CANOPUS ADVC100

Canopus ADVC-100 Advanced Digital Video Converter User Manual

Model: ADVC100 | Brand: CANOPUS

1. Introduction

The Canopus ADVC-100 is a high-quality analog-to-digital video converter designed to transform analog video sources (such as S-VHS, Hi8, and 8mm tapes) into digital DV format in real-time. This device is ideal for videographers and individuals looking to digitize their existing analog video archives for editing and preservation. It utilizes Canopus's proprietary DV CODEC technology to ensure excellent picture quality and supports locked audio for perfect audio/video synchronization.

Figure 1.1: The Canopus ADVC-100 digital video converter shown with its accompanying power adapter and FireWire cable, illustrating the complete package contents.

2. Package Contents

Upon opening the package, verify that all the following items are included:

- Canopus ADVC-100 device
- IEEE 1394 DV cable (4-pin to 6-pin)
- AC adapter
- Video cable (S-Video/Composite)

3. Setup

The ADVC-100 is designed for straightforward plug-and-play operation with no software installation or complex configuration required. All necessary intelligence is built directly into the device.

3.1 Connecting the Device

1. **Power Connection:** Connect the provided AC adapter to the "DC IN 5V" port on the rear of the ADVC-100 and plug it into a power outlet.
2. **Analog Input:** Connect your analog video source (e.g., VCR, camcorder) to the appropriate input ports on the front or rear of the ADVC-100.
    - For S-Video, use the S-Video input port.
    - For Composite Video, use the yellow RCA input port.
    - For Audio, use the red (right) and white (left) RCA input ports.

3. **Digital Output (to Computer):** Connect the IEEE 1394 (FireWire) cable from the ADVC-100 (either the 4-pin port on the front or the 6-pin port on the back) to your PC or Mac's FireWire port.

Figure 3.1: Front panel of the ADVC-100, featuring S-Video, Composite Video, and Audio (RCA) input jacks, along with a 4-pin DV (FireWire) port. This view highlights the primary connection points for analog video sources and a digital output to a computer.

Figure 3.2: Rear panel of the ADVC-100, displaying analog output jacks (S-Video, Composite Video, Audio RCA), a 6-pin DV (FireWire) port, and the DC 5V power input. These ports are used for connecting to a display or for alternative digital output.

Figure 3.3: Bottom panel of the ADVC-100, illustrating the DIP switches for mode selection. These switches allow users to configure settings such as video format (NTSC/PAL), audio mode, and input/output selection.

4. Operating Instructions

The ADVC-100 automatically converts analog video to DV format as soon as a signal is detected. It is designed to work seamlessly with various non-linear editing (NLE) applications on both PC and Mac platforms.

4.1 Analog to DV Conversion

1. Ensure all connections (power, analog input, FireWire output) are securely made as described in the Setup section.
2. Power on the ADVC-100.
3. Start playback on your analog video source (e.g., VCR, camcorder). The ADVC-100 will automatically detect the input signal.
4. Launch your preferred video editing or capture software on your computer. The ADVC-100 will appear as a DV device.
5. Begin capturing the DV stream within your software. The ADVC-100's built-in DV CODEC will perform the real-time conversion.

4.2 Key Features in Operation

- **Locked Audio Support:** The ADVC-100 is engineered to maintain perfect audio/video synchronization during conversion, even for extended video segments. This prevents common sync issues found in other converters.
- **Automatic Input Line Selection:** The device automatically detects and selects the active analog input signal.
- **NTSC/PAL Support:** The converter supports both NTSC (525/60) and PAL (625/50) video formats.
- **Color Bar Output:** The ADVC-100 can output NTSC color bars for reference signals, useful for calibration.

5. Maintenance

The Canopus ADVC-100 is a robust device designed for long-term use with minimal maintenance. Follow these guidelines to ensure optimal performance:

- **Cleaning:** Use a soft, dry cloth to wipe the exterior of the unit. Avoid using liquid cleaners or abrasive materials, as they may damage the finish or internal components.
- **Ventilation:** Ensure the device is placed in a well-ventilated area to prevent overheating. Do not block any ventilation openings.
- **Storage:** When not in use for extended periods, store the ADVC-100 in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Cable Care:** Handle cables gently. Avoid sharp bends or kinks that could damage the internal wiring.

6. Troubleshooting

If you encounter issues with your ADVC-100, refer to the following common troubleshooting steps:

- **No Signal Detected:**
  - Verify that the analog video source is powered on and playing correctly.

- Check all analog input cables (S-Video, Composite, Audio) for secure connections to both the source and the ADVC-100.
- Ensure the correct input is selected on your analog source device.

- **No Digital Output / Not Recognized by Computer:**
  - Confirm the ADVC-100 is powered on (check the power indicator light, if present).
  - Ensure the IEEE 1394 (FireWire) cable is securely connected to both the ADVC-100 and your computer.
  - Try a different FireWire port on your computer, if available.
  - Restart your computer and the ADVC-100.
  - Verify that your computer's FireWire drivers are correctly installed and up to date.

- **Audio/Video Synchronization Issues:**
  - The ADVC-100 features locked audio support to prevent sync issues. If problems persist, ensure your capture software is configured correctly for DV capture.
  - Try capturing a shorter segment to see if the issue is related to long capture times.

- **Poor Picture Quality:**
  - Ensure your analog source provides a clean signal.
  - Check the quality of your analog cables; damaged cables can degrade signal quality.
  - Verify that the correct input type (S-Video vs. Composite) is being used and that the cables match the input. S-Video generally provides better quality than Composite.

If these steps do not resolve the issue, please refer to the official Canopus support resources or contact customer service.

7. Specifications

Feature	Detail
Model Number	ADVC100
Product Dimensions (L x W x H)	5.75 x 4.72 x 1 inches
Item Weight	1.5 pounds
Digital Video I/O	6-pin S200 (200Mbps), 4-pin S200 (200Mbps) IEEE 1394 (FireWire)
Analog Video I/O	NTSC (525/60), PAL (625/50) S-video, Composite
Audio I/O	Stereo unbalanced line level (RCA)
Sampling Frequency	48kHz/16bit/2ch, 32kHz/12bit/4ch
Video Output Resolution	720x480 analog output

Feature	Detail
Compatibility	PC, Mac (OHCI and DV-only capture cards)
Key Features	Custom hardware Codec chip, Locked Audio Support, Input line auto select, YUV output, NTSC/PAL support, Front/Back analog in, 2 DV jacks, Color Bar output

8. Warranty and Support

For information regarding the warranty of your Canopus ADVC-100, please refer to the warranty card included with your product or visit the official CANOPUS website. Keep your proof of purchase for warranty claims. For technical support, troubleshooting beyond this manual, or service inquiries, please contact CANOPUS customer support. You may also find additional resources, including a detailed PDF user manual, on the product's Amazon page or the manufacturer's website.

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