TERRACAM X2

English Operation Manual

Version: 5/10/2007

Declaration of CE conformity

Product name: TerraCam X2

TerraTec article number: 10354

EAN number: 4017273103549

We, TerraTec Electronic GmbH, Herrenpfad 38, 41334 Nettetal, Germany declare in our own responsibility, that the product

TerraTec TerraCam X2

corresponds with the following norms and normative documents:

- EN 55022:1998 + A1:2000+A2:2003

- EN55024:1998+A1:2001+A2:2003

- EN61000-4-2:1995

- EN61000-4-3: 1997

According to this document, the utilization of the CE label is confirmed. Guideline 89/336/EWG.

Heiko Meertz

Contents

A new dimension of interactive cooperation

Thank you for choosing the TerraTec TerraCam X2. The TerraCam X2 is the culmination of current webcam development and combines state-of-the-art technology with maximum convenience. In this manual, we would like to give you a bit additional information on the topic of webcams. But first, a foretaste of what you can expect.

The TerraCam X2 has a stylish housing and outstanding technology that sets new standards. Installing drivers is now a thing of the past: simply plug it into a free USB 2.0 port and open your favorite messenger application. Its genuine 1.3 megapixels, resolutions of up to 1280 x 1024 (video and still) and its integrated microphone make chat sessions a special experience. The camera is also suitable for room surveillance.

Tip: Visit http://www.terratec.de from time to time for regular software updates, tutorials and other information that can make working with your TerraTec product easier. If you run into problems, checking the FAQ or updating to the latest driver and software versions will usually get you back on track.

We hope you enjoy your new TerraCam X2.

...your TerraTec Team

Specifications

- 1.3-megapixel CMOS sensor with genuine 1280 x 1024 resolution

- Ultra-low power technology

- State-of-the-art camera technology for webcam operation without drivers

- Focal range: 5cm to infinity

- Integrated microphone

  - Sensitivity: -43 dB

  - Impedance: 2.2 kOHM

  - Frequency Response: 50 - 15000

- Temperature range: 0°C to 50°C

- Lens: ¼"

- Supported resolutions:

160 x 120 @ 30 fps	176 x 144 @ 30 fps	320 x 240 @ 30 fps
352 x 288 @ 30 fps	640 x 480 @ 30 fps	1280 x 1024 @ 15 fps

- Output formats: RGB, YUV, CYbCr

- CE-compliant housing

- Blue ring-shaped status light

- 1.5m cable with snapshot button

- USB 2.0

- Color: black/white, transparent

- Software: ArcSoft Webcam Companion, TerraTec Snap!

- For Windows XP, Vista 32, Vista 64 (driverless)

Scope of delivery

- TerraCam X2 Hardware

- Software and product CD

- Service request form

- Registration card

- Quick Setup Guide

System Requirements

Your system should meet the following minimum requirements to guarantee the Terra-Cam X2's smooth operation:

- Intel / AMD / Centrino CPU with 1.0 GHz or higher

- 100 MB free hard drive space

- 256 MB RAM (512 MB recommended)

- CD/DVD drive for software installation

- Audio hardware with DirectX9 support

- Graphics card with DirectX9 support

- Windows XP with service pack 2, Windows Vista

Setup, safety and care information

- Please place the device on an even, dry surface to prevent fire and electrical shock hazards as well as possible damage to the device itself.

- Keep the webcam away from radiators and ensure that the player is at a safe distance from other devices to prevent overheating.

- If the device has been exposed to extreme differences in temperature, allow it to adjust to the room temperature for one hour before plugging it in. Condensation may have formed inside the device which could impair its functionality.

- Use a dry or slightly moistened, lint-free cloth to clean the TerraCam X2. Do not use cleaning products as they may damage the finish of the unit.

To put it simply, just use the device sensibly. The warranty does not cover deliberate damage to the device. Thank you.

The webcam at a glance
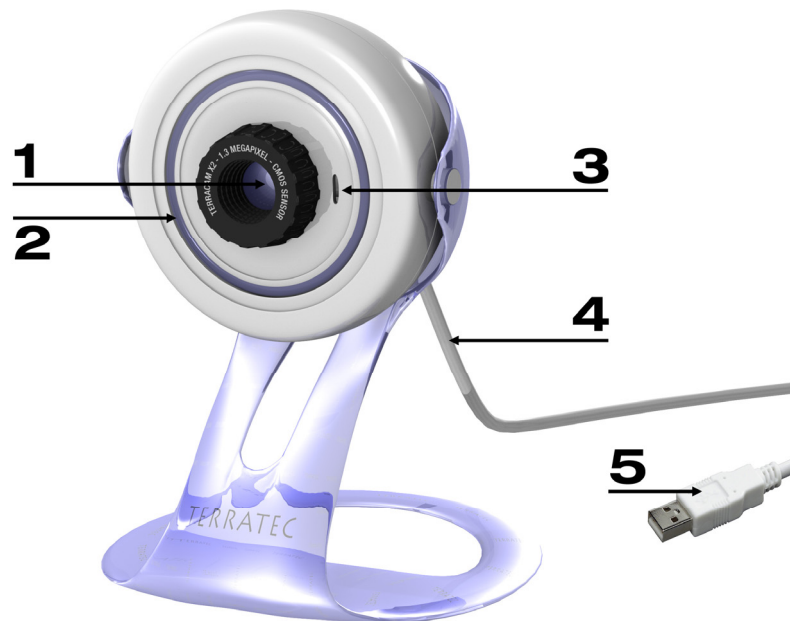
The TerraCam X2

❶ **Lens with sensor**

Adjust the focus of the webcam via the sensor. Turn it to focus it as needed. Please adjust the sensor with care and never apply force when turning it, as that would damage the TerraCam X2 irreparably.

❷ **Status LED**

The blue LED ring lights up when the webcam is connected to the PC and has power.

❸ **Microphone input**

The webcam features a highly sensitive microphone for videoconferencing without additional equipment. For best results, speak directly at the microphone from a distance of one to two meters (3 to 6 feet). For further information, see The microphone below.

❹ **USB cable with snapshot button**

The USB cable connects the camera to your PC. The cable also features a snapshot button with which you can take still photos or open your favorite messenger application. You must install the TerraTec Snap! application (on the included product CD) for the button to work.

❺ **USB 2.0 plug**

Please plug the TerraCam X2 into a free USB 2.0 port of your computer.

General information on the webcam

Setting up the camera

For best results with your TerraCam X2, choose your location with care. Aspects such as solidly mounting the camera and its position relative to the user are important, as are topics such as lighting conditions and the microphone covered below. Ideally, the webcam should be positioned one to two meters away from you at eye level. As this will be difficult to realize in most cases, please keep the following in mind:

- The camera should cover your workplace. Remember that your partner would like to see you while speaking to you.
- The camera should cover the largest possible area when being used for surveillance.
- The focal range of the camera extends from 5cm to infinity. For best results, ensure that the subject is as close as possible to the camera.

Lighting conditions

This webcam was designed to deliver an outstanding picture in (almost) any light. The camera delivers the best picture under ideal lighting conditions. "Ideal" means an evenly and brightly lit room in which the light source is not shining directly on the camera. The camera automatically increases the exposure time in darker environments, resulting in a less clear picture. If the light is too intense or shines directly into the camera, the sensor will overload, resulting in a white picture. In all normal lighting situations – the office, living room or back yard – you won't have to give it a moment's thought. The camera will do exactly what it is designed to do – deliver a good picture.

Pixels? Yes, but how many?

The TerraCam X2 has a resolution of 1.3 megapixels. That corresponds to 1,310,720 pixels at a maximum resolution of 1280 x 1024. Higher camera resolutions naturally also result in higher data rates. That can be problematic when videoconferencing via the Internet. In such cases, we recommend using a smaller resolution. High resolution is also not very suitable for room surveillance, as it would use up too much storage in a short time. However, if you would like to take a snapshot or a nice video clip for a DVD, you should choose the highest resolution possible. The camera supports the following modes:

Resolution	Suitable for	Mode name
160 x 120	Ideal for videoconferencing via analog modems or ISDN	QQVGA
176 x 144	Cell phone resolution	QCIF
320 x 240	Ideal resolution for video chat via Skype, ICQ etc.	QVGA
352 x 288	Video resolution for video CDs, as well as PDAs and smartphones	CIF
640 x 480	Standard webcam resolution. Suitable for most applications.	VGA
1280 x 1024	Premium resolution for snapshots and high-end video	SXGA

The microphone

The TerraCam X2 features a highly sensitive microphone. It is located at the front, just below the housing. For best results, speak toward the microphone from the front at a distance of 2 to 3 meters. If the microphone signal is not loud enough, use the Windows audio mixer to adjust the level for recording devices. Go to "Start" → "Settings" → "Control Panel" → "Sounds and Audio Devices" and select the "Audio" tab. Select the TerraCam X2 (or the USB audio device) as the "default audio recording device". You can now use the "Volume" button to adjust the level of the microphone (Capture).
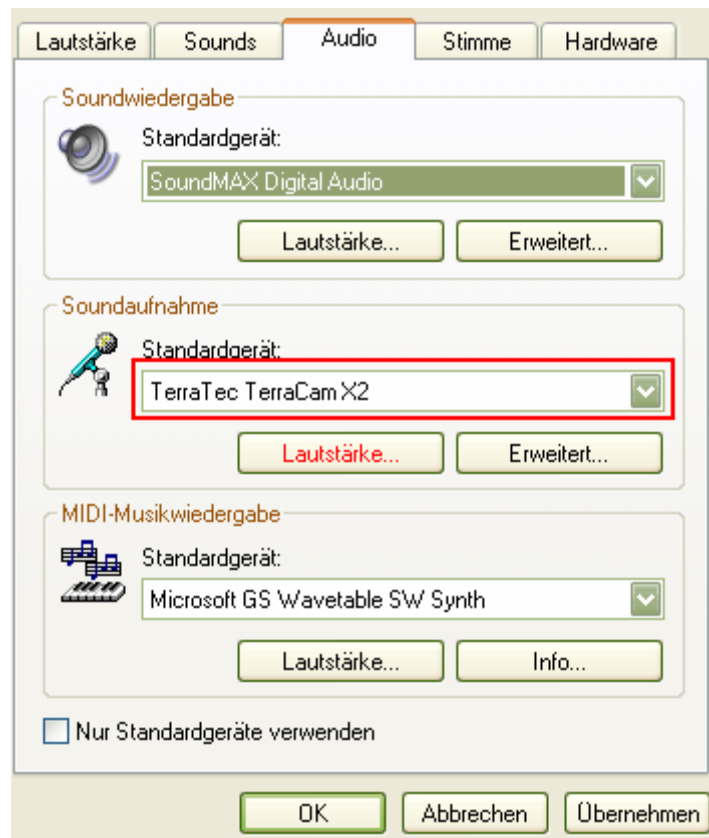
*Adjusting the audio level in the Windows Mixer*

Installation in Windows XP, Vista 32 and Vista 64

This chapter may strike you as very short, but installing the webcam is really very easy thanks to its architecture. Simply plug the USB cable into a free USB 2.0 port on your system. Connect the TerraCam X2 directly to your desktop or notebook PC to avoid the power supply and data throughput issues that frequently arise when using a USB hub. Windows will recognize the new hardware and will display a message over the system tray indicating that a new device, the "TerraTec TerraCam X2" and a "USB audio device" were found. All of the required system components will now be installed automatically by the operating system. After a few seconds, another message will be displayed, indicating that the hardware was successfully installed and is ready to use.

The installation was completed successfully.

To ensure that the installation completed successfully, open the Device Manager ("Windows key" + "Pause" → "Hardware tab" → "Device Manager"). Expand the "Sound, video and game controllers" and the "Imaging devices branches". If a USB audio device and a USB video device are present, the installation was successful.
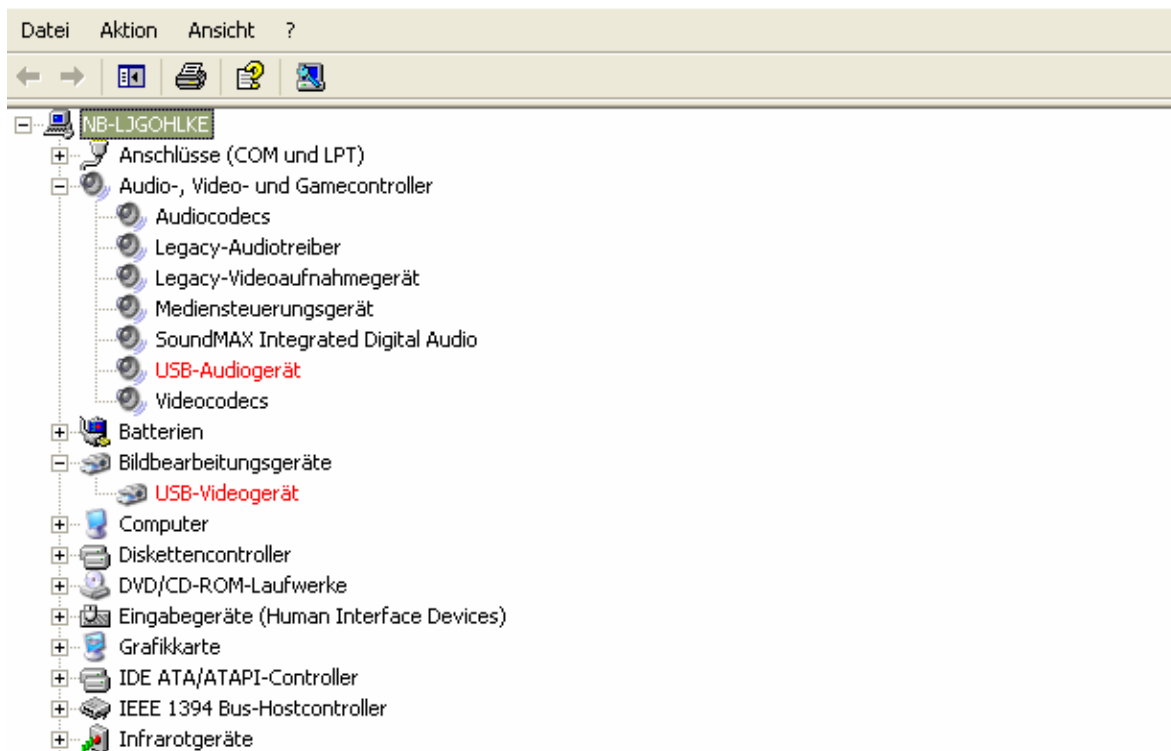
Device Manager with USB audio and video devices

The product CD

The included product CD contains optional software components. Naturally, the webcam will work just fine without these software packages, and if your favorite messenger application is already open, you will find that you can now take part in videoconferences. The camera will automatically be recognized and integrated by the messenger.

We nevertheless recommend installing the optional software to enable a wide range of functions that will add to your fun. The Arcsoft Webcam Companion lets you:

- record videoclips quickly and easily
- capture still image sequences with a single click

Use the following surveillance features:

- automatic video recording whenever your webcam detects motion
- automatic notification via e-mail, SMS or FTP upload when motion is detected
- adjustable motion detection sensitivity
- informative recording logs containing the date and time

As well as:

- trim and enhance videos
- save videos in a wide range of popular formats
- capture stills from videos
- edit photos with tools for zooming, cropping, and adjusting the size, brightness, contrast and sharpness
- enhance stills with the "automatic improvement" function
- send your stills and videos using your favorite e-mail client or e-mail service
- display your stills as a slide show
- print your stills

The CD also includes the TerraTec Snap! application, which lets you take quick, convenient snapshots, or reassign the snapshot button to act as a launcher for your favorite messenger application.

To install the software, insert the CD and wait for the autostarter to launch. Select your language and the "Software" item. Simply click the appropriate button to select an application to install. Follow the instructions on the screen until the software is completely installed.

TerraTec Snap!

TerraTec Snap! is a simple tool for quickly taking snapshots. It also lets you reassign the snapshot button to act as a launcher for your favorite messenger application. Once the installation is complete and the webcam is connected, a small TerraCam icon will appear in your system tray.

Snap! icon in the system tray

Right-click the icon to open the menu. You can now launch the snapshot module, or open the settings and enter the messenger application you would like to launch when pressing the snapshot button.

The snapshot mode displays the live picture from the camera. Press the snapshot button or "Save Picture" to capture a snapshot that will be saved to your default picture folder.

Messenger Support

At the time of printing, the following messengers were tested and supported:

- Skype http://www.skype.com

- ICQ http://www.icq.com

- Windows Live http://messenger.live.com

- Yahoo http://messenger.yahoo.com/

Video software capable of working with USB video devices is also supported.

Service at TerraTec

"Nothing seems to work!" — This can happen even on the best systems. If this happens to you, the TerraTec team is happy to offer its service and support.

Hotline, Internet.

In case of a serious problem—where you can neither solve the problem on your own nor with the guided help found in this manual, nor with the help of your dealer—please contact us directly.

If you have access to the Internet, please check our service and support at http://supporten.terratec.net/ first. There you'll find the answers to frequently asked questions (FAQ) and a form for e-mail support requests.

If you can't access our website, please check the service request form that came with the product for country-specific helpline numbers with which you can contact our support team.

Regardless of whether you contact us by e-mail or phone, you must have the following information at hand:

- your registration number,
- this documentation,
- information about your system.

In addition, it would be helpful to our technicians if the device is within reach during the phone call so that you can carry out our support tips directly. Please do not forget to write down the name of the respective support technician if you contact our Support Team. You will need this name if a defect is present and your device needs to be mailed to us.