SenseCam v2 Quick-start Guide

Turning the camera on and off
The SenseCam is turned on and off using the small round button on the top of the unit. A rising tone indicates that the camera is switching on and a falling tone indicates that the camera is switching off. The power button must be pressed for several seconds before the camera will respond and you will hear the tone.

The SenseCam takes several seconds to power up, during which time the yellow light will be on. When ready for use, the SenseCam will beep and the green power light will come on instead.

If battery charge is very low, the SenseCam will not switch on when the power button is pressed, but will make a low-pitched buzzing/warbling sound instead. If this happens the camera must be charged up.

In use
During operation, the yellow light will blink whenever the SenseCam is busy recording a photograph or sensor data. The green power light will be on continuously if the battery has plenty of charge and it will blink occasionally if the battery is getting low.

In order to explicitly take a picture, press the manual shutter button (the bottom of the two side buttons) at any time. Note that the camera takes several seconds to save the picture, during which time further presses of the manual shutter will have no effect.

The top of the two side buttons is a do-not-disturb button which causes the SenseCam to stop taking pictures for 5 minutes. During this time, the red LED will be on. Fifteen seconds before pictures start again there will be a beep and the LED will flash. Pictures can also be re-enabled using the manual shutter button.

Note that the SenseCam may be supplied with a black protective plastic cover fitted over the glass lens, to protect it from damage during shipping. This can be removed by carefully pulling it away from the body of the camera (it is a push fit and does not need to be unscrewed). In day-to-day operation the lens cover is not likely to be needed.

Charging
The battery will charge whenever the SenseCam is connected to a computer or a mains charger. Before connecting the camera to a charger or to a computer, please make sure that the unit is switched on. If the unit will not switch on due to a flat battery (low-pitched buzzing/warbling sound), please connect it to a charger or a computer for 15 minutes, then disconnect it, turn it on and reconnect as usual. When plugged in, a flashing green light indicates that the battery is charging; solid green indicates fully charged.

It takes around 3 hours to charge the battery from flat. It is not possible to ‘over-charge’ the battery, and it is safe to leave plugged in overnight. It is also OK to ‘top up’ the battery by re-charging it before it is fully exhausted. A fully-charged battery should allow up to 36 hours of operation although this varies with frequency of image capture and may be as low as 12 hours.

Connecting it to a PC or charger while it is switched off may result in the unit appearing not to respond as expected (for example, the charging light may not come on). If this happens, it is recommended that you disconnect the camera, switch it on, and then re-connect.

Figure 1: SenseCam lights and buttons
Transferring data
Photographs and sensor data may be transferred from the camera to a computer using the USB cable supplied. No special USB drivers are required; the camera will simply appear as an external flash drive under Windows. It is possible to browse SenseCam images (which will be recorded as a sequence of .JPG image files in various folders on the camera) directly from Windows, and to load the sensor data into Microsoft Excel. However, it is recommended to use the SenseCam Image Viewer software supplied to move the images from the SenseCam onto the PC because this software performs additional operations, such as tagging files and synchronising the SenseCam real-time clock. Transferring the images may take many minutes; a status bar indicates progress.

SenseCam Image Viewer software
One way of copying and viewing SenseCam images and sensor data is to use the SenseCam Image Viewer software supplied with the camera. This may be installed directly from the camera – simply connect it to the PC via USB, and run setup.exe from the folder within the \PCVIEWER folder. The software will also install the .NET framework 2.0 if required. During installation select ‘Advanced Operation’ if you want to be able to view sensor data.

Following installation, whenever the camera is subsequently connected to the PC the ‘Import photos from SenseCam using SenseCam Import’ option should be selected. The SenseCam User Guide gives a lot more detail about the installation, use and configuration of the MSRC viewer software.

Note that currently the software requires that the user is a local administrator of the machine to run properly.

General
The SenseCam is a research prototype. Please bear in mind that it is not as robust as a typical commercial product. It is not particularly waterproof so please be careful in the rain.

Documentation is supplied on the camera itself, in the \DOCS folder.

Please note the terms and conditions of the Limited Licence Agreement associated with the use of the SenseCam hardware and software before you attempt to install or use the PC software. This agreement has to be signed by all SenseCam recipients external to Microsoft before they are supplied with the SenseCam hardware and MSRC Viewer/Importer Software.

Thank you.