Antelope Audio Discrete 4 Pro Synergy Core

Antelope Audio Discrete 4 Pro Synergy Core Audio Interface User Manual

Model: Discrete 4 Pro Synergy Core

Brand: Antelope Audio

1. INTRODUCTION

The Antelope Audio Discrete 4 Pro Synergy Core is a high-fidelity desktop audio interface designed for professional recording, streaming, and studio applications. It features 14 inputs and 20 outputs, Thunderbolt 3 and USB 2.0 connectivity, four console-grade microphone preamps, and onboard real-time effects processing.

This manual provides essential information for setting up, operating, and maintaining your Discrete 4 Pro Synergy Core audio interface to ensure optimal performance and longevity.

Key Features:

- **High-Precision Audio Conversion:** Equipped with 64-bit AFC clocking technology for pristine audio quality, spacious stereo imaging, and intricate detail.
- **Versatile Preamps:** Four discrete console-grade microphone preamps on combo XLR jacks, with two inputs offering Hi-Z compatibility for instruments.
- **Extensive Connectivity:** Includes four DC-coupled analog line outputs, stereo monitor outputs, four independent headphone outputs, and ADAT & S/PDIF I/O for comprehensive input and output functionality.
- **Real-Time Effects:** Access to 37 included Synergy Core effects and over 60 optional expansions, processed in real-time with imperceptible latency.
- **Advanced Routing:** Features a studio audio mixer with drop-down channel selections and a virtual patch-bay for flexible input/output routing.

2. WHAT'S IN THE BOX

Upon unboxing your Antelope Audio Discrete 4 Pro Synergy Core, please verify that all the following items are included:

- Discrete 4 Pro Synergy Core Audio Interface
- Quick Start Guide

- USB Type-B to Type-A Cable
- External Power Supply Unit

3. SETUP GUIDE

Follow these steps to set up your Discrete 4 Pro Synergy Core audio interface.

3.1 Physical Connections

1. **Power Connection:** Connect the external power supply unit to the 18V DC input on the rear panel of the Discrete 4 Pro and then plug it into a power outlet.
2. **Computer Connection:** Use the provided USB Type-B to Type-A cable to connect the Discrete 4 Pro to your computer's USB port. For optimal performance and lower latency, a Thunderbolt 3 cable (not included) can be used with compatible computers.
3. **Monitor Connection:** Connect your studio monitors to the 'MONITOR' outputs (L/R) on the rear panel using appropriate cables.
4. **Headphone Connection:** Plug your headphones into any of the four independent headphone outputs on the front panel.
5. **Input Devices:** Connect microphones to the combo XLR/TRS inputs (A1-A4) on the front or rear panel. For instruments, use the Hi-Z compatible inputs (A1, A2) on the front panel.

Front view of the Antelope Audio Discrete 4 Pro Synergy Core, showing inputs A1 and A2, the display, main volume knob, and four headphone outputs.

Rear view of the Antelope Audio Discrete 4 Pro Synergy Core, displaying various input and output ports including S/PDIF, ADAT, USB, Thunderbolt, Word Clock, Monitor, Line Out, and Mic/Line inputs A3 and A4.

3.2 Driver and Software Installation

Before operating the device, ensure you have installed the necessary drivers and control panel software from the official Antelope Audio website. This software is compatible with both macOS and Windows operating systems.

The Discrete 4 Pro Synergy Core highlighting compatibility with macOS & Windows, USB 2.0 & Thunderbolt 3, 64-bit AFC Clocking, ADAT Optical I/O, included DAW (Bitwig), 14x20 I/O Channels, 4 Discrete Preamps, Real-time FX, and Virtual Patch-bay.

4. OPERATING INSTRUCTIONS

The Discrete 4 Pro Synergy Core offers a comprehensive set of features for audio production. Familiarize yourself with the control panel software for full functionality.

4.1 Front Panel Controls

- **Input Gain Knobs:** Adjust the input gain for microphones and instruments connected to inputs A1-A4.
- **Display Screen:** Shows input levels, system information, and menu navigation.
- **Main Volume Knob:** Controls the output level of your main monitor outputs.
- **Headphone Outputs (1-4):** Independent volume controls for each headphone output are managed via the software control panel.

Close-up of the Discrete 4 Pro Synergy Core front panel, showing the two combo inputs, the digital display with preamp levels, the main volume knob, and four headphone jacks.
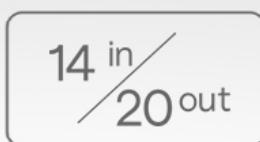
4.2 Software Control Panel

The Antelope Audio control panel software provides detailed control over all aspects of the Discrete 4 Pro:

- **Routing Matrix:** Drag-and-drop functionality to route any input to any output, creating custom signal flows.
- **Synergy Core Effects:** Load and manage real-time, hardware-accelerated effects on input channels, monitor mixes, or outputs.
- **Monitor Mixes:** Create multiple independent monitor mixes for artists and engineers.
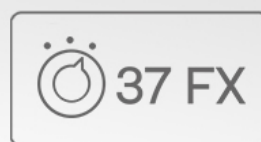- **Preamp Control:** Digitally control preamp gain, phantom power, and Hi-Z settings.

The Discrete 4 Pro Synergy Core's display showing the system menu, allowing navigation to device info, communication interface, screen save time, and screen save style settings.

4.3 Real-Time Effects Processing

The Discrete 4 Pro's Synergy Core platform allows you to run a wide array of analog-modeled effects with minimal latency. These effects are processed directly on the interface's hardware, freeing up your computer's CPU.

This video demonstrates the features and connectivity of the Antelope Audio Discrete 4 Pro Synergy Core, including its discrete preamps, 64-bit AFC clocking, 14x20 I/O channels, ADAT optical I/O, and real-time effects processing with a virtual patch-bay. It also shows compatibility with macOS and Windows.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Discrete 4 Pro Synergy Core.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners or solvents.
- **Ventilation:** Ensure the unit has adequate ventilation to prevent overheating. Do not block the ventilation slots.
- **Storage:** When not in use for extended periods, store the interface in a cool, dry place, protected from dust and extreme temperatures.
- **Cable Management:** Use proper cable management to prevent strain on connectors and accidental disconnections.

6. TROUBLESHOOTING

If you encounter issues with your Discrete 4 Pro Synergy Core, try the following troubleshooting steps:

- **No Power:** Ensure the power supply is securely connected to both the unit and a working power outlet.
- **No Audio Input/Output:**
  - Check all cable connections (microphones, instruments, monitors, headphones).
  - Verify input gain levels on the unit and in the software control panel.
  - Confirm correct routing in the software control panel.
  - Ensure the Discrete 4 Pro is selected as the audio device in your computer's sound settings and your Digital Audio Workstation (DAW).
- **Software Not Recognizing Device:**
  - Restart your computer and the Discrete 4 Pro.
  - Ensure the latest drivers and control panel software are installed.
  - Try a different USB or Thunderbolt port and cable.
- **Latency Issues:** Adjust buffer size settings in your DAW. Lower buffer sizes reduce latency but require more CPU power.
- **Distorted Audio:** Check input and output levels to ensure they are not clipping. Reduce gain if necessary.

For further assistance, please refer to the Antelope Audio support website or contact their customer service.

7. SPECIFICATIONS

Detailed technical specifications for the Antelope Audio Discrete 4 Pro Synergy Core:

Feature	Detail
Item Weight	3.7 pounds
Product Dimensions	8.2 x 10.2 x 1.7 inches
Item Model Number	Discrete 4 Pro Synergy Core

Compatible Devices	Personal Computer
Hardware Interface	USB, Thunderbolt 3
Supported Software	ADAT, S/PDIF, DAW (Bitwig included)
Proficiency Level	Professional
Operating System	Windows, macOS
Connectivity Technology	USB, Thunderbolt
Number of Channels	14 In / 20 Out

8. WARRANTY AND SUPPORT

For information regarding product warranty, registration, and technical support, please visit the official Antelope Audio website. You can find detailed resources, FAQs, and contact information for customer service there.

It is recommended to register your product to receive updates and support.

Related Documents - Discrete 4 Pro Synergy Core

	[Antelope Audio Zen Q Synergy Core User Manual	Thunderbolt 3 Audio Interface](#) Comprehensive user manual for the Antelope Audio Zen Q Synergy Core, a 14x10 bus-powered Thunderbolt 3 audio interface. Learn about setup, configuration, features, software, and troubleshooting.
	[Antelope Audio Zen Q Synergy Core User Manual - Setup, Features, and Specifications](#) Comprehensive user manual for the Antelope Audio Zen Q Synergy Core, detailing setup, online activation, hardware features, control panel application, audio routing, effects, and technical specifications for this advanced audio interface.
	[Antelope Audio Zen Q Synergy Core User Manual: Thunderbolt 3 Audio Interface Guide](#) This comprehensive user manual provides detailed instructions and specifications for the Antelope Audio Zen Q Synergy Core, a 14x10 bus-powered Thunderbolt 3 audio interface designed for professional audio production. Learn about setup, configuration, control panel features, and advanced functionalities.

[Antelope Audio Zen Tour Synergy Core User Manual](#)
User manual for the Antelope Audio Zen Tour Synergy Core, an 18x26 desktop Thunderbolt 3 & USB 2.0 audio interface. Learn about setup, configuration, features, and specifications.

[Antelope Audio SRC Stereo Remote Controller User Manual](#)
Comprehensive user manual for the Antelope Audio SRC Stereo Remote Controller, detailing system requirements, product activation, front and rear panel explanations, room calibration features, application usage, customer support information, warranty policy, safety notes, and technical specifications.

[Antelope MP32 32-Channel Microphone Preamp Owner's Manual](#)
This owner's manual provides detailed information on the Antelope Audio MP32, a 32-channel console-grade microphone preamp. Covers safety, features, installation, operation, technical specifications, and support resources.