

KOMPLETE AUDIO 6



MANUAL



The information in this document is subject to change without notice and does not represent a commitment on the part of Native Instruments GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by Native Instruments GmbH, hereinafter referred to as Native Instruments.

“Native Instruments”, “NI” and associated logos are (registered) trademarks of Native Instruments GmbH.

Mac, Mac OS, GarageBand, Logic, iTunes and iPod are registered trademarks of Apple Inc., registered in the U.S. and other countries.

Windows, Windows Vista and DirectSound are registered trademarks of Microsoft Corporation in the United States and/or other countries.

All other trade marks are the property of their respective owners and use of them does not imply any affiliation with or endorsement by them.

Document authored by: Native Instruments GmbH

(06/2016)

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

NATIVE INSTRUMENTS GmbH
Schlesische Str. 29-30
D-10997 Berlin
Germany
www.native-instruments.de

NATIVE INSTRUMENTS North America, Inc.
6725 Sunset Boulevard
5th Floor
Los Angeles, CA 90028
USA
www.native-instruments.com

NATIVE INSTRUMENTS K.K.
YO Building 3F
Jingumae 6-7-15, Shibuya-ku,
Tokyo 150-0001
Japan
www.native-instruments.co.jp

NATIVE INSTRUMENTS UK Limited
18 Phipp Street
London EC2A 4NU
UK
www.native-instruments.com



© NATIVE INSTRUMENTS GmbH, 2016. All rights reserved.

Table of Contents

1	Welcome to KOMPLETE AUDIO 6!	7
1.1	This is Included in the Box	7
1.2	Document Conventions	8
2	Installing KOMPLETE AUDIO 6	9
2.1	Installing KOMPLETE AUDIO 6 on Mac OS X	9
2.2	Installing KOMPLETE AUDIO 6 on Windows	10
2.2.1	Important Installation Information	10
2.2.2	Installing the Driver Software	11
2.2.3	Connecting the KOMPLETE AUDIO 6 to Your Computer	12
3	Basic Configuration	14
3.1	Selecting the KOMPLETE AUDIO 6 as Your System's Default Audio Output Device	14
3.1.1	On Windows	14
3.1.2	On Mac OS X	14
3.2	Using the KOMPLETE AUDIO 6 as an Audio Output Device with Music Software	15
4	The Hardware in Detail	16
4.1	Front Panel	17
4.2	Rear Panel	18
4.3	Top Panel	20
5	Advanced Configuration	22
5.1	Advanced Configuration on Windows (Control Panel)	22
5.1.1	Audio Settings Page	23
5.1.2	Diagnostics Page	27
5.2	Advanced Configuration on Mac OS X (Audio MIDI Setup)	30
5.2.1	Input Pane	31
5.2.2	Output Pane	32

6	Using the KOMPLETE AUDIO 6 (Setup Scenarios)	33
6.1	Connecting Speakers	33
6.1.1	Connecting Active Monitor Speakers	33
6.1.2	Using KOMPLETE AUDIO 6 in a Setup with Passive Speakers	34
6.2	Connecting Headphones	35
6.3	KOMPLETE AUDIO 6 in a Recording Setup	36
6.3.1	Connecting a Condenser Microphone	37
6.3.2	Connecting a Dynamic Microphone	39
6.3.3	Connecting a Guitar / Bass Guitar (with headphones)	41
6.3.4	Connecting Line Level Equipment (Synthesizer/Computer/Tapedeck/Mixer Line Out)	43
6.4	KOMPLETE AUDIO 6 with MIDI Devices	45
6.5	Using the Digital Input and Output	47
6.5.1	Connecting a DAT Tapedeck	47
6.5.2	Connecting a Synthesizer via Digital I/O	48
6.6	Direct Monitoring	49
7	Troubleshooting	50
7.1	Solving Hardware-related Problems	50
7.2	How to Check Whether the KOMPLETE AUDIO 6 Drivers are Installed Correctly	51
7.3	Troubleshooting (Windows)	52
7.4	Choosing the Correct USB Cable	52
7.5	Getting Help	52
7.5.1	Readme, Knowledge Base, Technical Support	52
7.5.2	Forum	53
7.6	Updates	53
7.7	Resolving Ground Loop Issues	54

8	Appendix	55
8.1	Technical Specifications	55
8.2	About Latency and Buffers	55
8.3	Different Types of ASIO (Windows)	56
	Index	57

1 Welcome to KOMLETE AUDIO 6!

Thank you for your purchase of KOMLETE AUDIO 6. It is the ultimate hardware complement for a variety of home studio and DJ applications. The KOMLETE AUDIO 6 provides the following features:

- 24-bit analog-to-digital / digital-to-analog converters
- 2 analog inputs with XLR / 1/4" jack combo sockets, 48V phantom power, and individual input gain control knobs on the interface's front panel
- 2 additional balanced inputs with 1/4" TRS jack sockets on the interface's rear panel
- 4 analog and 2 digital outputs
- 1/4" TRS jack headphone socket with button to switch between source outputs 1/2 and 3/4
- S/PDIF Digital I/O
- Up to 96kHz sampling rate
- 15 status LED indicators for monitoring the interface's connections
- ASIO and Core Audio low-latency drivers

1.1 This is Included in the Box

The KOMLETE AUDIO 6 box contains the following items:

- The KOMLETE AUDIO 6 audio interface
- A USB 2.0 cable
- A registration flyer with your KOMLETE AUDIO 6 hardware serial number and a link to the hardware registration page, where you can register your hardware and download the driver software for your Windows computer.

1.2 Document Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:



The speech bubble icon indicates a useful tip that may often help you to solve a task more efficiently.



The exclamation mark icon highlights important information that is essential for the given context.



The red cross icon warns you of serious issues and potential risks that require your full attention.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as Open..., Save as... etc.) in the software and paths to locations on your hard disk or other storage devices is printed in italics.
 - Text appearing elsewhere (labels of buttons, controls, text next to checkboxes etc.) in the software is printed in **blue**. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.
 - Text appearing on labels of the hardware is printed in **orange**. Whenever you see this formatting applied, you will find the same text on the hardware.
 - Important names and concepts are printed in bold.
 - References to keys on your computer's keyboard you'll find put in square brackets (e.g., "Press [Shift] + [Enter]").
- ▶ Single instructions are introduced by this play button type arrow.
- Results of actions are introduced by this smaller arrow.

2 Installing KOMPLETE AUDIO 6

This chapter describes how to install the KOMPLETE AUDIO 6 audio interface on your computer.

- If you want to use the audio interface with a Mac, see section [↑2.1, Installing KOMPLETE AUDIO 6 on Mac OS X](#).
- If you want to use the audio interface with a computer running Windows, see section [↑2.2, Installing KOMPLETE AUDIO 6 on Windows](#).

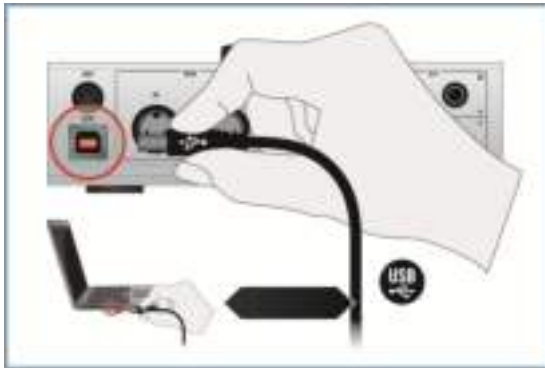
2.1 Installing KOMPLETE AUDIO 6 on Mac OS X



Mac OS X: No driver installation required. On Mac OS X no driver installation is required. As a class-compliant USB 2.0 device, KOMPLETE AUDIO 6 uses the operating system's built-in drivers provided by Apple.

To connect the KOMPLETE AUDIO 6 to your computer:

- ▶ Connect the KOMPLETE AUDIO 6 to a USB 2.0 port on your computer using the USB cable provided in the KOMPLETE AUDIO 6 box.



2.2 Installing KOMLETE AUDIO 6 on Windows

In order for the KOMLETE AUDIO 6 to work with your Windows computer, the following two components will be installed on your system during the software installation process:

- The KOMLETE AUDIO 6 driver handles the communication between the audio interface and your computer.
- The Control Panel software allows you to adjust several settings affecting performance as well as control sync and pre-amp settings for Windows.

2.2.1 Important Installation Information

Before starting the KOMLETE AUDIO 6 driver software installation, here are some points to be aware of:

- Make sure you have downloaded the KOMLETE AUDIO 6 driver software to your computer by following the instructions on the registration page:
<http://www.native-instruments.com/go-ka6>
If you have already registered your device but need to download the installer again, you can find the relevant downloads in the "My Account" section of the NI website:
<https://www.native-instruments.com/en/my-account/my-products-serials>
- Carefully review the installer screens and the suggested installation paths in order to avoid that any unwanted folders are created on your hard disk.
- Moving any folders related to Native Instruments software after installation is not recommended. Future software updates rely on the directory locations set during initial installation.



It may be necessary to disable your anti-virus software during installation, please refer to the software's own documentation for further information.



Do not connect the KOMLETE AUDIO 6 to your computer before the driver software installation process is finished.

2.2.2 Installing the Driver Software

To install the KOMLETE AUDIO 6 driver software on Windows:

1. Locate and double-click the **Komplete Audio 6 Driver Setup PC.exe** file to start the installation procedure.
2. In the installation program's **Welcome** screen, click **Next**. Then, follow the on-screen instructions.



3. On the last screen of the software installation, click [Finish](#).

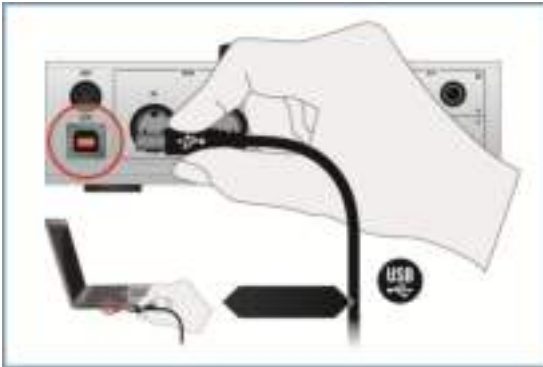


- All software components are now installed, and the KOMLETE AUDIO 6 can be connected to your computer as described in the following section.

2.2.3 Connecting the KOMLETE AUDIO 6 to Your Computer

To connect the KOMLETE AUDIO 6 to your computer:

- ▶ Connect the KOMPLETE AUDIO 6 to a USB 2.0 port on your computer using the USB cable provided in the KOMPLETE AUDIO 6 box.



3 Basic Configuration

In order for the KOMPLETE AUDIO 6 to operate as your computer's default soundcard, you will need to select it within the system's audio preferences. Find the relevant instructions in chapter [↑3.1, Selecting the KOMPLETE AUDIO 6 as Your System's Default Audio Output Device](#).

To use the KOMPLETE AUDIO 6 as your music software's default audio output, see the information given in chapter [↑3.2, Using the KOMPLETE AUDIO 6 as an Audio Output Device with Music Software](#).

3.1 Selecting the KOMPLETE AUDIO 6 as Your System's Default Audio Output Device

In the following sections, you will learn how to set up the KOMPLETE AUDIO 6 as your system's default audio output device.

3.1.1 On Windows

1. Open Start > Control Panel > Hardware and Sound > Sound.
 2. In the [Sound](#) control panel, select the [Playback](#) tab.
 3. Select the KOMPLETE AUDIO 6's pair of outputs (Ch A, Out 1|2 or Ch B, Out 3|4) that you want to set as default by clicking the corresponding entry.
 4. Click [Set Default](#).
 5. Click [OK](#) to confirm your selection and close the window.
- KOMPLETE AUDIO 6 is now selected as the default audio output device.

3.1.2 On Mac OS X

1. Open the [System Preferences](#) under the gray Apple Icon menu in the top left corner of your screen.
2. Below Hardware (second row from top), select Sound.
3. In the [Sound](#) control panel, select the [Output](#) tab.

4. Select the KOMPLETE AUDIO 6 from the list of available soundcards.
 5. Close the panel.
- KOMPLETE AUDIO 6 is now selected as the default audio output device.

3.2 Using the KOMPLETE AUDIO 6 as an Audio Output Device with Music Software

Before using the KOMPLETE AUDIO 6 with music production or DJ software, you will need to set it up as the software's audio output device. Most music production and DJ programs provide direct access to the soundcard properties in the audio and MIDI setup section of their preferences dialog. Please refer to the documentation of your music production or DJ software for more information on how to configure audio and MIDI interfaces.

4 The Hardware in Detail

The KOMLETE AUDIO 6 processes both incoming audio and the audio sent to your computer (and external equipment) in analog and digital form. It is a stand-alone device which draws power from the USB connection of your computer. Thus, an external power supply is unnecessary. The device provides:

- sound conversion (from analog to digital and vice versa)
- playback/monitoring (from an input device or computer to headphones/speakers)
- recording (from analog/digital inputs into digital data)



The KOMLETE AUDIO 6.

4.1 Front Panel



The front panel of the KOMLETE AUDIO 6.

(1) **INPUT 1** and **INPUT 2** (Line and Microphone): These inputs have a combination socket for use with XLR or 1/4" jack connectors. When connecting an XLR connector, an XLR lock latches. You can easily release the connector by pressing the release tab.

The input **GAIN** knob lowers/raises the amount of signal going into the KOMLETE AUDIO 6. The **LINE/INST** toggle button selects either **LINE** mode for strong-signal inputs (like a synthesizer or the output of an electric piano) or **INST** for weak-signal inputs (such as a guitar or a bass guitar). XLR connected gear is not affected by this button.

(2) **MONITOR** section: The **ON** switch turns direct monitoring on/off. With direct monitoring activated, the unaffected input signal will be heard with zero latency. The **ON** switch also doubles as a monitor selector switch. When held for one second, it cycles through three monitor modes: monitor signal to outputs **OUT 1/2**; monitor signal to outputs **OUT 3/4**; and monitor signal to both output pairs **OUT 1/2** and **OUT 3/4**. The LEDs from the **MONITOR** section on the device's top panel display which monitoring mode is currently active.

The **MONO** switch toggles the monitor output selection between a mono signal and a stereo signal. Switching to a mono setting aids in monitoring a mono signal, such as a guitar's mono input.

The **VOLUME** control lowers/increases the output level of the monitor signal.

(3) Headphones section: The **PHONES** socket is for plugging in headphones with a 1/4" TRS jack.

The **VOLUME** control lowers/increases the output signal of the headphones. The toggle switch **1/2** and **3/4** allows you to determine which output is monitored by the headphones.

4.2 Rear Panel



The rear panel of the COMPLETE AUDIO 6.

(1) Phantom power button (**48V**): The phantom power button supplies 48V to condenser microphones, which need this DC voltage to power their active electrical circuitry. This feature eliminates the need for direct boxes or other additional hardware when using a condenser microphone.



Be aware that phantom power can cause serious damage to ribbon microphones. Check your microphone's manual to see whether it is safe to use phantom power on it. If it isn't, make sure to disable phantom power on the interface before connecting: Switch the **48V** phantom power button on the device's rear panel off. The **48V** LED on the device's top panel stops lighting orange when phantom power is disabled.

- (2) **USB** port: The **USB** port socket connects the KOMPLETE AUDIO 6 device to your computer laptop or workstation via USB 2.0.
- (3) **MIDI**: The **MIDI** input (**IN**) and output (**OUT**) sockets connect to MIDI devices such as MIDI controllers and hardware synths or workstations. These connections also send and receive MIDI data to and from your computer, and can be utilized by the music software of your choice.
- (4) **MAIN** outputs **1/2**: The **MAIN 1/2** outs are balanced outputs. Normally, these are coupled to a mixer, mixing board, or active speakers via 1/4" jacks. However, you can also use RCA (phono) cables with suitable 1/4" jack adapters.
- (5) Outputs **3/4**: The **OUT 3/4** sockets are balanced outputs. They offer the option of additional outputs when setting up 4-channel applications, such as surround sound. They also make assigning certain instruments to certain outputs / output pairs or monitoring with a second pair of speakers possible. These outputs have no dedicated volume control (the output is always at 0 dB) so you will need to control the volume from within your software or the gear they are connected to.
- (6) **BALANCED IN 3/4**: The **IN 3/4** sockets are balanced 1/4" jack sockets. They are used with synths, tape decks, CD players, or any other devices or instruments that don't require phantom powering.
- (7) **IN** and **OUT 5/6**: The RCA (phono) sockets **5/6** are used for digital input/output (ADAT In/Out), and syncing to external digital clocks. Typically, DAT tape decks or synthesizers with digital ins/outs utilize these sockets.

4.3 Top Panel



The top panel of the KOMPLETE AUDIO 6.

- Volume control knob (**MAIN VOLUME 1/2**): The knob at the center of the top panel provides a master volume control for the main outputs (**MAIN 1/2**).

- **Status LEDs:** The status LEDs surrounding the Volume Control Knob allow you to quickly identify the status of all the connections going in and out of the device, especially in low lighting environments, where setup and troubleshooting can be cumbersome. See the following list for the LED's tasks in more detail:
 - **INPUT 1, 2, 3, and 4:** Light green when incoming signal on the relevant channel is detected. The LEDs light red when there is too much signal present, i.e. clipping.
 - **OUTPUT 1/2 and 3/4:** Lights green when there is an outgoing audio signal.
 - **MIDI:** Lights green when a MIDI connection is detected and active; flashes on incoming or outgoing MIDI data.
 - **48V:** Lights orange when phantom power is activated.
 - **USB:** Lights green when the USB port is connected to a computer. Flashing indicates a USB connection problem.
 - **Headphones 1/2:** Lights orange when there is outgoing signal on the headphone outputs 1 and 2 (see [↑4.1, Front Panel](#) for headphone source settings).
 - **Headphones 3/4:** Lights orange when there is outgoing signal on the headphone outputs 3 and 4 (see [↑4.1, Front Panel](#) for headphone source settings).
 - **MONITOR 1/2:** Lights orange when direct monitoring is activated with outputs 1/2 selected (see MONITOR section of chapter [↑4.1, Front Panel](#) for further information on direct monitoring).
 - **MONITOR 3/4:** Lights orange when direct monitoring is activated with outputs 3/4 selected (see MONITOR section of chapter [↑4.1, Front Panel](#) for further information on direct monitoring).
 - **SPDIF SYNC:** Lights orange when External Digital Clock Sync is established; does not light when the internal clock is used (see chapters [↑5.1.1, Audio Settings Page](#) and [↑5.2.1, Input Pane](#) for further information on synchronizing the KOMPLETE AUDIO 6's clock to external equipment).

5 Advanced Configuration

Once you have installed the KOMPLETE AUDIO 6 (↑2, [Installing KOMPLETE AUDIO 6](#)) and set it up as your system's default audio output device (↑3, [Basic Configuration](#)), there are more options available, such as latency optimization (see also ↑8.1, [Technical Specifications](#)) and audio quality settings.

On Windows

All advanced configuration settings on Windows can be accessed from the Control Panel software, which was installed on your computer during the software installation procedure in chapter ↑2, [Installing KOMPLETE AUDIO 6](#). Proceed with subchapter ↑5.1, [Advanced Configuration on Windows \(Control Panel\)](#).



If you experience problems with your setup, please refer to the Audio Troubleshooting Guide, which you can access from the [Information](#) section of the Control Panel's [Diagnostics](#) page, or open it directly from the software's documentation folder.

On Mac OS X

To access advanced configuration settings on Mac OS X, open the Mac OS X Audio MIDI Setup. Proceed with section ↑5.2, [Advanced Configuration on Mac OS X \(Audio MIDI Setup\)](#).



If you experience problems with your setup, please refer to the Audio Troubleshooting Guide, which you can access directly from the software's documentation folder.

5.1 Advanced Configuration on Windows (Control Panel)

The Control Panel software allows you to change the driver's performance settings, monitor performance and detect errors. To open the Control Panel:

- ▶ Navigate to Start > All Programs > Native Instruments > KOMPLETE AUDIO 6 Driver > Control Panel.



If you cannot find the Control Panel, the software is most likely not installed. In this case, please (re-)install the software as described in chapter [↑2, Installing KOMLETE AUDIO 6](#).

On the left-hand side of the Control Panel, you find two tabs: [Audio Settings](#) and [Diagnostics](#):

- ▶ Click on the tabs to open the corresponding page of the Control Panel.

Proceed to chapters [↑5.1.1, Audio Settings Page](#) and [↑5.1.2, Diagnostics Page](#) for more information on the Control Panel's pages.

5.1.1 Audio Settings Page



The Control Panel's Audio Settings page.

In the [Audio Settings](#) page, you can configure the audio latency and sample rate; monitor the device's status; enable clock syncing to external devices; and activate direct monitoring.

The [Audio Settings](#) page consists of four sections: [Audio Processing](#), [Device Monitor](#), [Digital Sync Source](#), and [Direct Monitoring](#). See the following subchapters for further information.

Audio Processing Section



The Audio Processing section in the Audio Settings page of the Control Panel.

The **Audio Processing** section sets the parameters for the analog-to-digital/digital-to-analog conversion done by your audio interface. It has two menus:

- **Sample Rate:** Choose a sample rate that is compatible with your music application and best suited to your computing power. A higher sample rate improves the audio quality, but also causes higher CPU load. By default, the sample rate is set to 44100 Hz (CD quality).



The sample rate defines how many samples are played/recorded per one second of sound. A higher sample rate results in higher audio quality; however, 44100 Hz (as used for recording audio CDs) is a common setting and absolutely sufficient for most tasks. If your final destination is CD, you should use this setting or a multiple of it (88200 Hz). For a better understanding: 48000 Hz is used by DAT recorders and for DVD (films) recording. 96000 Hz and higher rates are typical for DVD, HD DVD, and Blue-ray Disc audio recording. You should be aware that a higher sample rate also causes higher CPU load.



If you want to use multiple software clients simultaneously with the device, keep in mind they'll also have to share the same sample rate.

- **Process Buffer:** Lower the buffer size value for a quicker response time from your computer to audio software and MIDI controller actions.



When converting audio information to digital and vice versa, the audio driver needs to store the data in buffer packages (audio buffers) which are then sent to and processed by the CPU. The higher the buffer size, the longer it takes for a signal to finally arrive at the output as audio. You might experience this as a delay between the time you hit a key on your computer or controller and when you actually hear the sound. This delay is called latency. A rule of thumb is: lower buffer size results in lower latency. However, there are more factors to latency than buffer size alone (e.g., CPU speed and RAM size). You should start off with a higher buffer size setting, and gradually decrease the value until you find the perfect balance between playability and system performance. If you experience crackling at the audio output, the chosen buffer size is very likely too low for your computer's CPU to cope with, as lower buffer size causes higher CPU load.

Device Monitor Section

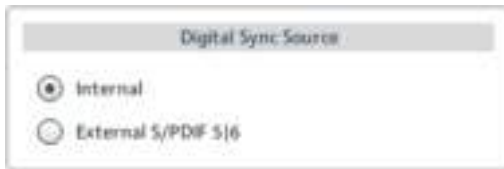


The Device Monitor section in the Audio Settings page of the Control Panel.

The **Device Monitor** section displays information about the audio interface's processing status and your system's output latency. It has two displays:

- **Processing State:** The processing state monitor provides feedback on the current status of the device. There are three possible status messages:
 - **Idle:** interface is connected, but no client delivers audio data.
 - **Streaming:** driver is working and processing audio data.
 - **Panic:** driver stopped streaming. Too many USB I/O errors occurred in the interface communication.
- **Output Latency:** Shows the amount of output latency in milliseconds.

Digital Sync Source Section



The Digital Sync Source section in the Audio Settings page of the Control Panel.

In the [Digital Sync Source](#) section, you can select whether the device uses its internal clock or gets synchronized to the clock of an external device:

- **Internal** (standard setting): Leave this radio button selected if you don't want the device to be synchronized to the clock of an external device.
- **External S/PDIF 5|6**: Select this radio button if you want the device to be synchronized to the clock of another external device via S/PDIF. When switching to this setting, the device automatically tries to establish synchronization to an external clock at the digital input/output 5 and 6 (see also chapter [↑4.2, Rear Panel](#)). If the synchronization request fails, the interface switches back to internal clock mode. If the synchronization is successful, the top panel's Sync LED lights (see chapter [↑4.3, Top Panel](#)).

Direct Monitoring Section



The Direct Monitoring section in the Audio Settings page of the Control Panel.

In the [Direct Monitoring](#) section, you can set the device to bypass any signal processing and send the signal from the input directly to the output of the device (at zero latency).

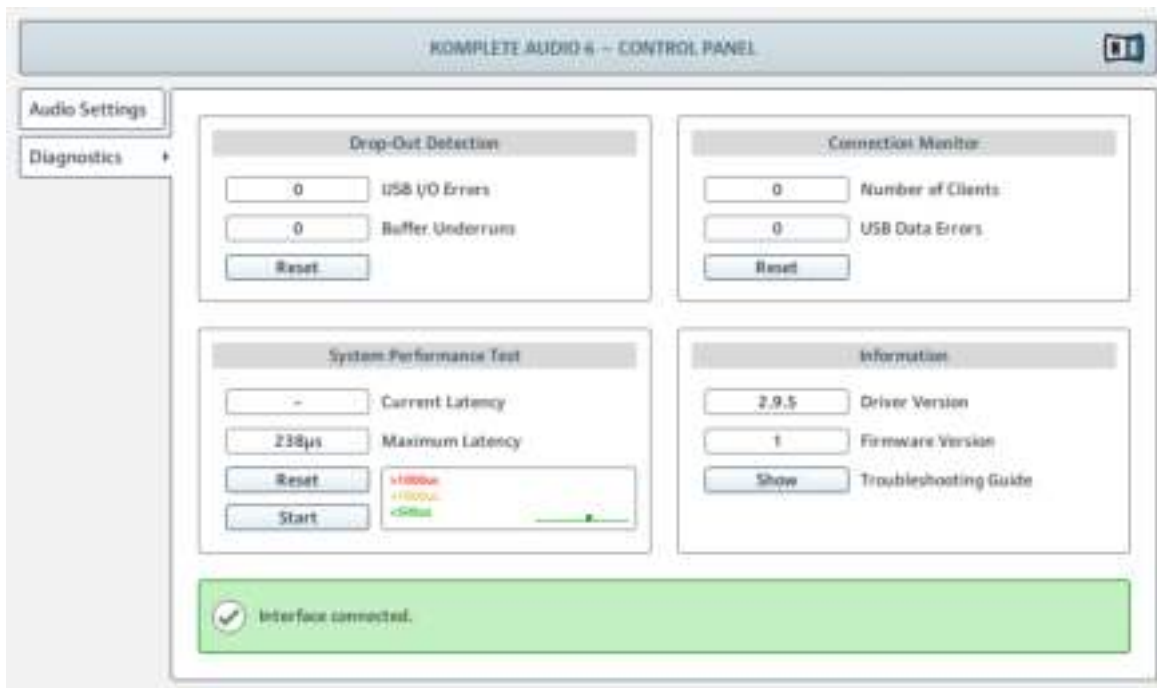


This function can be accessed from the MONITOR section on the device's front panel too; see chapter [↑4.1, Front Panel](#) for further information.

The [Direct Monitoring](#) section has a button and a drop-down menu:

- **Monitor Status:** Activating the direct monitoring routes the signal of the inputs 1 and 2 directly to the selected outputs (see **Channel** setting below) without sending them through the computer, so you can monitor the input at zero latency.
- **Channel:** When direct monitoring is active, select to which output channels signals from inputs 1 and 2 will be routed.

5.1.2 Diagnostics Page



The Control Panel's Diagnostics page.

The **Diagnostics** page allows you to monitor performance and detect errors. The information provided in this page is more of interest to advanced users; however, in case of problems with the device, you should have a look at this page. The **Diagnostics** page consists of the four sections: **Drop-Out Detection**; **Connection Monitor**; **System Performance Test**; and **Information**. See the following subchapters for further information on these sections.

Drop-Out Detection Section



The Drop-Out Detection section in the Diagnostics page of the Control Panel.

The [Drop Out Detection](#) section provides feedback on USB input/output and buffering errors. It has two displays and a button:

- [USB I/O Error](#): provides feedback on USB connection errors. A high [USB I/O Error](#) count points to your system being overloaded.
- [Buffer Underruns](#): Buffer underruns occur when your computer isn't able to process an audio buffer in time. Reasons for underruns include too many ongoing background tasks or high CPU usage within a music program.
- [Reset](#): A click on this button resets the error count.

Connection Monitor Section



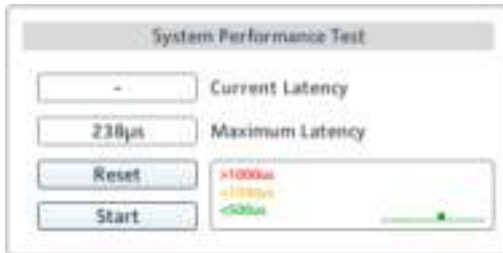
The Connection Monitor section in the Diagnostics page of the Control Panel.

The [Connection Monitor](#) section provides feedback on connected clients and USB data errors. It has two displays and a button:

- [Number of Clients](#): displays the number of clients connected to the interface. Multiple ASIO applications are counted separately. WDM and WASAPI increase the number by one, no matter how many WDM / WASAPI applications play audio.

- **USB Data Errors:** counts USB connection errors. Poor quality, or long USB cables as well as irradiation can be the source of connection errors on the USB bus.
- **Reset:** A click on this button resets the error count.

System Performance Test Section



The System Performance Test section in the Diagnostics page of the Control Panel.

The **System Performance Test** section provides monitoring of the current DPC (Deferred Procedure Call) latency value of your Windows system. A Deferred Procedure Call is a Windows mechanism which allows high-priority tasks (such as the basic system tasks) to delay lower-priority tasks. This specific DPC latency is not to be confused with the overall latency, explained in chapter [↑8.1, Technical Specifications](#), but it can add to it. The section has two displays and two buttons:

- **Current Latency:** displays the current DPC latency value.
- **Maximum Latency:** displays the highest DPC latency value monitored since the last time you either started or restarted monitoring.
- **Reset button:** Press this button to reset the **Maximum Latency** value to zero.
- **Start/Stop:** Press this button to start monitoring DPC latency. Once started, the button label changes to **Stop**.

Information Section



The Information section in the Diagnostics page of the Control Panel.

The **Information** section displays information about driver and firmware, and provides access to the Audio Troubleshooting Guide. This section has two displays and a button:

- **Driver Version:** See the currently installed driver version here.
- **Firmware Version:** See the currently installed firmware version here.
- **Troubleshooting Guide:** Click **Show** to open the Audio Troubleshooting Guide.

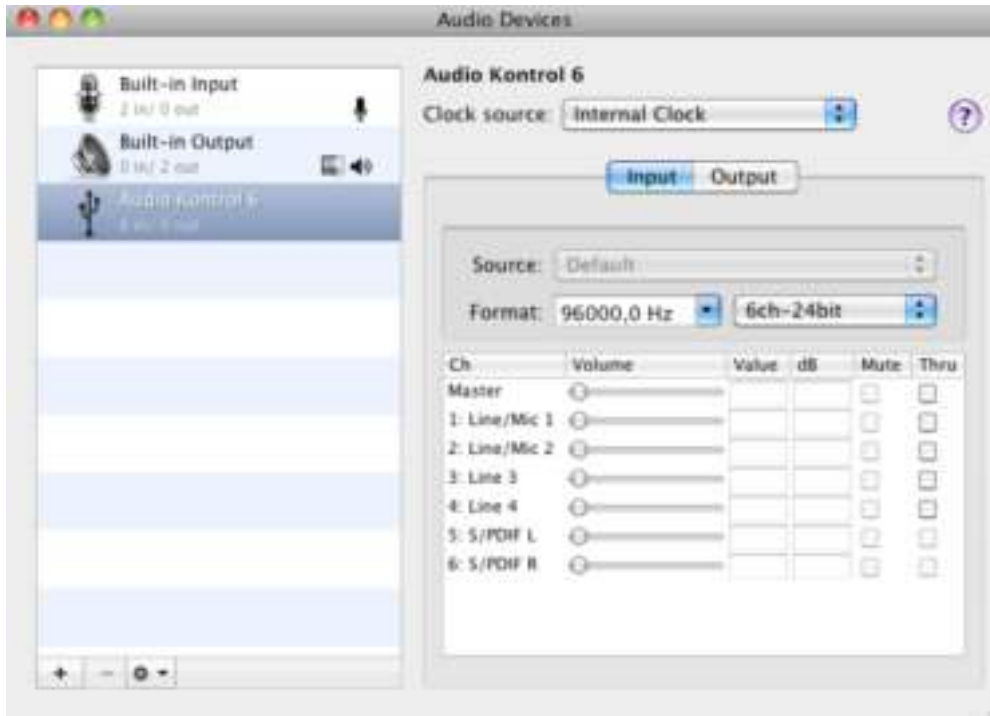
5.2 Advanced Configuration on Mac OS X (Audio MIDI Setup)

On Mac OS X, all advanced configuration settings can be accessed from the Audio MIDI Setup utility. To open the Audio MIDI Setup utility:

► Go to Applications > Utilities > Audio and MIDI Setup.

→ The Audio MIDI Setup utility will pop up in a window, entitled **Audio Devices**.

5.2.1 Input Pane



The Input pane of the Audio MIDI Setup utility in Mac OS X 10.6.

The Audio MIDI Setup's Input pane allows for selection of clock source settings, sample rate, and direct monitoring. The relevant areas/elements here are the [Clock source](#) drop-down menu, the [Format](#): drop-down menu, and the [Thru](#) checkboxes, respectively. See the following list for more detailed descriptions:

- **Clock source:** In the [Clock source](#) drop-down menu you can select whether the device uses its internal clock or gets synchronized to the clock of an external device. This is relevant when connecting to an external device via the digital In/Out 5/6 sockets (see also chapter [4.2, Rear Panel](#)). The drop-down menu holds the following entries:

- **Internal Clock** (standard setting): Leave this radio button selected if you don't want the device to be synchronized to the clock of an external device.
- **External Clock (S/PDIF)**: Select this radio button if you want the device to be synchronized to the clock of an external device via S/PDIF. When switching to this setting, the device automatically tries to establish synchronization to an external clock at the digital inputs 5/6 (see chapter [↑4.2, Rear Panel](#)). If the synchronization request fails, the interface switches back to internal clock mode. If synchronization is possible, the top panel's Sync LED lights (see chapter [↑4.3, Top Panel](#)).
- **Format**: Choose a sample rate that is compatible with your music application and suited to your computing power. A higher sample rate improves the audio quality, but also causes higher CPU load. By default, the sample rate is set to 44100 Hz (CD quality).



The sample rate defines how many samples are played/recorded per one second of sound. A higher sample rate results in higher audio quality; however, 44100 Hz (as used for recording audio CDs) is a common setting and absolutely sufficient for most tasks. If your final destination is CD, you should use this setting or a multiple of it (88200 Hz). For a better understanding: 48000 Hz is used by DAT recorders and for DVD (films) recording. 96000 Hz and higher rates are typical for DVD, HD DVD, and Blue-ray Disc audio recording. You should be aware that a higher sample rate also causes higher CPU load.

- **Thru**: The **Thru** checkboxes enable direct monitoring. This sends the input signals directly to its output at zero latency without any internal signal processing. Tick the checkbox of the relevant channel to activate direct monitoring. This setting is also accessible from the hardware's front panel in the MONITOR section (see also chapter [↑4.1, Front Panel](#)).



The channels' volume settings cannot be controlled from the Audio MIDI Setup utility; use the relevant hardware controls (see chapter [↑4, The Hardware in Detail](#)).

5.2.2 Output Pane

All relevant output settings of the KOMLETE AUDIO 6 are controlled from the hardware (see [↑4, The Hardware in Detail](#)). See chapter [↑5.2.1, Input Pane](#) for general settings and input channel settings.

6 Using the KOMPLETE AUDIO 6 (Setup Scenarios)

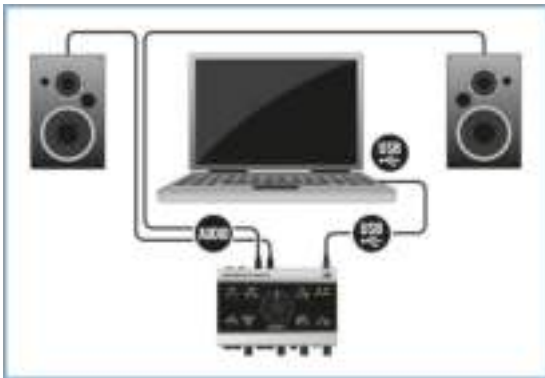
In this chapter, you will learn how to connect the KOMPLETE AUDIO 6 in various setup scenarios. Although we cannot cover all imaginable setups here, the examples are general enough to apply the information to most situations.



Please make sure to have installed the KOMPLETE AUDIO 6 driver as described in chapter ↑2, [Installing KOMPLETE AUDIO 6](#) prior to connecting the KOMPLETE AUDIO 6 to your computer. The device will not work properly otherwise.

6.1 Connecting Speakers

6.1.1 Connecting Active Monitor Speakers



KOMPLETE AUDIO 6 setup with active monitors.

Make sure the KOMPLETE AUDIO 6 is connected to your computer as described during the installation chapter (chapter ↑2, [Installing KOMPLETE AUDIO 6](#)), and is configured as your computer's main audio output device (see chapter ↑3, [Basic Configuration](#)).

To use active speakers (self-powered speakers with a built-in amplifier) with your KOMPLETE AUDIO 6:

1. Turn the Volume Control knob (**MAIN VOLUME 1/2**) on the top panel of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.
2. Connect the main outputs (**MAIN 1/2**) on the rear panel of the KOMPLETE AUDIO 6 to your active speakers with stereo 1/4" cables. First, connect the L output channel with the left speaker, then the R output channel to the right speaker.



3. Once you have connected the speakers to the device, set the gain knob on your active speakers to 0dB and turn them on.
4. Start the playback of an audio file on your computer.
5. Gradually turn the Volume Control knob (**MAIN VOLUME 1/2**) on top of the KOMPLETE AUDIO 6 to the right until you reach an appropriate listening level.

6.1.2 Using KOMPLETE AUDIO 6 in a Setup with Passive Speakers

Make sure the KOMPLETE AUDIO 6 is connected to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)), and is configured as your computer's main audio output device (see chapter [↑3, Basic Configuration](#)).

Passive speakers require amplification, so there will be an amplifier or powered mixer between the speakers and the KOMPLETE AUDIO 6. To use the KOMPLETE AUDIO 6 in a setup with passive speakers:

1. Turn your stereo amplifier / mixer off.
2. Connect the main outputs (**MAIN 1/2**) on the rear panel of the KOMPLETE AUDIO 6 to a pair of line inputs on your stereo amplifier / mixer with stereo 1/4" -to-RCA (phono) cables or suitable adapters. Connect the L output channel to the left line input channel, and the R output channel to the right line input channel of your stereo amplifier / mixer.

3. Turn your stereo amplifier / mixer on.
4. Turn the Volume Control knob (**MAIN VOLUME 1/2**) on the top panel of the KOMPLETE AUDIO 6 to the right-end stop to set the output to its maximum level.
5. Start the playback of an audio file on your computer.
6. Gradually raise your stereo console's / mixer's volume control level until you reach a good listening level.

6.2 Connecting Headphones

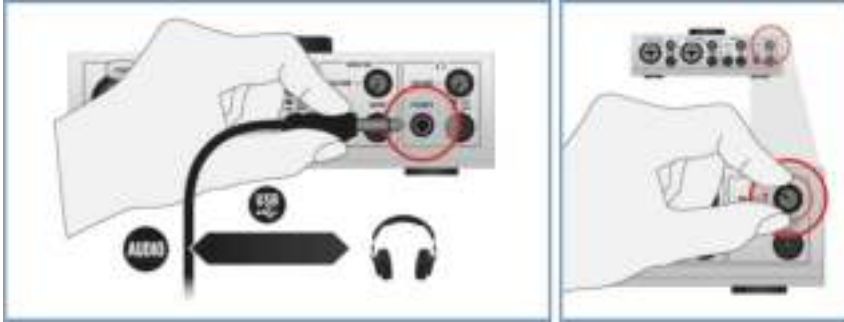


KOMPLETE AUDIO 6 setup with headphones.

Make sure the KOMPLETE AUDIO 6 is connected to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)), and configured as your computer's main audio output device (see chapter [↑3, Basic Configuration](#)).

To use headphones with your KOMPLETE AUDIO 6:

1. Plug the 1/4" TRS jack of your headphones into the PHONES socket on the KOMPLETE AUDIO 6's front panel. Turn the Headphone Volume Control knob (VOLUME) of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.

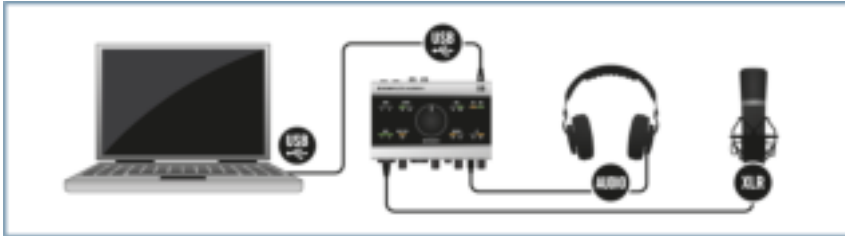


2. Start the playback of an audio file on your computer.
3. Gradually turn the Headphone Volume Control knob (VOLUME) of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.

6.3 KOMPLETE AUDIO 6 in a Recording Setup

The following instructions will assist you in using the KOMPLETE AUDIO 6 in a recording situation for capturing audio to your computer, and monitoring the input and result over your speakers or headphones. In most cases, you will use a third party DAW (digital audio workstation) software or another audio recording and editing software for recording voice or instruments. For instructions on how to configure audio and MIDI routing and recording, please refer to your software's documentation.

6.3.1 Connecting a Condenser Microphone



KOMPLETE AUDIO 6 setup with microphone and headphones.

Make sure to have connected the KOMPLETE AUDIO 6 to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)) of this manual.



Make sure the volume on the KOMPLETE AUDIO 6's main outs (Volume Control knob "MAIN VOLUME 1/2") is turned down before connecting a microphone to the KOMPLETE AUDIO 6. Microphones nearby speakers can cause a loud squealing tone from the speakers due to a phenomenon called the Larsen effect or audio feedback loop and can seriously damage your hearing and your equipment. The greater the distance between a microphone and speakers means this effect is less likely to occur.

To use the KOMPLETE AUDIO 6 in a recording setup with a condenser microphone:

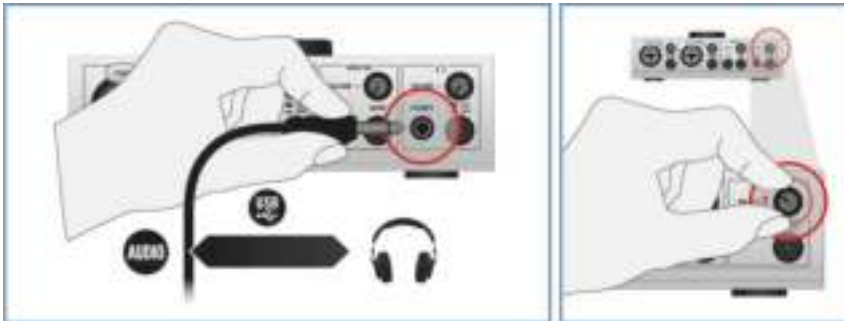
1. Turn the Volume Control knob (MAIN VOLUME 1/2) on the top panel of the KOMPLETE AUDIO 6 to the left-end stop to set the main output volume to minimum.
2. Plug an XLR cable jack from your condenser microphone into either INPUT 1 or INPUT 2 on the front panel of your KOMPLETE AUDIO 6.



- Switch the phantom power (48V button on the device's rear panel) on. The 48V LED on the device's top panel will light orange.



- Plug the 1/4" TRS jack of your headphones into the PHONES socket on the KOMPLETE AUDIO 6's front panel. Turn the Volume Control knob (VOLUME) in the headphone section of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.

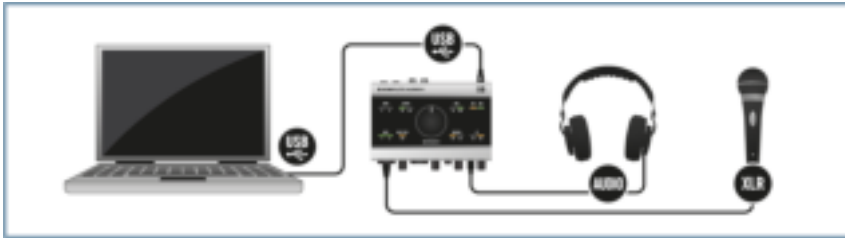


- Open the audio preferences of your audio recording software, and select KOMPLETE AUDIO 6 as your input and output device (you may have to restart your host software for the changes to become active). Please refer to the documentation of your audio recording software for information on how to configure the audio device setup.
- While singing / playing an instrument into the microphone, adjust the input signal by turning the relevant input channel's GAIN knob gradually to the right. Check the input LEDs (INPUT 1 and 2 on the top panel of the KOMPLETE AUDIO 6) to make sure your input signal does not clip; adjust the input level so that the LEDs light green on input. A red lighting LED indicates signal clipping.
- Gradually turn the Volume Control knob (VOLUME) in the headphone section of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.



For information on how to adjust the audio input for recording in your audio recording software, please refer to your software's documentation.

6.3.2 Connecting a Dynamic Microphone



KOMPLETE AUDIO 6 setup with microphone and headphones.

Make sure to have connected the KOMPLETE AUDIO 6 to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)) of this manual.



Make sure the volume on the KOMPLETE AUDIO 6's main outs (Volume Control knob "MAIN VOLUME 1/2") is turned down before connecting a microphone to the KOMPLETE AUDIO 6. Microphones nearby speakers can cause a loud squealing tone from the speakers due to a phenomenon called the Larsen effect or audio feedback loop and can seriously damage your hearing and your equipment. The greater the distance between a microphone and speakers means this effect is less likely to occur.

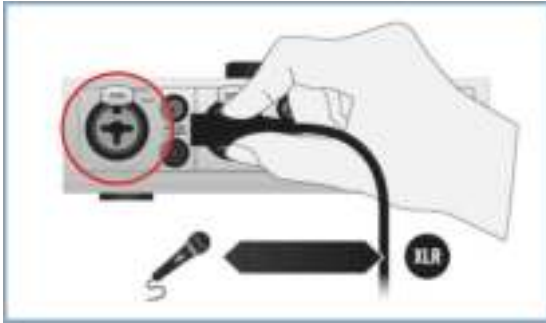


Be aware that phantom power can cause serious damage to ribbon microphones. Check your microphone's manual to see whether it is safe to use phantom power on it. If it isn't, make sure to disable phantom power on the interface before connecting: Switch the 48V phantom power button on the device's rear panel off. The 48V LED on the device's top panel stops lighting orange when phantom power is disabled.

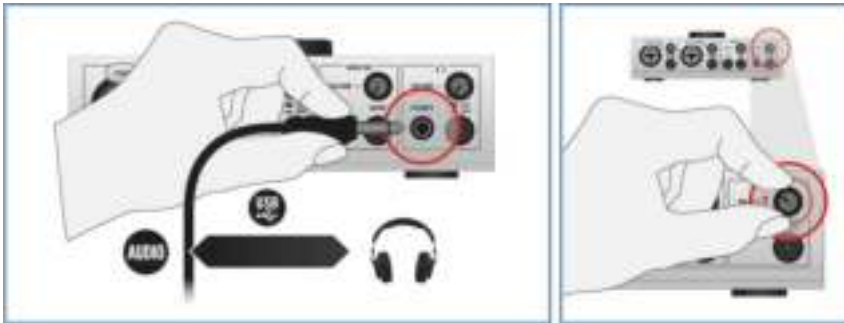
To use the KOMPLETE AUDIO 6 in a recording setup with a dynamic microphone:

1. Turn the Volume Control knob (MAIN VOLUME 1/2) on the top panel of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.

- Plug the XLR cable connection of your dynamic microphone into either **INPUT 1** or **INPUT 2** on the front panel of your KOMPLETE AUDIO 6.



- Plug the 1/4" TRS jack of your headphones into the **PHONES** socket on the KOMPLETE AUDIO 6's front panel. Turn the Volume Control knob (**VOLUME**) in the headphone section of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.

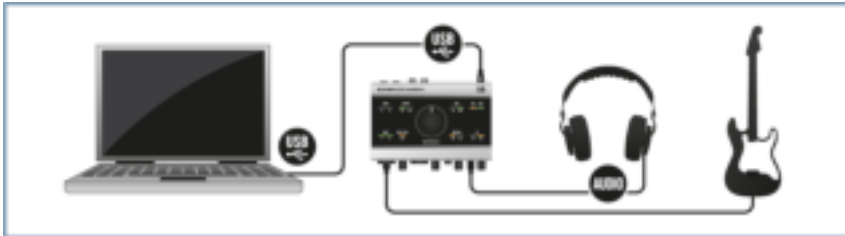


- Open the audio preferences of your audio recording software, and select KOMPLETE AUDIO 6 as your input and output device (you may have to restart your host software for the changes to become active). Refer to the documentation of your audio recording software for information on how to configure the audio device setup.
- While singing / playing an instrument into the microphone, adjust the input signal by turning the relevant input channel's **GAIN** knob gradually to the right. Check the input LEDs (**INPUT 1** and **2** on the top panel of the KOMPLETE AUDIO 6) to make sure your input signal does not clip; adjust the input level so that the LEDs light green on input. A red lighting LED indicates signal clipping.
- Gradually turn the Volume Control knob (**VOLUME**) in the headphone section of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.



For information on how to record in your audio recording software, please refer to your software's documentation.

6.3.3 Connecting a Guitar / Bass Guitar (with headphones)

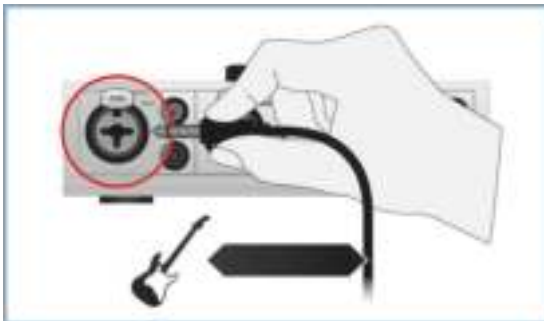


KOMPLETE AUDIO 6 setup with guitar / bass guitar and headphones.

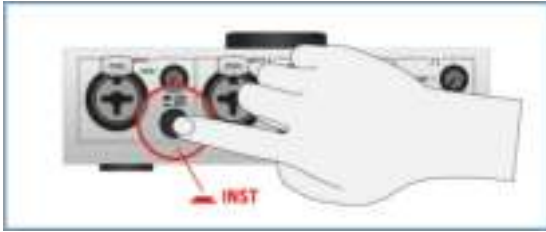
Make sure to have connected the KOMPLETE AUDIO 6 to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)) of this manual.

To use the KOMPLETE AUDIO 6 in a recording setup with a guitar / bass guitar:

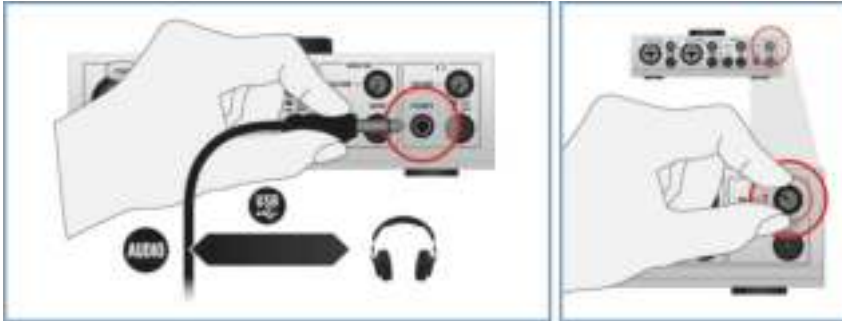
1. Turn the Volume Control knob (**MAIN VOLUME 1/2**) on the top panel of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.
2. Plug a 1/4" instrument cable (unbalanced) from your instrument into either **INPUT 1** or **INPUT 2** of the KOMPLETE AUDIO 6.



3. Make sure the **LINE/INST** button adjacent to the jack is set to **INST** (for instruments with active electronics, set this to **LINE**).



4. Plug the 1/4" TRS jack of your headphone cable into the **PHONES** socket on the KOMPLETE AUDIO 6's front panel. Turn the Volume Control knob (**VOLUME**) in the headphone section of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.



5. Open the audio preferences of your audio recording software, and select KOMPLETE AUDIO 6 as your input and output device (you may have to restart your host software for the changes to become active). Refer to the documentation of your audio recording software for information on how to configure the audio device setup.
6. Make sure that the Volume knob on your instrument is at maximum.
7. While playing your instrument, adjust the input signal by turning the relevant input channel's **GAIN** knob gradually to the right. Check the input LEDs (**INPUT 1** and **2** LEDs on the top panel of the KOMPLETE AUDIO 6) to make sure your input signal does not clip; adjust the input level so that the LEDs lights green on input. A red lighting LED indicates signal clipping.
8. Gradually turn the Volume Control knob (**VOLUME**) in the headphone section of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.



For information on how to adjust the audio input for recording in your audio recording software, please refer to your software's documentation.

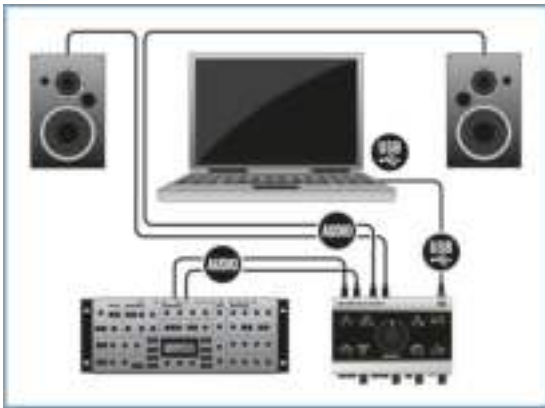


Instead of using headphones, you could also listen to the instrument sound using your monitor speakers. See the relevant chapters for information on how to connect speakers to the KOMPLETE AUDIO 6. Always make sure the volume is set to minimum when connecting the instrument, and gradually raise the volume afterwards until you reach a good listening level.



Instead of using headphones, you could also listen to the instrument sound using your monitor speakers. See the relevant chapters for information on how to connect speakers to the KOMPLETE AUDIO 6. Always make sure the volume is set to minimum when connecting the instrument, and gradually raise the volume afterwards until you reach a good listening level.

6.3.4 Connecting Line Level Equipment (Synthesizer/Computer/Tapedeck/Mixer Line Out)

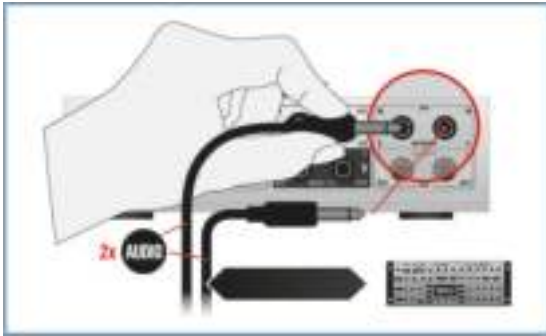


KOMPLETE AUDIO 6 setup with a synthesizer and active speakers.

Make sure the KOMPLETE AUDIO 6 is connected to your computer as described during the installation chapter (chapter ↑2, [Installing KOMPLETE AUDIO 6](#)), and configured as your computer's main audio output device (see chapter ↑3, [Basic Configuration](#)). See chapter ↑6.1, [Connecting Speakers](#) for instructions on how to connect speakers (active and passive) to your KOMPLETE AUDIO 6.

To use the KOMPLETE AUDIO 6 in a setup with typical line level equipment:

1. Turn the Volume Control knob (**MAIN VOLUME 1/2**) on the top panel of the KOMPLETE AUDIO 6 to the left-end stop to set the volume to minimum.
2. Plug a pair of stereo 1/4" TRS cables from the outputs of your device into the inputs **IN 3** and **IN 4** on the rear panel of the KOMPLETE AUDIO 6 or unbalanced 1/4" cable if you are using a mono device.

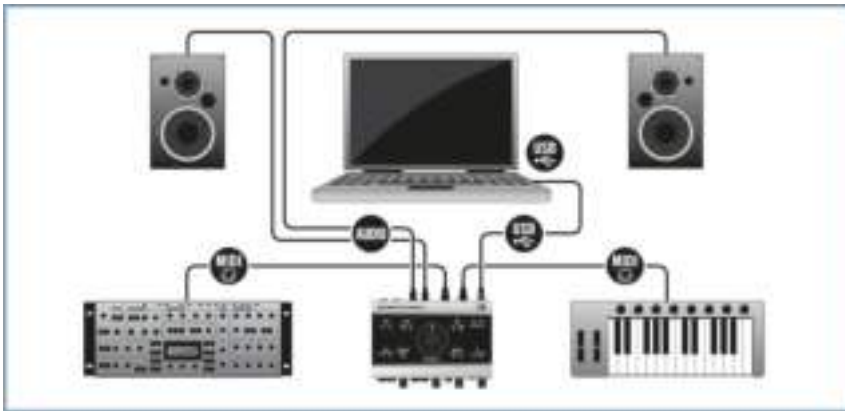


3. Open the audio preferences of your audio recording software, and select the KOMPLETE AUDIO 6 as your input and output device (you may have to restart your host software for the changes to become active). Refer to the documentation of your audio recording software for information on how to configure the audio device setup.
4. Adjust the output signal of your connected device by using the relevant volume/gain control. Check the KOMPLETE AUDIO 6's input LEDs (**INPUT 3** and **4** on the top panel) to make sure your input signal does not clip; adjust the device's output level so that the LEDs light green on input. A red lighting LED indicates signal clipping.
5. Gradually turn the Volume Control knob (**MAIN VOLUME 1/2**) on top of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.



You can also use **INPUT 1** and **INPUT 2** on the front panel of the KOMPLETE AUDIO 6 to connect a line level device with a stereo output. The **LINE/INST** buttons adjacent to the sockets have to be set to **LINE** in that case and you'd use the relevant **GAIN** control buttons next to the sockets to adjust the left and right channels input gain.

6.4 KOMPLETE AUDIO 6 with MIDI Devices

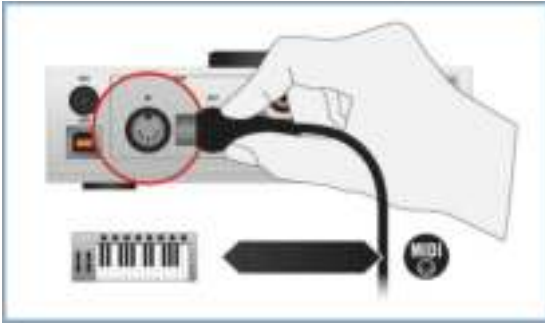


KOMPLETE AUDIO 6 in a MIDI controller / synthesizer setup.

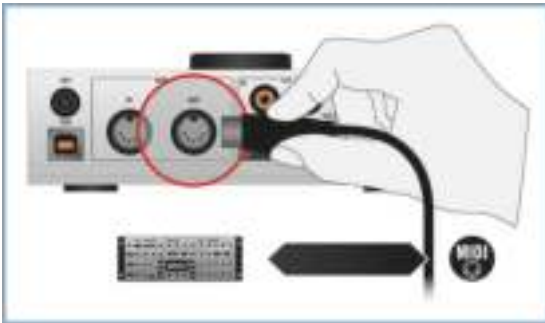
Make sure the KOMPLETE AUDIO 6 is connected to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)), and configured as your computer's main audio output device (see chapter [↑3, Basic Configuration](#)). See chapter [↑6.1, Connecting Speakers](#) for instructions on how to connect speakers (active and passive) to your KOMPLETE AUDIO 6. To use the KOMPLETE AUDIO 6 in a setup with a MIDI controller:

1. Make sure to have the Volume Control knob (**MAIN VOLUME 1/2**) on the top panel of the KOMPLETE AUDIO 6 turned to the left-end stop so the volume is set to minimum.

- Attach a MIDI cable. One end goes to your MIDI controller's MIDI Out port, the other end to the **MIDI IN** port of the KOMPLETE AUDIO 6.



- If you are controlling an external synth: attach a MIDI cable, one end to your Synth's MIDI IN port, the other to the **MIDI OUT** port of the KOMPLETE AUDIO 6.



- Open the audio and MIDI settings dialog of your digital audio workstation software and activate the MIDI input and the MIDI output channel of your KOMPLETE AUDIO 6. For information on where to find the relevant dialog and how to apply the settings, please refer to the documentation of your digital audio workstation software.
- Gradually turn the Volume Control knob (**MAIN VOLUME 1/2**) on top of the KOMPLETE AUDIO 6 to the right until you reach a good listening level.



To develop this setup further, you could now connect the synth's audio output to the KOMPLETE AUDIO 6 and record the synthesizer with your digital audio workstation.

6.5 Using the Digital Input and Output

About Digital I/O and S/PDIF

The **SPDIF** RCA (phono) sockets **5/6** on the rear panel of the KOMPLETE AUDIO 6 are digital connectors employing the S/PDIF (Sony/Philips Digital Interconnect Format) transfer protocol. S/PDIF allows for carrying digital audio signals between devices without loss of quality. Typical users of the RCA (phono) sockets **5/6** would be DAT tape decks, synthesizers and CD players with digital output.

In essence, Digital I/O transmits digital information in both directions (using two mono RCA cables). The electronic data transferred is digital data and gets translated to sound waveforms via S/PDIF. For this connection, a digital RCA cable should be used, although it is also possible to use standard RCA (phono) cables.

In order for the transfer to work, the devices need to be synchronized with each other, whereby one of the devices acts as a master and sends a syncing signal and the other acts as a slave and syncs to it. The KOMPLETE AUDIO 6 can be set to act as a slave, and sync to external devices in such a setup.

6.5.1 Connecting a DAT Tape Deck



KOMPLETE AUDIO 6 connected to a DAT tape deck.

Make sure to connect the KOMPLETE AUDIO 6 to your computer as described during the installation chapter (chapter [↑2](#), [Installing KOMPLETE AUDIO 6](#)) of this manual.

To use the KOMPLETE AUDIO 6 in a setup with a DAT tape deck:

1. Connect the KOMPLETE AUDIO 6's **SPDIF** RCA (phono) input jack **IN 5/6** to the digital output of your DAT tapedeck, and the KOMPLETE AUDIO 6's **SPDIF** RCA (phono) output jack **OUT 5/6** to the digital input of your DAT tapedeck.



2. For Windows users: Open the KOMPLETE AUDIO 6's Control Panel software. In the Control Panel, go to the **Audio Settings** page and set the **Digital Sync Source** to the **External S/PDIF 5|6** setting. The KOMPLETE AUDIO 6 checks for availability of external syncing sources. If the synchronization request fails, the interface switches back to internal clock mode. If synchronization is possible, the top panel's Sync LED lights (see chapter [↑4.3, Top Panel](#)).
3. For Mac OS X users: Go to Applications > Utilities > Audio and MIDI Setup to open the Audio and MIDI Setup utility. From the **Clock source** drop-down menu select External Clock (S/PDIF). The KOMPLETE AUDIO 6 checks for availability of external syncing sources. If the synchronization request fails, the interface switches back to internal clock mode. If synchronization is possible, the top panel's Sync LED lights (see chapter [↑4.3, Top Panel](#)).

6.5.2 Connecting a Synthesizer via Digital I/O

Make sure to connect the KOMPLETE AUDIO 6 to your computer as described during the installation chapter (chapter [↑2, Installing KOMPLETE AUDIO 6](#)) of this manual.

To use the KOMPLETE AUDIO 6 with a synthesizer with digital output:

1. Connect the KOMPLETE AUDIO 6's **SPDIF** RCA (phono) input jack **IN 5/6** to the digital output of your synthesizer.

2. For Windows users: Open the KOMPLETE AUDIO 6's Control Panel software. In the Control Panel, go to the [Audio Settings](#) page and set the [Digital Sync Source](#) to the [External S/PDIF 5|6](#) setting. The KOMPLETE AUDIO 6 checks for availability of external syncing sources. If the synchronization request fails, the interface switches back to internal clock mode. If synchronization is possible the top panel's Sync LED lights orange (see also chapter [↑4.3, Top Panel](#)).
3. For Mac OS X users: Go to Applications > Utilities > Audio and MIDI Setup to open the Audio and MIDI Setup utility. From the [Clock source](#) drop-down menu select External Clock (S/PDIF). The KOMPLETE AUDIO 6 checks for availability of external syncing sources. If the synchronization request fails, the interface switches back to internal clock mode. If synchronization is possible the top panel's Sync LED lights orange (see also chapter [↑4.3, Top Panel](#)).

6.6 Direct Monitoring

In the [Monitor](#) section of the KOMPLETE AUDIO 6 audio interface, you can set the device to bypass any signal processing and send the audio signal from the input directly to the output of the device at zero latency. This function is known as Direct Monitoring.



The Direct Monitoring feature only applies to inputs [IN 1/2](#) and is not available for inputs [IN 3/4](#) and [IN 5/6](#).

You can activate Direct Monitoring via the [ON](#) switch in the [Monitor](#) section, which is located on the front panel of the KOMPLETE AUDIO 6. This routes the signal of the inputs [IN 1](#) and [IN 2](#) directly to the selected outputs. The [ON](#) switch also doubles as an output [MONITOR](#) selector switch. When held for one second, it cycles through three monitoring modes:

- Monitor signal to outputs [OUT 1/2](#)
- Monitor signal to outputs [OUT 3/4](#)
- Monitor signal to both output pairs [OUT 1/2](#) and [OUT 3/4](#)

The LEDs on the device's top panel display which monitoring mode is active.

7 Troubleshooting

The information provided in this chapter should help you to solve most of the problems you may encounter while you are using the KOMLETE AUDIO 6.

7.1 Solving Hardware-related Problems

All Native Instruments products are extensively tested in real life situations during the development phase. However, if you encounter any problems with your hardware, please check the following points:

- Verify that you have installed the latest driver and the latest software update. Check the Native Instruments website for further information.
- Make sure the KOMLETE AUDIO 6 interface is connected to a USB 2.0 port on your computer (see also [↑7.3, Troubleshooting \(Windows\)](#)).
- Make sure the KOMLETE AUDIO 6 is connected directly to a USB port of the computer and not through a USB hub (see also [↑7.3, Troubleshooting \(Windows\)](#)).
- Replace the USB cable (see also [↑7.3, Troubleshooting \(Windows\)](#)).
- Disconnect all other USB devices from the computer (except keyboard/mouse if not built in).
- Try using another USB port on your computer (see also [↑7.3, Troubleshooting \(Windows\)](#)).

If none of these tips help, please contact our Technical Support team. The contact information is available under the following URL: <http://www.native-instruments.com/contactinfo>. In case the KOMLETE AUDIO 6 needs to be returned, the Technical Support team at Native Instruments will assign you an RA (Return Authorization) number, which is required to handle your return. Packages returned without this RA number will not be correctly identified and as such might not be processed properly.

7.2 How to Check Whether the KOMPLETE AUDIO 6 Drivers are Installed Correctly

Windows

Open Start > All Programs > Native Instruments > KOMPLETE AUDIO 6 Driver. There you will find the helper application Control Panel. Make sure that the device is connected to the computer and open the Control Panel. If all the drop-down menus are grayed out (i.e., there are no presets in the preset drop-down list and no sample rate values to choose from) there must be something wrong with the connection. If the KOMPLETE AUDIO 6 Driver entry in the Native Instruments folder of the Start Menu is missing, the driver is most probably not installed.

- If the driver is not installed, you can install it as described in chapter [↑2, Installing KOMPLETE AUDIO 6](#).
- If the driver is not recognized, check your USB 2.0 connection as described in chapter [↑7.3, Troubleshooting \(Windows\)](#).
- As any other USB device, the driver installs exactly for one USB port. If you connect the KOMPLETE AUDIO 6 to another port, a standard Windows dialog opens in which you can install the driver to that port. If you have previously installed the driver on your computer once, Windows will find the right drivers itself once that you start the driver installation procedure.
- If you do not know whether drivers were installed correctly, it is advisable to start the setup program of the KOMPLETE AUDIO 6 again (see chapter [↑2, Installing KOMPLETE AUDIO 6](#)). If the setup program states that it will first uninstall the drivers, you already have installed the drivers on your computer. In this case you can connect the device to any other USB port and Windows will find the right driver when installing the KOMPLETE AUDIO 6 on another USB port.

Mac OS X

On Mac OS X, open the System Preferences; with the device connected and the driver installed, the KOMPLETE AUDIO 6 icon should be listed in the [Other](#) section.

- If the icon is missing here, the driver is probably not installed.

- If the driver is not installed, you can install it as described in chapter [↑2, Installing KOM-
COMPLETE AUDIO 6](#).
- If the device is not recognized, check your USB 2.0 connection as described in chapter [↑7.3, Troubleshooting \(Windows\)](#).

7.3 Troubleshooting (Windows)

If you use a computer running Windows and experience problems, please see this Knowledge Base article:

<http://www.native-instruments.com/en/support/knowledge-base/show/800/ni-audio-interface-troubleshooting-guide-windows/>

7.4 Choosing the Correct USB Cable

If your device repeatedly loses USB connection to the computer or behaves otherwise erratically, make sure you are using a suitable USB 2 cable. To learn how to identify USB 2 cables, please see this Knowledge Base article:

<http://www.native-instruments.com/en/support/knowledge-base/show/2085/choosing-the-correct-usb-cable-for-your-ni-hardware-device/>

7.5 Getting Help

Native Instruments provides various sources of support and information.

7.5.1 Readme, Knowledge Base, Technical Support

Readme

Always read the “Readme” file found on the installation CD. It contains important information and all last minute changes that could not be included in this manual.

Knowledge Base

Access the Knowledge Base at <http://www.native-instruments.com/knowledgebase>. To search the Knowledge Base log into your user account first. For information on registering a user account, see chapter ↑2.2.1, [Important Installation Information](#).

Technical Support

You can reach the Technical Support team online via <http://www.native-instruments.com> > [Support](#) > [Product Support](#). The subsequent form will ask you for all information about your hardware and software environment to better facilitate our support team. In your communication with the support team, you should offer as much information as possible; about your hardware, your operating system and the software you are running. In your description, you should mention:

- How to reproduce the problem
- What you have already done to try to fix the problem
- A description of your setup, including all hardware and software involved
- The exact model and technical specifications of your computer

7.5.2 Forum

Check out the NI online forum to discuss all aspects of KOMLETE AUDIO 6 with other users: <http://www.native-instruments.com/forum/>.

7.6 Updates

Whenever you encounter problems, you should also check if you have the latest driver is installed. For updates, visit the product page on our website: <http://www.native-instruments.com/KA6>.

7.7 Resolving Ground Loop Issues

Ground loops are a common problem within any environment where multiple electrical devices are connected to the same power circuit. In complex setups, the cause(s) of the noise can be difficult to find. Ground loops are perceived usually as a hum or buzz in your audio signal, but this can also transmit and amplify other sounds from the devices connected to the circuit. For example, one very common problem is that you hear internal clicking sounds created by your computer.

For information on how to resolve issues related to ground loops, please see this Knowledge Base article:

<http://www.native-instruments.com/en/support/knowledge-base/show/250/how-to-resolve-ground-loop-issues-humming-and-buzzing-sounds/>

8 Appendix

8.1 Technical Specifications

Output (D/A)	
Channels	6
Sampling Rate	44.1, 48, 88.2, 96kHz
Bit Resolution	24
Converter	Cirrus Logic

Spec	Line	Headphone
Cross Talk	-87dBu	-87dBu
Impedance	100 Ohms unbalanced 200 Ohms balanced	8... 600Ohms (Load)
Maximum Output Level	9.6dBu	9.3dBu 4.26Vrms, 100mW @ 100 Ohms
THD + N	0.007%	0.012%
SNR	101dB (A-weighted)	95dB (A-weighted)
Frequency Response	10-40kHz±0.5 dB	10-40kHz±0.5dB

8.2 About Latency and Buffers

When converting audio information to digital and vice versa, the audio driver needs to store the data in buffer packages (audio buffers) which are then sent to and processed by the CPU of your computer. The larger the buffer, the more delay. You might experience this as late response between hitting a key on a controller which controls music software on your computer,

and hearing the sound at the output. Fortunately, with today's computers and low-latency sound card drivers, this delay is usually very low (e.g., three milliseconds is about the same delay caused by fingers snapping one meter away from your ears). Latency must be kept at a minimum in order to make software instruments and DJ applications playable.

How Low Can You Go?

1.5 ms of latency approaches the theoretical minimum because it will always take some time to process information in a computer. Note that ultra-low buffer size settings (as well as higher sample rates) make your computer work harder, which can affect the performance.

See [↑5.1.1, Audio Settings Page](#) (Windows) and [↑5.2.1, Input Pane](#) (Mac OS X) for instructions on how to adjust buffer sizes, sample rates for shorter latency.



For Windows users: If you cannot get rid of audio dropouts, crackles and noises by adjusting buffer size and sample rate settings, you might also check your system for DPC latency problems (see the "System Performance Test" section of chapter [↑5.1.2, Diagnostics Page](#) for mor info on DPC latency) using the DPC Latency Checker program, which is found on the web at http://www.thesycon.de/eng/latency_check.shtml.

8.3 Different Types of ASIO (Windows)

It is extremely important to use the dedicated ASIO driver written for the KOMPLETE AUDIO 6 and installed during software installation (chapter [↑2, Installing KOMPLETE AUDIO 6](#)). However, ff your system also provides generic ASIO drivers, typically called ASIO DirectX Full Duplex Driver or ASIO Multimedia Driver, and you cannot get the KOMPLETE AUDIO 6 driver to work at low latencies, try them all and choose the one that provides the best performance.

Index

Numerics

48V [18]

A

Audio configuration

advanced [22]

basic [14]

DAW [15]

B

Basic audio configuration [14]

C

Connecting a condenser microphone [37]

Connecting a dynamic microphone [39]

Connecting a synthesizer via digital I/O [48]

Connecting an instrument [41]

Connecting headphones [35]

Connecting line level equipment [44]

Connecting MIDI [45]

Connecting Speakers

active [33]

passive [34]

Contact [52]

Control Panel [22]

D

Digital in/out [19] [47]

Direct Monitoring [17] [49]

Mac [32]

mono [17]

selecting the source [17]

stereo [17]

Windows [26]

DPC latency (Windows only) [29]

G

Ground loops

avoiding [54]

H

Hardware overview [16]

I

Instrument mode [17]

L

Latency

- about [55]

Latency optimization

- Windows [24]

Line mode [17]

P

Phantom power [18]

S

Sample rate setting

- Mac [32]

- Windows [24]

SPDIF SYNC [21]

Sync Source

- Mac [31]

- Windows [26]

Syncing to external gear

- Mac [31]

- Windows [26]

T

Troubleshooting [50]

- Windows [52]

V

Volume control [20]