TASCAM®

TEAC PROFESSIONAL

US-2000

USB 2.0 Audio Interface

OWNER'S MANUAL
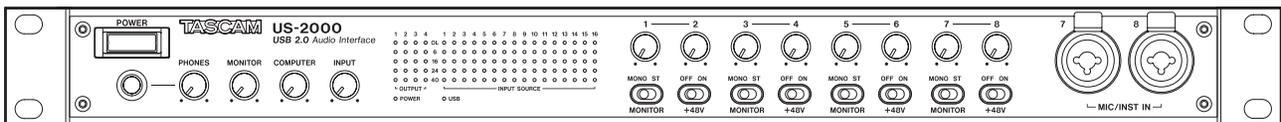
IMPORTANT SAFETY PRECAUTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.

Model number _____

Serial number _____

For U.S.A.

TO THE USER

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION

Changes or modifications to this equipment not expressly approved by TEAC CORPORATION for compliance could void the user's authority to operate this equipment.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CE Marking Information

a) Applicable electromagnetic environment: E4
b) Peak inrush current: 1.1 A

In North America use only on 120V supply.

产品有毒有害物质或元素的名称及含量

机种：US-2000	有毒有害物质或元素					
品名	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
1　CHASSIS部份	×	○	○	○	○	○
2　线材部份	○	○	○	○	○	○
3　PCB Assy部份	×	○	○	○	○	○
4　电源部份	×	○	○	○	○	○
5　附属品部份	○	○	○	○	○	○
6　SEAL部份	○	○	○	○	○	○
7　包装部份	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含有量均在 SJ/T11363-2006 标准规定的限量要求以下。
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。
（针对现在代替技术困难的电子部品及合金中的铅 ）

IMPORTANT SAFETY INSTRUCTIONS

1 Read these instructions.

2 Keep these instructions.

3 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 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 from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11 Only use attachments/accessories specified by the manufacturer.

12 Use only with the 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.

- Do not expose this apparatus to drips or splashes.

- Do not place any objects filled with liquids, such as vases, on the apparatus.

- Do not install this apparatus in a confined space such as a book case or similar unit.

- The apparatus draws nominal non-operating power from the AC outlet with its POWER or STANDBY/ON switch not in the ON position.

- The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.

- The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

- Products with Class I construction are equipped with a power supply cord that has a 3-prong grounding plug. The cord of such a product must be plugged into an AC outlet that has a protective grounding connection.

- If the product uses batteries (including a battery pack or installed batteries), they should not be exposed to sunshine, fire or excessive heat.

- CAUTION for products that use replaceable lithium batteries: there is danger of explosion if a battery is replaced with an incorrect type of battery. Replace only with the same or equivalent type.

- Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or head-phones can cause hearing loss.

- If you are experiencing problems with this product, contact TEAC for a service referral. Do not use the product until it has been repaired.

■ RACK-MOUNTING THE UNIT

Use the supplied rack-mounting kit to mount the unit in a standard 19-inch rack, as shown below.

Remove the feet of the unit before mounting.
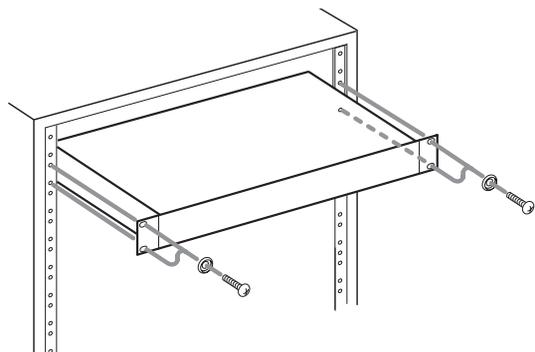
NOTE

- *Leave 1U of space above the unit for ventilation.*

- *Allow at least 10 cm (4 in) at the rear of the unit for ventilation.*

Contents

Thank you for your purchase of the TASCAM US-2000 USB 2.0 Audio Interface.

Before connecting and using the unit, please take time to read this manual thoroughly to ensure you understand how to properly set up and connect the unit, as well as the operation of its many useful and convenient functions. After you have finished reading this manual, please keep it in a safe place for future reference.

You can also download the Owner's Manual from the TASCAM web site (http://www.tascam.com).

Main features

- Audio interface with 16 inputs and 4 outputs

- 24-bit/96-kHz audio

- 14 balanced analog inputs include 6 XLR for mics, 2 combined XLR/TRS and 6 line

- S/PDIF digital input

- +48V phantom power can be provided (to 8 mic inputs)

- Inputs 1-14 can be monitored individually in mono or in stereo as pairs of channels

- Outputs include 4 balanced line, a balanced pair for monitors, digital and headphone

- S/PDIF or AES/EBU selectable digital output

- 5-dot meter for every input and output

- Direct monitoring function allows input monitoring without latency

- In addition to a monitor level control, independent level control is possible for the signals input from a computer by USB and through the unit's input jacks

- Input 7 and 8 have insert jacks

- Can be used with multiple software clients at the same time even if some use ASIO and other use WDM for audio control

- USB 2.0 High speed (480 MHz) compatible

- Cubase LE4 included

A note about computer operation

If you are unsure about how to perform basic computer operations appearing in this manual, please refer to the owner's manual that came with your computer.

Included items

The included items are listed below.

Take care when opening the package not to damage the items. Keep the package materials for transportation in the future.

Please contact the store where you purchased this unit if any of these items are missing or have been damaged during transportation.

- Main unit 1
- Power cord 1
- USB cable 1
- CD-ROM (containing driver and manuals) 1
- DVD-ROM (Cubase LE4)..1
- Cubase LE4 Quick Start Guide 1
- A rack-mounting screw kit..1
- A warranty card 1
- Owner's manual (this manual) 1

About this manual

In this manual, we use the following conventions:

- The names of keys and controls are given in the following typeface: **MONO**.

- Messages on the unit's display are shown with quotation marks like this: "Message"

- Additional information is introduced in the styles below when needed:

TIP

Useful hints when using the unit.

NOTE

Explanation of actions in special situation and supplement.

CAUTION

Instructions that should be followed to avoid injury, damage to the unit or other equipment, and loss of data.

1 – Introduction

Trademarks

- TASCAM is a registered trademark of TEAC Corporation.

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

- Apple, Macintosh, Mac OS and Mac OS X are trademarks of Apple Inc., registered in the U.S. and other countries.

- Pentium and Intel are trademarks of Intel Corporation in the U.S. and other countries.

- AMD Athlon is a trademark of Advanced Micro Devices, Inc.

- Cubase is a registered trademark of Steinberg Media Technologies GmbH. ASIO is a trademark of Steinberg Media Technologies GmbH.

- Other company names, product names and logos in this document are the trademarks or registered trademarks of their respective owners.

Precautions and notes for placement and use

- The operating temperature should be between 5°C and 35°C (41°F and 95°F).

- Make sure that the unit is mounted in a level position for correct operation.

- Do not place any object on the unit for heat dissipation.

- Avoid installing this unit on top of any heat-generating electrical device such as a power amplifier.

Beware of condensation

If the unit is moved from a cold to a warm place, or used after a sudden temperature change, there is a danger of condensation; vapor in the air could condense on the internal mechanism, making correct operation impossible. To prevent this, or if this occurs, let the player sit for one or two hours at the new room temperature before using.

Cleaning the unit

To clean the unit, wipe it gently with a soft dry cloth. Do not wipe with chemical cleaning cloths, benzene, paint thinner, ethyl alcohol or other chemical agents to clean the unit as they could damage the surface.

Front panel
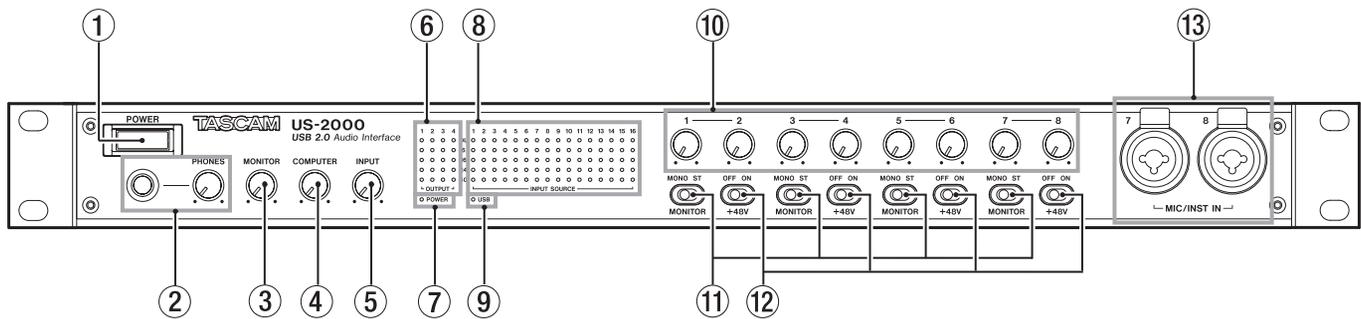
① POWER switch

Use to turn the unit's power ON and OFF.

② PHONES jack and knob

Use this standard stereo phone jack to connect stereo headphones. Use a plug adapter when connecting headphones that have mini-plugs.

Use the **PHONES** knob to adjust the headphones output level.

CAUTION

Turn the PHONES knob to the minimum volume before connecting headphones. Failure to do so could cause sudden loud noises and damage hearing, for example.

③ MONITOR knob

Use this to adjust the output level for **MONITOR OUTPUT L/R**.

④ COMPUTER knob

For the signal input from the computer connected by USB, use this to adjust the level of output from the **MONITOR OUTPUT** and **PHONES** jacks.

⑤ INPUT knob

Use this to adjust the overall level of all the signals input through this unit's input jacks (mic, line and digital) that is output from the **MONITOR OUTPUT** and **PHONES** jacks.

⑥ OUTPUT meters

These show output levels for the unit's 4 outputs.

⑦ POWER indicator

This lights when the power is ON.

⑧ INPUT SOURCE meters

These show input levels for this unit's 16 inputs.

⑨ USB indicator

This lights when the USB connection is in use.

⑩ Input gain knobs

Use these to adjust the input levels of **MIC INPUTS 1–8** independently.

NOTE

Turn all the way to the left to minimize the input level or all the way to the right to maximize the input level.

⑪ MONITOR switches

Use these switches to set whether or not adjacent inputs 1-2, 3-4, 5-6, 7-8 are monitored in mono or as stereo pairs with odd-numbered channels (1, 3, 5, 7) on the left and even-numbered channels (2, 4, 6, 8) on the right.

⑫ +48V switches

Use these switches to set whether or not +48 V phantom power is provided to the mic input jacks in pairs (1-2, 3-4, 5-6, 7-8).

CAUTION

• *Before turning these switches ON or OFF, turn the output volume down using the PHONES and MONITOR knobs. Depending on the mic, loud noises might be produced and damage could be caused to equipment and people's hearing.*

• *Do not connect or disconnect a mic with an input when its +48V switch is ON.*

• *Turn a switch ON only when connecting a condenser microphone that requires phantom power.*

• *Do not supply phantom power to an unbalanced dynamic microphone.*

• *Some ribbon mics can be damaged by phantom power. If unsure, do not supply phantom power to a ribbon mic.*

⑬ MIC/INST IN

These are analog mic/instrument inputs that combine XLR and phone jacks. Use the XLR connectors for balanced mic connections and the phone jacks for electric guitars and basses, for example.

The pin assignments of the XLR jacks are 1 = GND, 2 = HOT, and 3 = COLD.

2 – Names and Functions of Parts

Rear panel
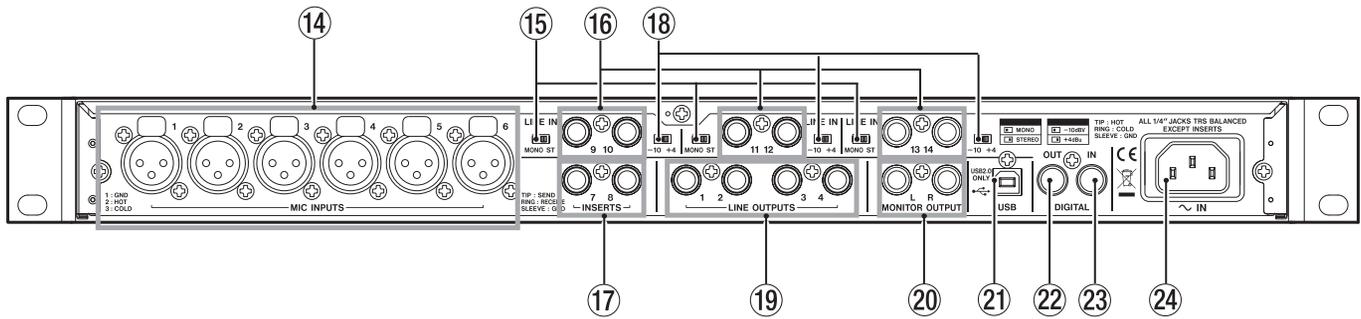
⑭ MIC INPUTS

These are balanced XLR-type analog mic input jacks for connecting microphones.

The pin assignments of the XLR jacks are 1 = GND, 2 = HOT, and 3 = COLD.

⑮ MONO/ST switches

Use these switches to set whether or not adjacent line inputs 9-10, 11-12, 13-14 are monitored in mono or as stereo pairs with odd-numbered channels (9, 11, 13) on the left and even-numbered channels (10, 12, 14) on the right.

⑯ LINE IN jacks

Use these balanced TRS phone jacks for line input sources, including keyboards and sound modules.

The pin assignments are tip = HOT, and ring = COLD, and sleeve = GND.

⑰ INSERTS jacks

These are analog insert jacks (unbalanced) for the **MIC/INST IN** inputs on the front panel (7-8).

Use these to connect compressors, gates and other external effects.

The pin assignments are tip = SEND, ring = RECEIVE, and sleeve = GND.

⑱ Level selection switches

Use these to set the nominal input level of the line input jacks to -10 dBV or +4 dBu.

⑲ LINE OUTPUTS

These TRS phone jacks are balanced analog line outputs. Signals output from a computer connected by USB are output from these jacks. Set which signals are output using an audio application, for example, on the computer. These jacks can be connected to an external mixer or recorder, for example.

The pin assignments are tip = HOT, and ring = COLD, and sleeve = GND.

⑳ MONITOR OUTPUT jacks

These TRS phone jacks are balanced analog monitoring outputs. Connect them to monitor speakers or other equipment.

The pin assignments are tip = HOT, ring = COLD, and sleeve = GND.

㉑ USB port

Use the included USB cable to connect this unit to a computer (USB 2.0 compatible).

㉒ DIGITAL OUT jack

This coaxial digital output jack conforms to IEC60958-3 (S/PDIF) or AES3-2003 (AES/EBU) specifications.

This jack outputs the same digital signal that is output from the **LINE OUTPUTS 1/2** or **LINE OUTPUTS 3/4** (set by the control panel). The digital signal format is set on the control panel.

㉓ DIGITAL IN jack

This coaxial digital input jack conforms to IEC60958-3 (S/PDIF) specifications.

> **NOTE**
>
> *This unit is capable of input and output through its DIGITAL IN and OUT jacks at 24-bit/96 kHz.*

㉔ ~IN connector

Connect the included power cord here.

System requirements

See the TASCAM website for updated information about OS compatibility.

Windows

Windows XP 32-bit SP2 or later
Windows XP 64-bit SP2 or later
Windows Vista 32-bit SP2 or later
Windows Vista 64-bit SP2 or later

Supported computer system:

Windows compatible computer with a USB 2.0 port

- CPU/clock:
  Pentium 4 1.4 GHz or faster
  AMD Athlon 1.4 GHz or faster
  (or equivalent processor)

- Memory:
  512 MB or more for Windows XP 32-bit and Windows Vista 32-bit

  1 GB or more for Windows XP 64-bit and Windows Vista 64-bit

NOTE

Although this product has been checked for use with typical computers that meet the above operating requirements, we cannot guarantee that it will operate with all computers that meet these requirements. Please be aware that even under the same conditions, processing capability may vary depending on differences of the design and system.

Mac OS X

Supported operating system:

Mac OS X 10.4.11 or later
Mac OS X 10.5.6 or later

Supported computer system:

Apple Macintosh series equipped with a USB port as standard equipment

- CPU/clock:
  Power PC G4 1 GHz or faster, or Intel processor

- Memory:
  512 MB or more

Installing the driver

In order to use the US-2000, you must install the appropriate driver into your computer. As described below, this is an easy process using the CD-ROM included with the US-2000.

Driver are updated from time to time. You can download the most recent version of the driver from the TASCAM website <http://www.tascam.com/>.

Do not connect the US-2000 to your computer before you have installed the driver.

CAUTION

- *Handle the enclosed CD-ROM with care. If the disc becomes scratched or dirty, your computer may be unable to read it and the software cannot be installed. If the disc becomes unreadable, a fee will be charged for its replacement.*

- *Never attempt to play the enclosed CD-ROM in a conventional audio CD player, as the resulting noise may damage your speakers or your hearing.*

Installing the driver for Windows

NOTE

- *During driver installation, a warning that "this software ... has not passed Windows Logo testing" will appear. This message appears when a driver that has not received Windows Logo testing is installed. This message appears because the drivers for TASCAM products have not received Windows Logo testing. We have, however, confirmed their proper operation. If this message appears, click Continue to proceed with the installation.*

- *During installation, you must connect, disconnect and reconnect the unit in steps 7, 8 and 9. You should complete each of these installation steps in less than one minute. Installation may fail if you take too much time.*

1 Confirm that the unit and the PC are not connected by the USB cable.

2 Insert the included driver installation CD-ROM into the PC where you will install it.

3 Click the "Install Driver" button when the screen below appears. (If this screen does not appear automatically, find and open the "Autorun2.exe" program in the "Autorun" folder on the driver CD-ROM.)

4 When the language selection screen (below) appears, select the language you prefer and then click the "OK" button.

5 Click the "Install the Driver" button when the screen below appears.
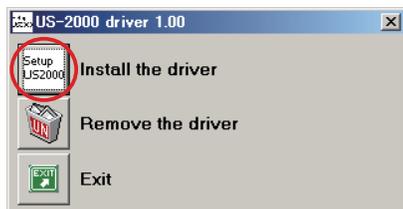
6 Read the contents of the License Agreement, and select "I accept the agreement" if you agree to the terms. Next, click the "Install" button to start installation.
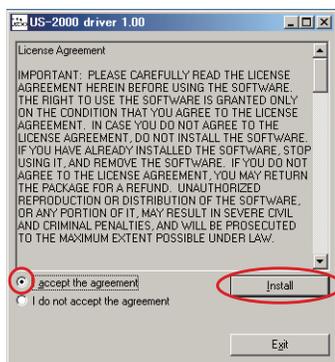
7 When the screen below appears, use the supplied USB cable to connect the unit to the PC.

8 When the screen below appears, unplug the connecting USB cable from the unit or the PC.

9 When the screen below appears once more, reconnect the unit and the PC with the USB cable.

10 When the screen below appears, the installation is complete. Click the "Reboot now" button to restart the PC to use the driver.
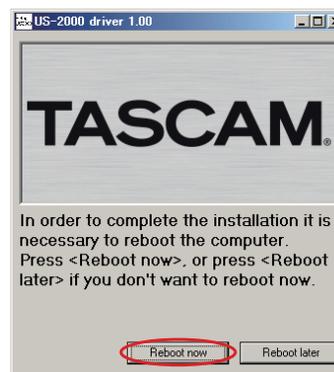
11 After the PC has restarted, open the "TASCAM US-2000" ("Start > Control Panel") or "US-2000 Control Panel" ("Start > All Programs > TASCAM"). If the Driver Version, Device and other data appear correctly, the installation has succeeded.

Installing the driver for Mac OS X

1 Confirm that the US-2000 is not connected to the computer.

2 Double-click the "TASCAM_US2000_Driver_x.xx. dmg" on the included CD-ROM. As the "TASCAM_ US-2000_x.xx" is created on the desktop, open the folder.

3 Dboule-click the "TASCAM_US-2000_x.xx.mpkg" in the folder to launch the installer.

4 Follow the instructions on the screen to conduct the installation.

5 Restart the computer and then connect the unit.

Uninstalling the driver

■ Windows

There are two ways to uninstall the driver as shown below.

Using the Installation CD-ROM:

1 Follow steps 1 to 4 under "Installing the driver for Windows" (See page 10.)

2 At step 5 of the procedure, click "Remove the driver".
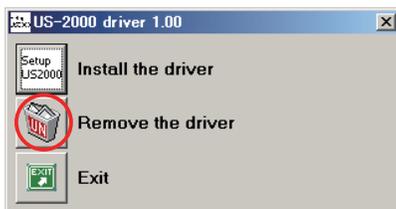
3 Follow the instructions on the screen for the remaining procedure.

Using Windows "Add or Remove Programs" :

1 Open the "Control Panel" from the "Start" menu.

2 Double click on "Add or Remove programs".

3 Select "US-2000 driver" from the list and click "Change or Remove Programs".

4 Follow the instructions on the screen for the remaining procedure.

■ Mac OS X

1 Insert the CD-ROM into the PC and double click "TASCAM US-2000 Remover" icon.

TASCAM US-2000 remover

2 Follow the instructions on the screen for the remaining procedure.

Frequently asked installation questions and answers (FAQ)

Windows driver installation

Q: When I connect the unit to a computer, the Windows "Hardware Wizard" appears and I cannot install the driver. Am I making a mistake in the installation procedures?

A: Close the Windows "Hardware Wizard" and disconnect the unit. You must install the driver before connecting this unit. Insert the CD-ROM included with the product. The menu for installing the driver appears automatically.

Select "Install Driver," and follow the instructions shown on the screen. If you have downloaded the driver from the TASCAM website (htt://www.tascam.com), expand the ZIP archive, launch the "setup.exe" file, and follow the instructions on the screen.

Q: I loaded the installation CD-ROM into a Windows computer, but the driver installation menu does not appear. How can I access this menu?

A: The automatic playback settings for the disc drive might be disabled.

Open the CD-ROM using Windows Explorer, and double-click the "Autorun2.exe" file to manually open the installation menu.

Settings on your computer

Here are a few basic points to help you set up your computer for best performance with audio applications.

• Do not run other applications. You will probably use your computer for applications other than audio, but we recommend that you avoid running other applications at the same time you are running audio programs. Processing digital audio places a considerable load on your computer.
This means that if you are running other applications (especially graphics or Internet tools) at the same time as your audio application, the processing may not happen fast enough.

Installing Cubase LE4

For details see the Cubase LE4 Quick Start Guide.

Overview

The "Control Panel" lets you make various settings for the US-2000's functionality.

On Windows XP and Windows Vista, the "US-2000 Control Panel" shortcut can be found in the Windows "Start menu > Control Panel" or the "Start menu > All Programs > TASCAM."

On Mac OS X, the "US-2000 Control Panel" is located in the Applications folder. Other useful audio and MIDI settings for Mac OS X can be found in "Applications/ Utilities/Audio MIDI Setup."

[Windows Control Panel]

[Mac OS X Control Panel]

Control panel settings

Audio Performance

The US-2000 driver temporarily stores input and output audio sample in buffers. The size of these buffers can be adjusted. A smaller buffer size will reduce the delay when monitoring the audio signal, but will require your computer to perform the processing faster. If the processing does not occur in time (e.g., if other system operations are occurring), you may hear clicks, pops, or dropouts in the audio signal. A larger buffer size provides more safety against such problems caused by other system activities, but will produce greater delay when monitoring the audio signal. You should select the buffer size that works best for your system.

On the Windows version of the US-2000 Control Panel, the "Audio Performance" setting permits you to adjust the buffer size that will be used by all audio applications. The

"lowest latency" setting is the minimum buffer size, and the "highest latency" setting is the maximum buffer size.

On Mac OS X, the buffer size is determined by each audio application. Consequently, there is no "Audio Performance" setting on the Mac OS X version of the US-2000 Control Panel. Some applications select the buffer size automatically while others permit the user to select the buffer size. Please consult your audio application's documentation for details.

Sample Clock Source

The clock source can be set to "Automatic" or "Internal."

• Automatic (default): If a clock signal is input through the **DIGITAL IN** jack, it is used. If no signal is input through the **DIGITAL IN** jack, this unit's internal clock is used.

• Internal: This unit's internal clock is always used.

• When using digital input, set this to "Automatic."

Digital Output Format

Set the digital output format to "AES/EBU" or "S/PDIF."

Digital Output Chanels

The **DIGITAL OUT** jack outputs either digital signals of **LINE OUTPUTS 1/2** or **3/4**. You select which pair of signals to output using this item.

Headphones

Guitar

Bass guitar

Sound module

Drum machine

Keyboard

Effects unit

Digital recorder

Drum

Powered speaker, or amplifier and speaker

Computer

USB
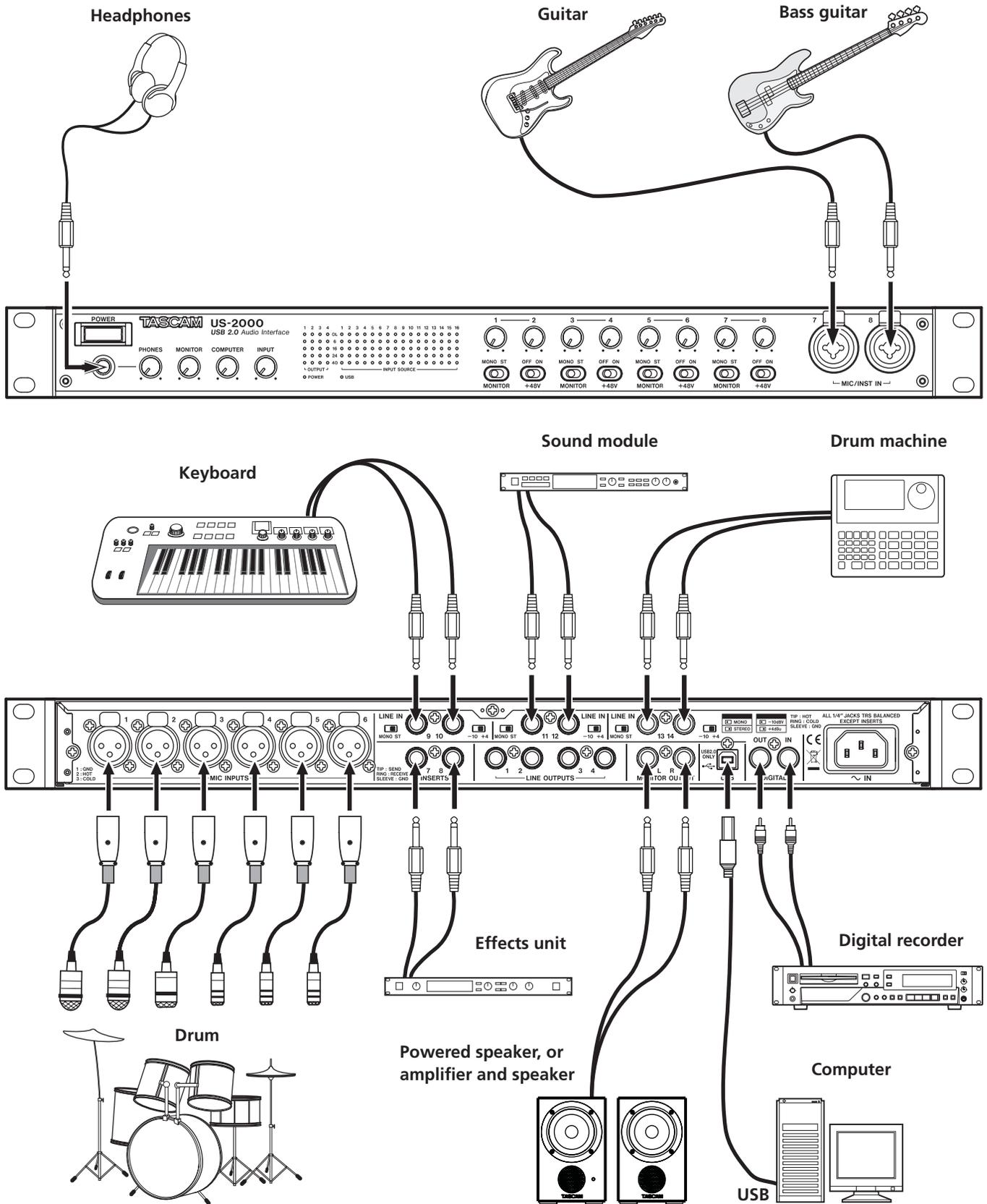
USB connections

Using the included USB cable, connect the US-2000 to your computer as shown in the illustration.

NOTE

Some USB devices access the USB bus frequently. To avoid dropouts and clicks in the audio signal, we strongly recommend that you do not connect other USB devices to the USB bus used by the US-2000. USB keyboards and mice are exceptions to this, and will probably not cause problems.

Audio connections

Connect the output signal of your mic, guitar, keyboard, or other audio device to the US-2000, where it will be converted into digital audio and sent via USB to your computer. Connect the output of the US-2000 to your speakers (via an amp) or headphones, so you will be able to monitor the audio signals coming into the US-2000 or being produced by your computer.

The balance between the input signal from the mic and guitar and the output signal from the computer should be adjusted by the **INPUT** and **COMPUTER** knobs.

Mic

Connect your mics to the **MIC INPUTS (1-6)** jacks (XLR) on the rear panel or **MIC/INST IN (7-8)** jacks (XLR) on the front pannel. If you are using a condenser mic that requires phantom power, turn on the **+48V** switch on the front panel.

CAUTION

- *Connecting a dynamic mic with an unbalanced connection could damage it if the +48V switch is ON.*

- *Do not connect or disconnect mics when the +48V switch is ON. Doing so could cause loud noise or damage the equipment.*

- *Before turning a +48V switch ON or OFF, turn the output volume down using the PHONES and MONITOR knobs on the front panel. Depending on the mic, loud noises might be produced and damage could be caused to equipment or to people's hearing.*

Guitar

Connect your guitar to the **MIC/INST IN (7-8)** jack (1/4" phone jack) on the front panel.

Keyboard/drum machine/sound module/ cassette deck/MD/CD etc. (analog connection)

Connect the analog signal outputs of these devices to **LINE IN** jacks **9-14** (TRS phone jacks) on the rear panel.

Sound Modules/MDs/CDs, etc. (digital connection)

Connect the digital inputs and outputs of digital devices to the **DIGITAL IN/OUT** jacks on the rear panel.

NOTE

This unit can output either S/PDIF or AES/EBU digital signals. Set the type of output using the control panel.

Monitor speakers

Connect monitor speakers (powered speakers or an amplifier and speakers) to the **MONITOR OUTPUT** jacks on the rear panel.

Headphones

Connect headphones to the **PHONES** jack (standard stereo phone jack) on the front panel.

In this chapter, we explain how to set some audio applications for use with this unit.

Windows XP and Windows Media Player

1   Close all applications and then open the "Control Panel" from the "Start" menu.

2   Open "Sounds and Audio Devices."

NOTE

If you do not see either of the items above, click "Sounds, Speech, and Audio Devices" and one will appear.

Sounds and
Audio Devices

3   Click the "Audio" tab, and set the "Default device:" for "Sound playback" to "TASCAM US-2000."
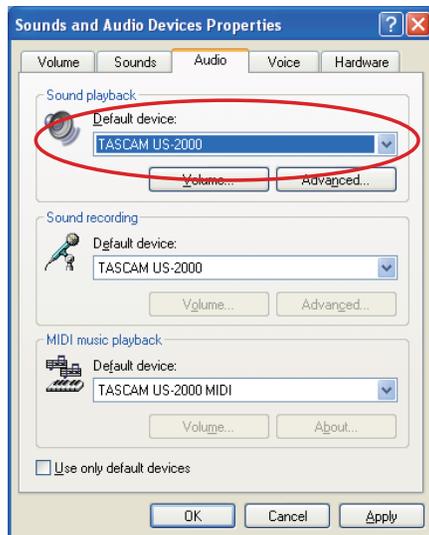
4   Click "OK."

5   Start Windows Media Player, select an audio file and begin playback.

NOTE

- *If you change the setting while Windows Media Player is running, the software will not recognize that the device has been changed. In this case, restart Windows Media Player.*

- *If you still cannot hear sound after making the settings and completing the procedures above, restart the computer.*

- *If you make this setting, sound will be output through this unit, but no sound will be output by the computer's speakers or headphone jack.*

Windows Vista and Windows Media Player

1   Close all applications and then open the "Control Panel" from the "Start" menu.

2   Open "Sound."

NOTE

If the above item does not appear, click "Hardware and Sound" and it will appear.

Sound

3   Click the "Playback" tab, click "Speakers TASCAM US-2000" and click the "Set Default" button. This moves the green check mark to "Speakers TASCAM US-2000."

4   Click "OK."

5   Start Windows Media Player, select an audio file and begin playback.

NOTE

- *If you change the setting while Windows Media Player is running, the software will not recognize that the device has been changed. In this case, restart Windows Media Player.*

- *If you still cannot hear sound after making the settings and completing the procedures above, restart the computer.*

- *If you make this setting, sound will be output through this unit, but no sound will be output by the computer's speakers or headphone jack.*

6 – Application Guide

Mac OS X and iTunes

1 Open the "Utilities" folder, which is inside the "Applications" folder, and double-click "Audio MIDI Setup" to launch it.

2 Click the "Audio Devices" tab.
   Set "Default Input," "Properties for," "Default Output" and "System Output" to "US-2000."
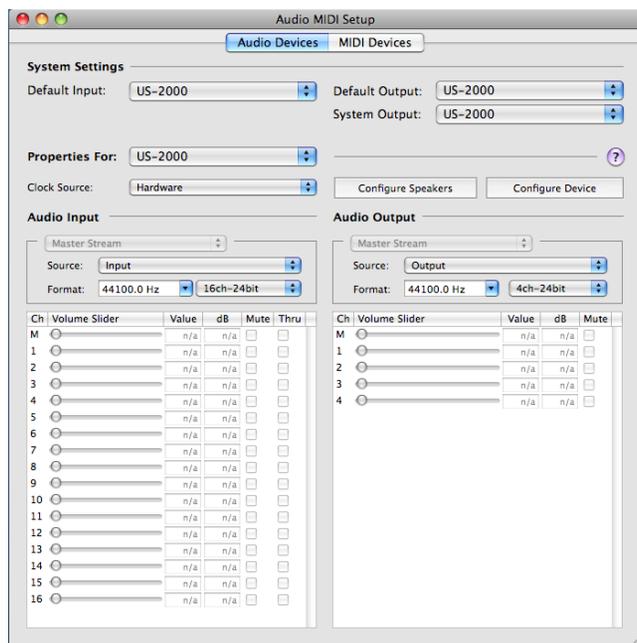
3 Launch iTunes, select an audio file and start playback.

Cubase LE4

For details see the provided Cubase LE4 Quick Start Guide.

Please read this chapter if you are unable to use the unit properly even after setting it up following the procedures in this manual.

If you are still unable to resolve your problems please contact TASCAM customer support with the following information about the operating environment and details about the trouble.

Operating environment

- Computer manufacturer:
- Model:
- CPU:
- Installed memory:
- OS:
- DAW:
- Antivirus software use:
- Wireless LAN use:

■ Installation is failing.
Installation completed, but the computer does not recognize it.

If some trouble is causing installation to fail, or installation completes but the computer does not recognize the unit, check the following.

1) Is the unit's USB indicator lit?
   If the USB indicator is not lit, confirm that the USB cable is properly connected.

NOTE

Always use the included USB cable.

2) Change the USB port
   Since the unit may not properly function with some USB ports, try connecting to a different (built-in) USB port, and reinstall the driver.

NOTE

- *Try again after disconnecting other USB devices. (Keyboards and mice can be left connected.)*
- *Do not use a USB hub. Always connect the unit directly to a USB port on the computer (built-in).*

3) Stop other software that is running in the background
   Since antivirus software and other software that runs in the background can interfere with installation, stop them before beginning installation.

See page 10 of this manual for how to install and uninstall the driver.

■ There is no sound even when audio is playing back.

The audio output must be set on the computer.

Please confirm the following while the unit is connected to the computer.

If you make the following settings, sound will be output through this unit, but no sound will be output by the computer's speakers or headphone jack.

Windows XP

1 Shut down all applications, and open the "Control Panel" from the "Start Menu."

2 Open "Sounds and Audio Devices"

NOTE

If you cannot find the above item, click "Sounds, Speech, and Audio Devices" and it will appear.

3 Click the "Audio" tab, and set the "Default device:" for "Sound playback" and "Sound recording" to "TASCAM US-2000."

Windows Vista

1 Shut down all applications, and open the "Control Panel" from the "Start" menu.

2 Open "Sound."

NOTE

If the above item does not appear, click "Hardware and Sound" and it will appear.

3 Click the "Playback" tab, right-click "Speakers US-2000" and click the "Set Default" button.

Mac OS X

1 Shut down all applications and open "System Preferences" from the Apple menu.

2 Open "Sound."

3 From the "Output" tab, select "US-2000: Output."

After completing the settings, restart the computer and check the playback sound.

Depending on the application you are using, it might also be necessary to make other device settings in addition to those above.

In particular, since DAW (Digital Audio Workstation) software operates using audio engines that are different from the OS settings, confirm the DAW driver settings first after installing the driver for this unit.

Please see the manual for the application that you are using for detailed setting procedures.

For the bundled Cubase LE4 software, see the manual on the included CD-ROM.

■ The sound breaks up or there is noise.

The load on the computer causes sound to break up and noise to occur.

Methods to reduce the load on the computer are introduced below.

1) If a wireless LAN, antivirus software and other software that run in the background are operating, they regularly put burdens on the computer, which can cause sound to

break up and noise.

Stop wireless LAN transmission, antivirus software and other software running in the background when using this unit.

2) Set the buffer size in the audio application that you are using to a larger value.

NOTE

- *Consult the maker of your audio application for methods to reduce its burden on your computer.*

- *If you are not using an audio application which puts burdens on the computer, try setting the "Audio Performance" in the driver for this unit to "High Latency."*

3) Change the settings of your computer so that they are optimal for audio processing.

Windows XP

1 **Right-click "My Computer" and select "Properties."**

2 **Click the "Advanced" tab.**

3 **Click "Settings" in the "Performance" section.**

4 **On the "Performance Option" screen, select the "Adjust for Best Performance" option.**

Windows Vista

a) Turn Aero off.

1 **Right-click the desktop and select "Personalize" to open the "Personalize appearance and sounds" screen.**

2 **Choose "Window Color and Appearance" and then click "Open classic appearance properties for more options."**

3 **Select "Windows Vista Basic" or any option other than "Windows Aero."**

b) Performance settings

1 **Right-click "Computer," select "Properties," and then click "Advanced system settings."**

2 **Click the "Advanced" tab.**

3 **Click "Settings" in the "Performance" section.**

4 **On the "Performance Option" screen, select the "Adjust for Best Performance" option.**

Mac OS X

1 **Open "System Preferences. . ." from the Apple menu and select "Energy Saver."**

2 **Click the "Sleep" tab.**

3 **Set "Put the computer to sleep when it is inactive for:" to "Never."**

4 **Set "Put the display(s) to sleep when the computer is inactive for:" to "Never."**

5 **Click the "Options" tab.**

If a "Processor performance" setting is available, set it to "Highest."

NOTE

Depending on the Mac OS version and model this setting might not be available.

■ **Questions related to Cubase LE4**

Since Cubase LE4 is a product provided by Steinberg Media Technologies GmbH, it is not supported by TASCAM.

Please use the Cubase LE4 Help menu (and access the PDF manuals) for information about how to use this software.

Input/output ratings

Analog audio input/output

MIC INPUTS (Balanced) terminals (1-8)

Connector: XLR-3-31 (1: GND, 2: HOT, 3: COLD)
Input impedance: 2.4 kΩ
Nominal input level:
 –60 dBu (When input gain konb is at maximum)
 –4 dBu (When input gain knob is at minimum)
Maximum input level:
 +12 dBu (When input gain knob is at minimum)

INST IN (Unbalanced) terminals (7-8)

Connector: 6.3 mm (1/4") Standard phone jack
Input impedance: 1 MΩ
Nominal input level:
 –56 dBu (When input gain konb is at maximum)
 0 dBu (When input gain knob is at minimum)
Maximum input level:
 +16 dBu (When input gain knob is at minimum)

LINE IN (Balanced) terminals (9-14)

Connector: 6.3 mm (1/4") TRS Standard phone jack
 (Tip: HOT, Ring: COLD, Sleeve: GND)
Input impedance: 10 kΩ
Nominal input level:
 –10 dBV/+4 dBu
Maximum input level:
 +6 dBV/+ 20 dBu

LINE OUTPUTS (Balanced) terminal

Connector: 6.3 mm (1/4") TRS Standard phone jack
 (Tip: HOT, Ring: COLD, Sleeve: GND)
Output impedance: 100Ω
Nominal output level:
 +4 dBu
Maximum output level:
 +20 dBu

MONITOR OUT (Balanced) terminal

Connector: 6.3 mm (1/4") TRS Standard phone jack
 (Tip: HOT, Ring: COLD, Sleeve: GND)
Output impedance: 100Ω
Nominal output level:
 +4 dBu
Maximum output level:
 +20 dBu

INSERT (Unbalanced) terminal

Connector: 6.3 mm (1/4") TRS Standard phone jack
 (Tip: SEND, Ring: RECEIVE, Sleeve: GND)
Output impedance: 100Ω
Nominal output level:
 –2 dBu
Maximum output level:
 +14 dBu
Input impedance: 10 kΩ
Nominal input level
 –2 dBu
Maximum input level:
 +14 dBu

PHONES jack

Connector: 6.3 mm (1/4") Standard Stereo phone jack
Maximum output level:
 100 mW + 100 mW or more
 (THD + N less than 1%, 32Ω load)

Digital audio input/output

DIGITAL IN (COAXIAL) terminal

Connector: RCA pin jack

Compatible signal format: IEC60958-3 (S/PDIF)

DIGITAL OUT (COAXIAL) terminal

Connector: RCA pin jack

Compatible signal format: IEC60958-3 (S/PDIF) or
AES3-2003 (AES/EBU), selectable using control panel

Control input/output

USB terminal

Connector: USB B type 4 pin
Format:
 USB 2.0 High speed (480 MHz)

Audio performance

Frequency response

20 Hz - 20 kHz, ±1.0 dB (44.1/48 kHz) (**MIC** to
MONITOR OUTPUT)

20 Hz - 40 kHz, +0.5/–2.0 dB (88.2/96 kHz) (**MIC** to
MONITOR OUTPUT)

Signal-to-noise ratio

90 dB (**LINE IN** to **MONITOR OUTPUT**, 20 kHz LPF +
A-weighted)

Total harmonic distortion

Less than 0.01% (**LINE IN** to **MONITOR OUTPUT**, 1 kHz,
+20 dBu input, 20 kHz LPF)

Computer requirements

Windows

Supported Operating system
Windows:
 Windows XP 32 bit SP2 or later
 Windows XP 64 bit SP2 or later
 Windows Vista 32 bit SP2 or later
 Windows Vista 64 bit SP2 or later

8 – Specifications

Supported computer system

Windows compatible computer with a USB 2.0 port

- CPU/clock:
  Pentium 4 1.4 GHz or faster
  AMD Athlon 1.4 GHz or faster
  (or equivalent processor)

- Memory:
  512 MB or more for Windows XP 32-bit and Windows Vista 32-bit

  1 GB or more for Windows XP 64-bit and Windows Vista 64-bit

Macintosh

Supported operating system:

Mac OS X 10.4.11 or later
Mac OS X 10.5.6 or later

Supported computer system:

Apple Macintosh series equipped with a USB port as standard equipment

- CPU/clock:
  Power PC G4 1 GHz or faster, or Intel processor

- Memory:
  512 MB or more

General

Sampling frequency

44.1/48/88.2/96 kHz

Sampling bit rate

16/24 bit

Power

AC 100 - 240 V, 50-60 HZ

Power consumption

14 W

Dimensions (W x H x D)

438 x 44 x 280 mm/17.24 x 1.732 x 11.02 in.

Weight

2.5 kg/5.512 lb

Operating temperature

5 to 35 °C/41 to 95 °F

Bundled software

Cubase LE4 (for Windows or Mac OS X)

Dimensional drawings

432.6 mm

5.9 mm

41.1 mm

280 mm

434.2 mm

482.6 mm

18 mm

44 mm 1 mm

465.6 mm

31.8 mm
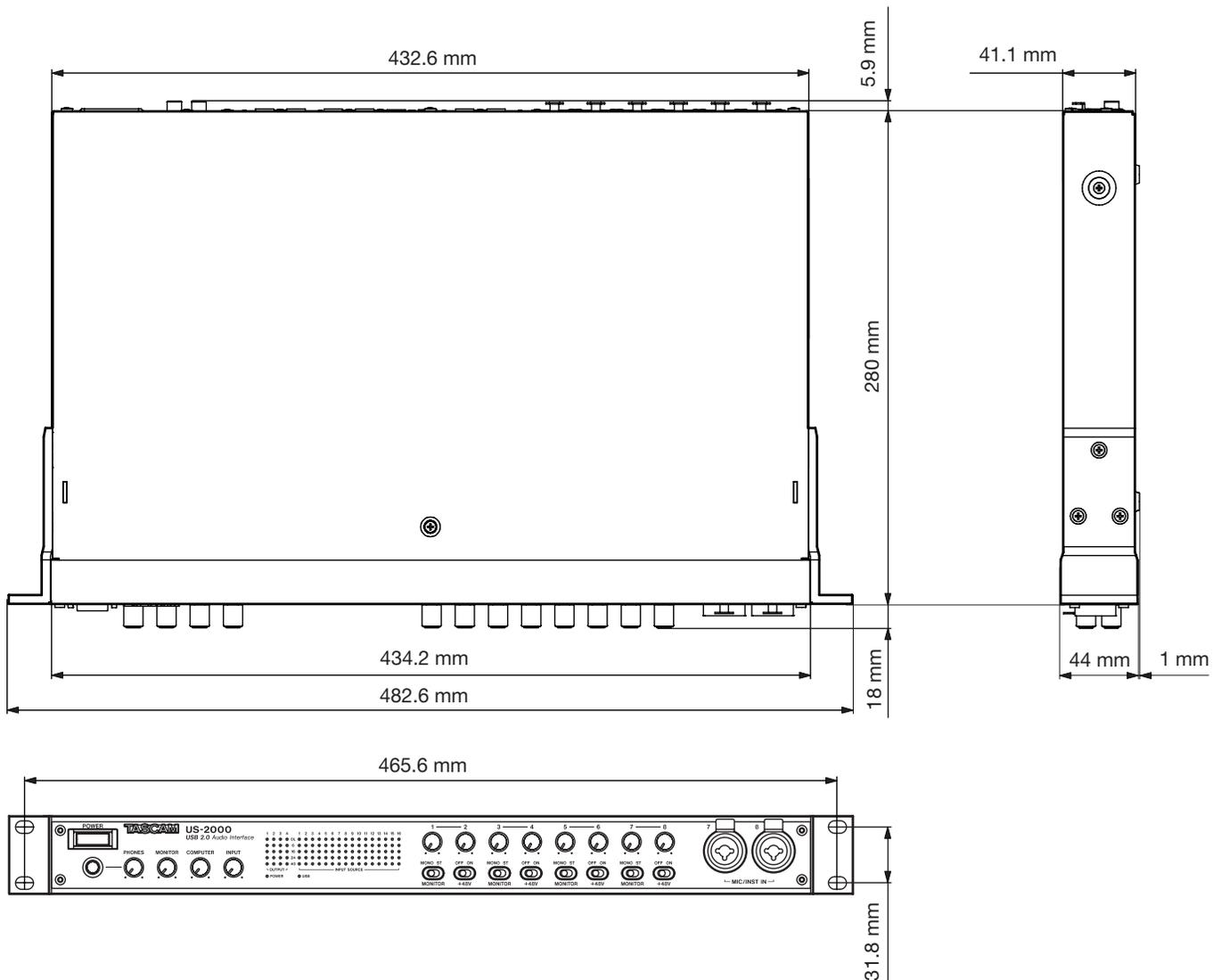
• Illustrations and other depictions may differ in part from the actual product.

• Specifications and external appearance may be changed without notification to improve the product.

Block diagram

Level diagram

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US-2000