**KURZWEIL®** 

# UNITE-Z USER'S MANUAL

**English Manual** 

**HDC** YOUNG CHANG



DO NOT BEMOVE THE COVER NO USER SERVICEARLE PARTS INSIDI REFER SERVICING TO OUAL IEIED SERVICE PERSONNE



e is intended to alert the user to the presence of uninsulate prous voltage" within the product's enclosure that may be of



The exclamation point within an equilateral triangle is intent to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature

#### IMPORTANT SAFETY & INSTALLATION INSTRUCTIONS

INSTRUCTIONS PERTAINING TO THE RISK OF FIRE ELECTRIC SHOCK, OR INJURY TO PERSONS

WARNING: When using electric products, basic precautions should always be followed, including the following:

- Read all the Safety and Installation Instructions and Explanation of Graphic Symbols before using the product.
- This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product electric current to reduce the risk of electric shock. This product is equipped with a power supply cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use an adaptor which defeats the function of the equipment-grounding conductor. If you are in doubt as to whether the product is properly grounded, check with a qualified serviceman or electric

- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
- This product should only be used with a stand or cart that is recommended by the manufacturer.
- This product, either alone or in combination with an amplifier and Inis product, eitner aione or in combination with an amplinier and speakers or headphones, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- This product should be located so that its location or position does not interfere with its proper ventilation.
- The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.

- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the 8 product
- This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of
- The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time. When unplugging the power supply cord, do not pull on the cord, but grasp it by the plug.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
  - The product should be serviced by qualified service personnel when
  - A. The power supply, power cord or plug have been damaged;
  - B. Objects have fallen, or liquid has been spilled into the
  - C. The product has been exposed to rain;
  - The product does not appear to be operating normally or exhibits a marked change in performance:
  - F The product has been dropped or the enclosure damaged
  - Do not attempt to service the product beyond that described in the user maintenance instructions. All other servicing should be the user maintenance instructions. All referred to qualified service personnel.
- 14. WARNING: Do not place objects on the product's power supply cord, or place the product in a position where anyone could trip over, walk on, or roll anything over cords of any type. Do not allow the product to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.

## RADIO AND TELEVISION INTERFERENCE

WARNING: Changes or modifications to the instrument not expressly approved by Young Chang could void your authority to operate the instrument.

IMPORTANT: When connecting this product to accessories and/or other equipment use only high quality shielded cables.

NOTE: This instrument has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rugars. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This instrument penerates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause martiful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this instrument does cause harmful interference to radio or television reception, which can be determined by turning the instrument off and on, the user is encouraged to try to correct the interference by one or more of the following measures

Recrient or relocate the receiving antenna.

- Increase the separation between the instrument and the receiver. Connect the instrument into an outlet on a circuit other than the one to which the receiver is connected
- If necessary consult your dealer or an experienced radio/television technician for additional suggestions

The normal function of the product may be disturbed by strong electromagnetic interference. If so, simply reset the product to resume normal operation by following the instructions in the manual. If normal function does not resume, please use the product in another location.

This apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada

# SAVE THESE INSTRUCTIONS

# IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet
- 10) Protect the power cord and power supply adapter from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.





- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

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Contact the Kurzweil office listed below to locate your local Kurzweil representative.

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# Table of contents

1. lı	ntroduction	5	
	1.1 Features	5	
2. lı	nstallation	7	
	2.1 System Recommendation	7	
	2.2 Hardware Installation	7	
	2.3 Driver & Software Installation	7	
	2.3.1 Installation under Windows	7	
	2.3.2 Installation under macOS	9	
3. Windows Audio Settings10			
4. C	Control Panel under Windows	11	
	4.1 Latency settings	12	
	Control Panel under macOS		
	. Specifications		

# 1. Introduction

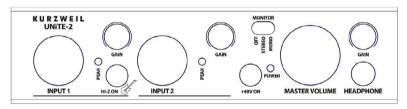
The KURZWEIL UNITE-2 offers a maximum of flexibility as fully bus powered USB device with pristing professional 24-bit audio quality.

It features 2 analog input and 2 analog output channels with two microphone preamplifiers with XLR input and support for +48V phantom power, a Hi-Z instrument input for electric guitars, a high quality headphone output and TRS line outputs. Master and headphone volume as well as monitoring are controlled on the front panel.

On the software side, UNITE-2 provides low latency drivers with support for WDM, ASIO 2.0 and CoreAudio.

#### 1.1 Features

The UNITE-2 hardware has these main features, from left to right:





- 1. Microphone INPUT 1 with XLR/TRS combo connector, use this connector to connect a dynamic or condenser microphone with an XLR cable, an electric guitar with a TRS cable or a line signal with a TRS cable. Next to it is the PEAK LED that shows when the input signal is too loud and clipping, the GAIN knob controls the input level. With the HI-Z ON switch, the input (when pressed) gets switched so that it can be used with an electric guitar. When it is not pressed, the input will be used for line level or microphone signals.
- Microphone INPUT 2 with XLR/TRS combo connector, use this connector to connect a dynamic or condenser microphone with an XLR cable, or a line signal with a TRS cable. Next to it is the PEAK LED that shows when the input signal is too loud and clipping, the GAIN knob controls the input level.
- 3. The MONITOR switch controls the real time input monitoring. When it is set to OFF, you cannot hear any input signals but you can still record them. The OFF setting is useful when you are monitoring the input signal through your recording software. When it is set to MONO, the signals from the left and right input will both be audible via the output on both channels as a mono down-mixed signal.

- 4. The POWER LED shows when UNITE-2 is turned on.
- The +48V ON switch enables the phantom power for the microphone inputs when used with condenser microphones.
- 6. The MASTER VOLUME knob controls the master output volume.
- Via the HEADPHONE section you can connect your headphones and control the playback volume via the GAIN knob.
- 8. The LEFT / 1 and RIGHT / 2 LINE OUTPUTS with TRS connectors are on the backside. Connect these to your active speakers or your amplifier.
- 9. The **USB** port connects UNITE-2 with your computer using the included cable.

# 2. Installation

#### 2.1 System Recommendation

UNiTE-2 is not simply a standard digital audio interface, but a high-resolution device capable of advanced processing of audio content. Even though UNiTE-2 is built to have low-CPU resource dependability, system specifications play a key part in the UNiTE-2s performance. Systems with more advanced components are generally recommended.

#### Minimum System Requirements

#### PC

- Windows Windows 7 / 8 / 8.1 or 10 (32- and 64-bit) operating system
- 1 available USB 2.0 port

#### Mac

- Mac OS X / macOS 10.7 or higher
- 1 available USB 2.0 port

#### 2.2 Hardware Installation

UNiTE-2 is simply connected to an available USB port of your computer. A separate power supply is not required, as UNiTE-2 is a USB powered device. Simply install the hardware by plugging it into your computer with the supplied cable.



USB port of a computer

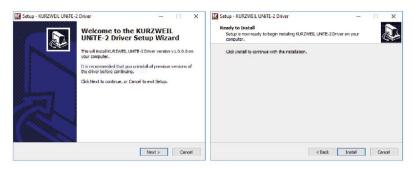
#### 2.3 Driver & Software Installation

After the connection of UNiTE-2, the operating system automatically detects it as a new hardware device. Modern operating systems like Windows 7/8/10 or macOS usually detect the hardware and begin installing the correct USB audio drivers automatically.

#### 2.3.1 Installation under Windows

This text explains how to install UNiTE-2 under Windows 10. If you use Windows 7, Windows 8 or Windows 8.1, the steps are basically the same. Disconnect UNiTE-2 before you install the driver if it has been connected already.

To start the installation, download the setup program from our website and launch the setup program by double clicking on it. The setup program is an .exe file, typically the filename is something like setup\_KURZWEIL\_UNITE-2\_vX.YYYY.exe where X.YYYY is the version number of the driver. When launching the installer, Windows might display a security message. Make sure to allow the installation. After that, the following dialog on the left will appear. Click Next and then the dialog on the right will appear:



Now click Install. Files are now being copied. After some time an additional dialog will appear:



Confirm this by clicking Next. Again some files are being copied and typically you will be prompted with a Windows Security message like this:



Confirm it by clicking *Install*. After a while the installation will be completed and the following dialog will appear:



Once you see the window on the left, click *Finish*. In many cases, the window on the right appears. We strongly suggest to select *Yes, restart the computer now* and then click *Finish*.

You can connect UNiTE-2 to your computer anytime if not done yet. Windows will automatically set up the system so you can use the device.

Once the system starts again and you are logged in with the hardware connected, you will see by looking at the KURZWEIL icon in the taskbar notification area as shown below, that the UNITE-2 control panel is now automatically being loaded:



If you can see it, the driver installation has been completed successfully.

#### 2.3.2 Installation under macOS

macOS already provides support for class compliant USB audio devices such as UNiTE-2. This means that no software or driver needs to be installed to use UNiTE-2 under macOS. Simply connect the unit with the supplied USB cable to your Mac and you can start using it.

To make the usage more simple, we provide a control panel application that can be installed from downloaded on our website. To install it, open the .dmg file and then you can drag control icon into your application folder folder which is displayed next to it.



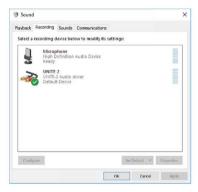
Controlling some of the basic options of UNiTE-2 under macOS can also be done via the *Audio MIDI Setup* utility from macOS.

# 3. Windows Audio Settings

In the Windows *Control Panel* under *Hardware and Sound > Sound*, you can select the default playback device that is used by all audio applications that do not have their own preferences. It looks like the following dialog:



The main playback device represents the main output of UNiTE-2. Similar settings are available for the main default recording device:

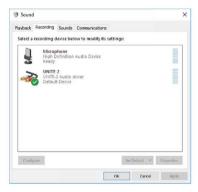


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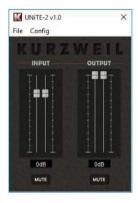
The main playback device represents the main output of UNiTE-2. Similar settings are available for the main default recording device:



# 4. Control Panel under Windows

This chapter describes the UNiTE-2 Control Panel under Windows.

To open the control panel double click on the KURZWEIL icon in the task notification area. The following dialog will appear:



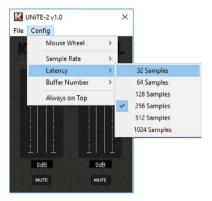
The panel has the following functions and sections:

**INPUT** section: This section controls the input monitoring volume of the incoming signal from the hardware. A pair of mono faders can be controlled together or individually depending on your mouse position – perfect for stereo signals. The **MUTE** button below this section allows you to mute the input signal. An orange button indicates that the mute function is enabled. When disabled, the button is gray.

**OUTPUT** section: This section controls the playback volume of the playback signal from your audio applications. The pair of mono faders can be controlled together or individually depending on your mouse position – perfect for stereo signals. The **MUTE** button below this section allows you to mute the output signal. An orange button indicates that the mute function is enabled. When disabled, the button is gray.

### 4.1 Latency settings

Via Config > Latency in the Control Panel it is possible to change the latency setting (also called "buffer size") for the driver of UNiTE-2:

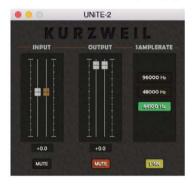


A smaller latency is the result of a smaller buffer size and value. Depending on the typical application (e.g. for playback of software synthesizers) a smaller latency is an advantage. At the same time, the best latency setting indirectly depends on the performance of your system. For recording applications, a typical latency buffer size between 128 and 512 samples is standard, a value displayed typically inside your audio application. Note that the latency has to be setup before launching the audio application using UNITE-2.

# 5. Control Panel under macOS

This chapter describes the UNITE-2 Control Panel under macOS.

After the installation, the panel can be found in your *Applications* folder. You can launch it in the Finder via *Go> Applications > UNITE-2 Panel*. The following dialog appears:



The panel has the following functions and sections:

INPUT section: This section controls the input monitoring volume of the incoming signal from the hardware. The pair of mono faders can be controlled together when the LINK function is enabled (perfect for stereo signals) or individually when it is disabled. The MUTE button below this section allows you to mute the input signal. An orange button indicates that the mute function is enabled. When disabled, the button is gray.

**OUTPUT** section: This section controls the playback volume of the playback signal from your audio applications. The pair of mono faders can be controlled together when the **LINK** function is enabled (perfect for stereo signals) or individually when it is disabled. The **MUTE** button below this section allows you to mute the input signal. An orange button indicates that the mute function is enabled. When disabled, the button is gray.

In the SAMPLERATE section, the current default samplerate for UNiTE-2 can be defined.

# 6. Specifications

- 2 input / 2 output 24-bit / 96kHz USB 2.0 Full Speed Audio Interface

- 2x line / microphone input
- 1 Hi-Z instrument input
- +48V phantom power support
- USB bus powered
- max. 24bit / 96kHz
- line output with balanced 1/4" TRS connectors
- headphone output with 1/4" connector
- input monitoring controlled on front panel
- master volume control on front panel
- supports Windows 7, Windows 8.1 and Windows 10 with ASIO 2.0, MME, WDM and DirectSound
- supports Mac OS X (10.7 and above) via the native CoreAudio USB audio driver from Apple (no driver install required)

# Audio Specifications

- max. 24-bit / 96kHz
- ADC Dynamic Range: 102dBA@48kHz, SNR = 102dBA@48kHz
- DAC Dynamic Range: 108dBA@48kHz, SNR = 108dBA@48kHz

 NOTE

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