Introduction

The Shoestring Astronomy USB Shutter Control Adapter is designed to allow personal computers to control the shutter of various cameras. Because it is a USB device, it is very convenient to install, is compatible with many operating systems, and requires no additional power source. However, you will need more than this device alone, you will also need a cable that is compatible with your camera, and third-party software that supports this product. Consult the Shoestring Astronomy website for a current list of cables and software vendors.

Features

- Plugs directly into your computer’s USB port.
- Receives it power from your computer via the USB port, so no external power source or battery is necessary.
- Uses the USB HID (Human Interface Device) class driver, which is included with most operating system such as Windows 98 Second Edition, Windows 2000, and Windows XP. There is no need for a proprietary driver.
- Compatible with any camera that has a “short to ground” remote control input.
- Output is a standard 3.5mm stereo jack, so making a cable specific to your camera is easy if one is not already available.
- Red-green LED for software-dependent status indication.
Device Installation

The first time you plug the DSUSB into a computer, it will automatically be identified as a new device. See the section below that applies to your operating system. Operating systems prior to Windows 98 Second Edition do not support USB and the HID class of devices.

After the first installation is complete, the next time you plug the DSUSB into your computer, it will remember that this device has already been installed once and will automatically recognize it.

To remove the DSUSB from your computer, simply unplug it from the USB port.

Installation under Windows XP or Windows 2000
Plug the device into a USB port. The red LED on the DSUSB should light immediately. A “Found New Hardware” balloon will pop up on your monitor. Wait a few moments and the text in the balloon should change to say “Your new hardware is installed and ready to use”. It really is that simple!

Installation under Windows 98 Second Edition
Win98SE installation is a little more work, but still pretty simple. Plug the device into a USB port. The red LED on the DSUSB should light immediately.
1) The “Add New Hardware Wizard” should open up. Click the “Next” button.
2) The wizard will then say “What do you want Windows to do?” Select “Search for the best driver…”, then click the “Next” button.
3) The wizard then says “Windows will search for new drivers…”. Uncheck all the boxes and click “Next”.
4) Next the wizard says “Windows driver file search for the device:”, and should show the location as C:\WINDOWS\INF\HIDDEV.INF. Just click the “Next” button.
5) At this point, you will probably be asked to insert the Windows 98 Second Edition CD-ROM. Do this, then click “OK”, then click “OK” again
6) Finally, click “Finish” and you should be done!
Device Operation Verification

Once you have completed the initial installation, you may want to verify that the DSUSB is working properly before you begin to use it with your camera control software. To do this, you can download and install DSUSBCheck from the Shoestring Astronomy website. This is simple software that allows you to turn the LED on and off, change the color of the LED from red to green, and to open and close the shutter of your camera. It is intended to allow you to verify that everything is working properly. Should you have trouble getting your third-party camera control software to work, using DSUSBCheck will also allow you to troubleshoot your setup. In other words, if everything works with DSUSBCheck, then your problem most likely is with your third-party software.

Connecting to Your Camera

The output of the DSUSB is a standard 3.5mm stereo jack. Camera manufacturers use a variety of connector types for the remote control input, so you will need a cable that has a 3.5mm stereo plug at one end, and the appropriate camera-specific connector at the other end. Several types of cable are available from Shoestring Astronomy, or you may choose to build your own. The diagram below shows how to pin out your cable.

![3.5mm Stereo Plug Diagram]

Operating the DSUSB

Once you have the proper cable, operating the DSUSB is quite simple. Plug the DSUSB into a USB port on you computer or a USB hub. Plug your camera-specific cable into the DSUSB output jack, then the other end into your camera’s remote control jack. Start your camera control software, and you are ready to take photographs!!
Limited Warranty

In no event shall Shoestring Astronomy be liable for any claim for incidental or consequential damage arising out of or in connection, manufacture, delivery or use of any product offered on this website or by information received by US mail, E-mail, data files or fax. All products are guaranteed to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of purchase. At its option, Shoestring Astronomy will repair or replace the defective product. Shoestring Astronomy is not responsible for damage caused by the freight carrier, i.e.: UPS, FED EX, etc., to our product. A claim to repair or replace the product must be initiated by the recipient. Warranty coverage excludes normal wear and tear, or damage caused by improper installation, any modification, abuse, misuse, improper maintenance, and unauthorized repairs or modifications to the original product. Warranty does not cover those parts prone to failure under normal wear and tear. Any product repair request must be submitted and approved before shipment to Shoestring Astronomy. Shipper is responsible for proper packaging, shipping and insurance on approved repair items. Shoestring Astronomy will package, insure and return ship at no cost to the customer.

Return Policy

Merchandise may be returned in new (mint) condition within 30 days of receipt for exchange or a full refund. (less shipping/handling). If you'd like to apply your return credit to a new order, we'd be happy to do that. Please include this information with your return. We must receive the returned merchandise within 30 days of the date you received it. All items must be in new (mint) condition. Returned items cannot show evidence of use or wear, dirt, or blemishes of any kind. Merchandise must be returned in its original packaging and should include all supplied materials, instructions, warranty cards, original accessories, hardware, and any software provided. Shoestring Astronomy is not responsible for lost or damaged packages. Return shipping costs are the responsibility of the customer.