

Sentosa USB-BP

External MPEG-1/2 Encoder and Capture device for the PC

PRODUCT OVERVIEW

Sentosa USB is a small form factor, external MPEG-1/MPEG-2 encoder for the PC, ideal for notebook PCs and also useful for desktop PCs. The unit connects to the PC via a USB cable and is bus-powered, thereby requiring no external power supply for operation. This product consists of an external box and a software application. The application allows the user to capture full motion D-1 quality video clips in MPEG-1 or MPEG-2 format on the PC.

GENERAL FEATURE SET

- MPEG-1, MPEG-2 capture
- VCD, SVCD, DVD formatted recording
- Full D-1 capture in NTSC & PAL



Emuzed Sentosa USB-BP



FEATURES

Video

The device has 1 set of video inputs. Under SW control, the user can select either:

- Composite Video Input
- S-Video Input

The hardware MPEG encoder supports the following features:

- MPEG-1 or MPEG-2 format
- CBR and VBR from 0.25 to 15 Mbps (6.5 Mbps over USB 1.1)
- NTSC or PAL video formats
- Pixels per Line: 720, 480, 352, 320
- Lines per Frame: 576, 480, 288, 240
- Programmable 2D and dynamic noise reduction filters
- Auto 3:2 pull down detection
- VBI extraction
- VCD, SVCD & DVD formats

Audio

The device has 1 set of stereo audio inputs. The audio A/D converter allows the user to select one of 3 different sampling rates; 32, 44.1 and 48 kHz. The audio encoder supports the following options:

- MPEG-1, Layer 2 encoding

Selectable bit rates: 32, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320, 384 kbps

I/O

The following I/O connectors are supported on the unit:

Front Panel

- One Composite Video Input (RCA)
- One S-Video Input (4-pin DIN connector)
- One Stereo Audio Input (dual RCA)

NOTE: The USB cable is permanently attached to this unit.

USB Interface

Sentosa USB supports the USB 1.1 and USB 2.0 standards.

Thermal

Operating Temperature: 0 to 55 degrees C ambient

Storage Temperature: -10 to 65 degrees C [10-90 % humidity].



Sentosa USB-BP Product Brief

Power

The unit is powered from the USB bus, and no external power supply is required.

SOFTWARE

The Sentosa USB unit ships with WDM compliant USB drivers and Emuzed's capture application, MovieMill. The key features of MovieMill are outlined below:

Capture

- Preview in a window or full screen. Preview is implemented by means of a real time software decoder included in the bundle. Audio is rendered through sound card and proper audio/video synchronization is ensured
- Capture to a file. Manual stop or timed capture
- Video and audio input selection and color controls
- VCD, SVCD and DVD templates
- JPEG still image capture
- Color controls (Brightness, Saturation, Tint, Sharpness, Contrast)

Playback

- MPEG1 and MPEG2 files playback
- Video in a window and Full screen
- Browse to a file for file selection
- Position slider with a thumb for instant position change
- Buttons: play, pause, 1 frame step back, 1 frame step forward, begin, end
- Volume control

Driver

The MPEG encoder and USB uCodes are downloaded over the USB cable so that the unit can be completely field upgradeable. The driver works under Windows 98SE, Windows ME, Windows 2000 and Windows XP. The drivers are WDM compliant and can be integrated with a variety of 3rd party applications with minimal engineering effort.

Customization

Emuzed will customize the driver, installation and MovieMill application to reflect OEM's company name, logo, and product name. MovieMill user interface is localization-ready and can support multiple languages using Emuzed's OEM customization kit.

3rd Party Software

A variety of 3rd party capture, edit, and authoring application support this product. Please contact Emuzed for more information.



PC REQUIREMENTS

The requirements for the PC will be set by the SW application(s) more than by the hardware. The driver requires:

- Pentium III 500 MHz or equivalent AMD
- 256 MB RAM
- Graphics board with DirectX 8 support
- Sound board with DirectX 8 support
- CD-ROM drive
- IDE Hard drive with master mode support
- Free USB 2.0 or 1.1 port
- Windows 98SE, ME, 2000 or XP