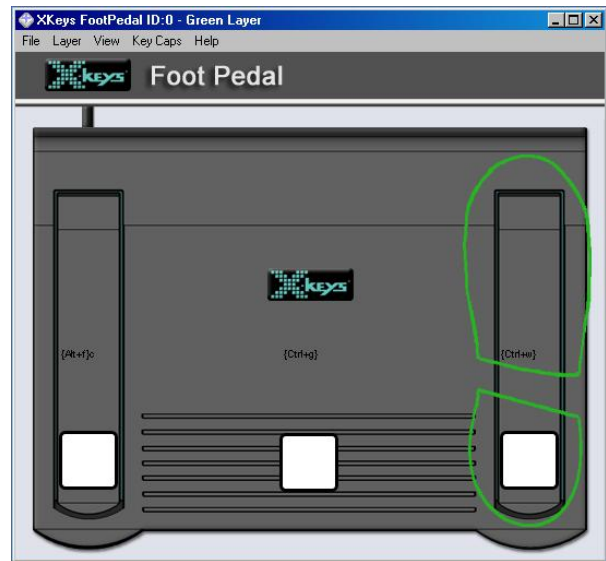
A programmable footswitch lets you use your foot to activate any keyboard command. The three pedals on the footswitch emulate a sequence of keyboard functions. You can perform a single operation, or send a string of key strokes to the application software for more complex operations. The center pedal is larger, and requires minimal movement for the most frequently used key functions, while the outer pedals offer two additional keyboard actions all on one panel. Lumenera's footswitch option is available with either a USB interface, or a standard PS/2 connection, allowing for a configuration that best suits your preferences.

Footswitches are available from a number of sources, at an approximate cost of US\$150. Prices will vary by region and supplier. Use these links to contact the dealer nearest you:

Country	Product Name / URL Link
USA	<ul style="list-style-type: none"> Savant USB Triple Action Foot Switch http://www.kinesis-ergo.com/fs-savant.htm
Canada	<ul style="list-style-type: none"> X-Keys Triple Action Foot Pedal http://www.ergocanada.com/cgi-bin/store/commerce.cgi?product=Footswitch
Europe	<ul style="list-style-type: none"> Savant Programmable Foot Switch http://www.techready.co.uk/Assistive-Technology/Foot-Switches/Savant-Programmable-Foot-Switch

Simple to Use

The footswitch comes with a user interface that makes it simple to configure. The drivers for the USB version are installed directly from the CD supplied with the device, and installs in minutes. Once the plug-and-play device recognition is complete, the application can be started. Users will see a graphic showing the footswitch pedals. Each pedal is programmed by clicking on the location of the pedal, causing a footprint outline to appear over the pedal graphic. Users can then type the desired key sequence on the keyboard. The typed keys are displayed in the overlay window and the pedal will begin to perform that function. Once all three pedals have been programmed in this manner, the footswitch is ready to use.



For example, programming the right-side pedal to emulate a <Alt> f, c, will invoke the image acquisition in the INFINITY CAPTURE software, while programming the center pedal to emulate a <Ctrl> G, will cause an image to be captured within INFINITY ANALYZE. Verify the application controls for the keyboard shortcuts you want to use. Each time an underscore appears under one letter on a menu item, that key corresponds to a shortcut. For drop down menus, use the <Alt> key with the designated letter.

The table below provides examples of key sequences for commonly used functions that work with the INFINITY ANALYZE or CAPTURE applications.

Function	Key sequence in INFINITY CAPTURE	Key sequence in INFINITY ANALYZE
Image acquisition	<Alt> f, c	<Ctrl> G
White balance	<Alt> c, w, g	<Ctrl> W
Auto exposure	(not available – use 'AEC')	<Ctrl> E