# DEFENDER HD Video Spy Pen 82-22590

The HD Video Spy Pen is a simple, multifunctional recording device built into a fully functional ballpoint pen. Take photos, record audio, or capture HD video with the touch of a button.



## In the Box

Your new Pen Camera includes the Spy Pen and a USB cable. The Micro SD memory card is sold separately.

## Getting Started

The first step is to charge your new Spy Pen. Begin by connecting the device to a USB port on your PC, or an external 5v USB charging adapter. While charging, the LED indicator will blink yellow and then will become solid when the battery is full. Before first use, we suggest charging the device for 4 hours.

After charging, remove the pen cap and insert a micro SD card into the USB slot. Gently slide it into the slot with the copper contacts facing away from you until you feel resistance (do not push in too far, otherwise the SD card becomes difficult to remove).

#### Power on/off

To power the device on, hold down the On/Off button for 2-3 seconds. The LED indicator first lights up yellow and blue then turns to blue-only and blinks 3 times. The camera is now either recording video or audio, or ready for still-frame pictures depending on the mode setting the device is set to (Mode2-Video; Mode1-Pics/Audio).

# Recording Video

To record video, move the Mode switch to the 2 position and power the device on. The LED will blink blue 3 times, and immediately begin recording video. Press the Record button again to save your current file and stop recording, returning the device to Standby. The LED will glow yellow while in Standby. To begin recording again, press the Record button.

## Recording Audio

To record audio, move the Mode switch to the 1 position and power the device on. The LED will blink yellow twice to indicate it is recording audio. Press the Record button again to save your current file and stop recording, returning the device to Standby. The LED will glow yellow while in Standby. To start recording a new audio file, you will need to power the device down and turn it back on.

# Taking Photos

To take photos move the Mode switch to the 1 position. Power the device on, which will automatically record an audio file, as described above. Press the Record button to end recording and enter Standby. Press the Record button. The LED will blink blue once to indicate it is capturing and storing your photo, and will return to solid orange.



## **Reviewing Files on a Computer**

To view your files on a computer, simply connect the device via the supplied USB cord or by inserting the device directly into a USB port, making sure the device is powered Off. It will connect as a removable drive, and depending on the settings on your PC, it may automatically notify you that new hardware has been detected. If so, select Open Folder to View Files.

If it is not automatically detected, click Start on your desktop. Select My Computer if you are using Windows XP, or Computer if using Windows Vista or Windows 7. The device should be listed as a Removable Disk under the Devices with Removable Storage section. Open that drive, which will contain 4 folders:AUDIO, IMAGE, SYSTEM, and VIDEO. Audio, image, and video files will be found within their respective folders. The SYSTEM folder contains system files. Do not delete or modify anything in this folder

## Setting Time and Date

Setting the time and date stamp on your device is easy. Simply create a .txt file on your computer and name it "time". In that file you will enter the date and time in the following format: year.month.day hour:minute:second. (Ex. 201 1.01.31 12.00.00 Y) To turn the time and date stamp off, enter N instead of Y. There is also a sample. txt file on the included CD.

Once you've created the file, connect the device to your computer via USB and save the .txt file to the device's root directory. When you connect the device to your computer, it will be assigned a drive letter (ex. C:, D:, E:). When you open that drive, you are in the root directory, or topmost level of the drive.

After you have loaded the file, safely disconnect the device from your computer, turn the device on and off, and the time and date you loaded should now appear on any new videos and photos you record.

#### Troubleshooting

Problem: The device seems to have frozen and isn't reacting when

Quick Specs	Format	Battery Life	Record Time
Audio	WAV	75 Minutes	1000 minutes per GB
Video	AVI	75 Minutes	20 minutes per GB
Photo	JPEG	х	х

any buttons are pressed.

Solution: This usually occurs if the device receives too many commands in too short a time. To reset the device, insert a pin into the Reset hole for 2-3 seconds.

Problem: When playing back my video, I can hear audio, but have no video.

Solution: This most often occurs if your computer's media player is having trouble with your files. Try using VLC player, which can be downloaded for free at http://www.videolan.org.

Problem: My video playback is "choppy" or "stuttering."

#### Glossary

LED: An abbreviation for "light emitting diode," it's an electronic device that lights up when electricity passes through it. LEDs are good for displaying images because they can be relatively small, and they do not bum out. However, they require more power than LCDs.

Micro SD Card: Micro SD cards, also known as TransFlash, are smaller versions of SD memory cards. As electronic devices are becoming smaller, Micro SD cards are becoming more and more common in the marketplace. Currently, the highest capacity of micro SD card is 32 GB.

Root Directory: A root directory is the first directory on a drive or disk. For example, when connecting a removable drive to a Windows computer, it will be assigned a drive letter (ex. C;, D;, E:). When opening that drive, the first window listing the contents of the drive is the root directory.

USB Port: A USB port is a standard cable connection interface on personal computers and consumer electronics. USB ports allow standalone electronic devices to be connected via cables to a computer. USB can connect computer peripherals such as mice, keyboards, PDAs, gamepads and joysticks, scanners, digital cameras, printers, wpersonal media players, flash drives, and external hard drives.