# SENSORAY CO., INC.

## USB MPEG Capture Device

## Model 2251 (Rev.A)

October, 2007

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## Limited warranty

Sensoray Company, Incorporated (Sensoray) warrants the hardware to be free from defects in material and workmanship and perform to applicable published Sensoray specifications for two years from the date of shipment to purchaser. Sensoray will, at its option, repair or replace equipment that proves to be defective during the warranty period. This warranty includes parts and labor.

The warranty provided herein does not cover equipment subjected to abuse, misuse, accident, alteration, neglect, or unauthorized repair or installation. Sensoray shall have the right of final determination as to the existence and cause of defect.

As for items repaired or replaced under warranty, the warranty shall continue in effect for the remainder of the original warranty period, or for ninety days following date of shipment by Sensoray of the repaired or replaced part, whichever period is longer.

A Return Material Authorization (RMA) number must be obtained from the factory and clearly marked on the outside of the package before any equipment will be accepted for warranty work. Sensoray will pay the shipping costs of returning to the owner parts that are covered by warranty. A restocking charge of 25% of the product purchase price, or $105, whichever is less, will be charged for returning a product to stock.

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## Special handling instructions

The circuit board contains CMOS circuitry that is sensitive to Electrostatic Discharge (ESD).

Special care should be taken in handling, transporting, and installing circuit board to prevent ESD damage to the board. In particular:

- Do not remove the circuit board from its protective anti-static bag until you are ready to install the board into the enclosure.

- Handle the circuit board only at grounded, ESD protected stations.

- Remove power from the equipment before installing or removing the circuit board.

## Introduction

Model 2251 is a USB video and audio capture device. It converts the signal from an analog video source (NTSC or PAL) into one of the supported MPEG or MJPEG streams along with (optional) audio from a line level input. Model 2251 is powered through the USB port and does not require any external power supplies.
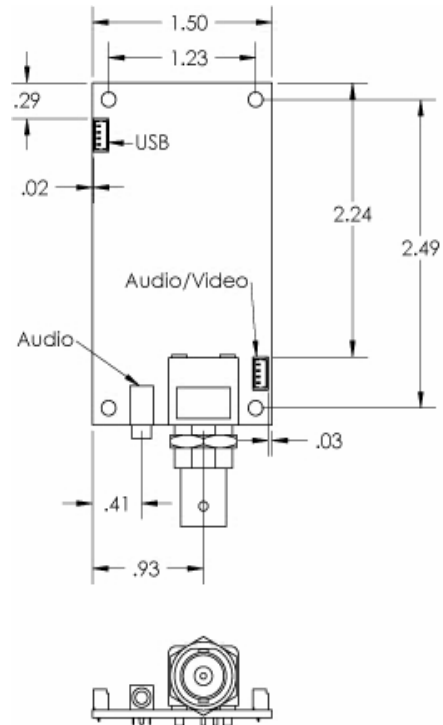
## Feature Summary

- MPEG1/2/4 capture at full frame rate and full resolution.
- Motion JPEG capture (JPG frames and AVI streams)
- Composite video input.
- Stereo audio is mixed synchronously into MPEG stream.
- On screen display (OSD) of multiple text overlays.
- Three-zone motion detection.
- Compact design.
- Driver support for Windows 2000, XP, & Vista.

## Specifications

| Inputs | Video: composite (BNC), 75 Ohm<br>Audio: line in stereo (3.5 mm). |
|---|---|
| Input video formats | NTSC (M), PAL (BDGHIMN) |
| Output Video formats | MPEG1, MPEG2 (MP@ML), MPEG4 (SP@L3 with B-frames), Motion JPEG |
| Output resolutions | 320x240, 720x480 (NTSC, 30 frames/sec)<br>320x288, 720x576 (PAL, 25 frames/sec) |
| Bitrates | Constant and variable, up to 6Mbs |
| OSD | max 96 characters per frame, 16x16 font |
| Snapshot | JPG and BMP formats, concurrent with capture/preview |
| Power | +5 V, 470 mA (through USB port) |

## Mechanical Drawing & Pinout



USB Pinout
Pin1    Ground
Pin2    +Data
Pin3    -Data
Pin4    +5V

Audio/Video Pinout
Pin1    Ground
Pin2    Audio Left
Pin3    Audio Right
Pin4    Video