TASCAM®
TEAC PROFESSIONAL

US-100
USB Audio Interface

This device has a serial number located on the bottom panel. Please record it and retain it for your records.

Serial number:

_____
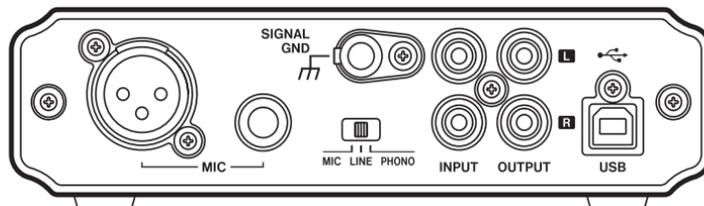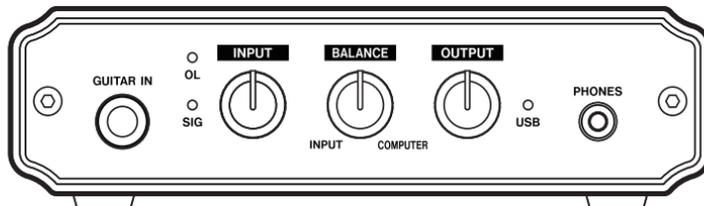
OWNER'S MANUAL

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.

● Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones 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.

Declaration of Conformity

Model Number   : US-100
Trade Name   : TASCAM
Responsible party : TEAC AMERICA, INC.
Address   : 7733 Telegraph Road, Montebello, California, U.S. A.
Telephone number   : 1-323-726-0303

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference recieved, including interference that may cause undesired operation.

FOR U.S.A.

TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

a) Reorient or relocate the receiving antenna.

b) Increase the separation between the equipment and receiver.

c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

d) Consult the dealer or an experienced radio/TV technician for help.

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.

THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA.

产品有毒有害物质或元素的名称及含量

机种：US-100	有毒有害物质或元素					
品名	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(Ⅵ))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
1 CHASSIS部份	○	○	○	○	○	○
2 PCB Assy部份	✕	○	○	○	○	○
3 附属品部份	○	○	○	○	○	○
4 SEAL部份	○	○	○	○	○	○
5 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 ）

Table of Contents

Thank you for purchasing the TASCAM US-100 USB Audio Interface.

Please read this manual carefully before you begin using the unit so that you can use it correctly and enjoy using it for a long time. After you have read this manual, keep it nearby for reference when needed.

We accept no responsibility and can provide no compensation for recovering any data loss in audio equipment, hard disks, or other storage media that occurs in a system that includes this product.

Features

- USB audio interface with two inputs and two outputs
- 44.1/48 kHz, 16-bit
- Balanced microphone input connectors (XLR and standard TRS)
- Unbalanced stereo line input connectors (RCA pin jacks)
- Guitar input connector (standard TRS jack)
- Direct connection of analog turntables
- Unbalanced stereo line output connectors (RCA pin jacks)
- Headphones output jack
- Direct monitoring function allows latency-free input monitoring
- Power supplied by USB connection

- Operates using standard Windows XP, Windows Vista and Mac OS X audio drivers

Included items

This product includes the items listed below.

- Main unit 1
- USB cable (1.5 m) 1
- CD-ROM (with Audacity software) 1
- Warranty card 1
- Owner's Manual (this document) 1

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

Please contact TASCAM if any of these items are missing or have been damaged during transportation.

Conventions used in this manual

The following conventions are used in this manual:

- Front and rear panel knobs, indicators and connectors are presented in a gothic font.
  Example: GUITAR IN
- Text displayed on the computer is presented in quotes
  Example: "Sound"

1 – Introduction

- Additional information is introduced as needed in the following categories.

TIP

This is a useful hint about ways to use the unit.

NOTE

A note provides additional explanations for special situations.

CAUTION

These instructions should be followed to avoid injury, damage to equipment or loss of data.

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

Precautions for placement

- The environmental temperature operation range of this unit is 5–35° C (41–95° F).
- Do not place anything on top of unit because it generates much heat.
- Do not put this unit on top of a power amplifier or other equipment that generates heat.

Beware of condensation

Condensation could occur if the unit is moved from a cold place to a warm place or used after a sudden temperature change, such as after a cold room has been heated. If this occurs, let the unit sit for one or two hours at the new room temperature before turning the power on.

Cleaning the unit

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

Front panel

Overload indicator

Signal indicator

USB indicator

Guitar input connector

Headphones connector

Input level adjustment knob

Output level adjustment knob

Monitoring balance adjustment knob

- Overload indicator (OL)
  This lights if the input level is too high.

- Signal indicator (SIG)
  This lights when the input level is high enough to be detected.

- INPUT knob
  Use this to adjust the input level. Turn it right to increase the sound volume. This functions as a gain knob, so turning it all the way to the left (minimum) does not completely cut the input sound.

- BALANCE knob
  Use this to balance the mix of the sounds input into the unit and the sound from the computer when monitoring. Turn it all the way to the left to hear only the input sound or all the way to the right to hear only the sound from the computer.

- OUTPUT knob
  Use this to adjust the level output from the PHONES and OUTPUT jacks. Turn right to increase the volume.

- USB indicator
  This lights when the USB connection is working correctly.

2 – Part Names and Functions

Rear panel

Input switch

Analog record player signal GND connector

Line input connectors

Microphone input connector (balanced , XLR)

Microphone input connector (balanced , TRS)

Line output connectors

USB connector

SIGNAL GND

MIC

MIC LINE PHONO

INPUT OUTPUT USB

L

R
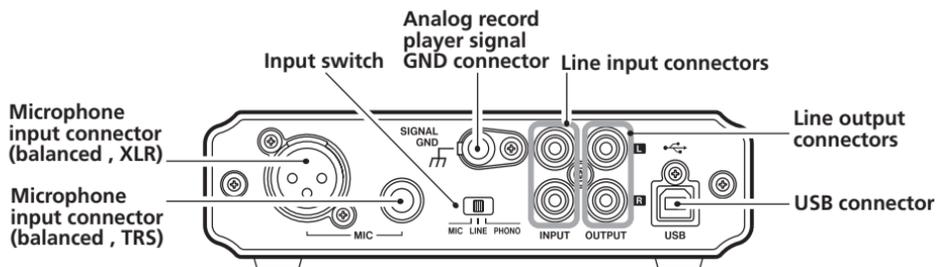
Connecting with a computer

Use the included USB cable to connect the unit with a computer as shown in the illustration.

Computer

USB
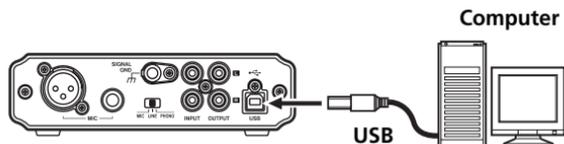
CAUTION

Some USB devices use the USB bus frequently. In order to avoid dropouts in the audio signal, clicking noises and other problems, we strongly recommend that you do not connect any other USB devices besides mice and computer keyboards to the same computer when using this unit.

Connecting microphones

Connect a microphone to one of the two microphone inputs (**MIC**) on the rear panel. You can use either the XLR connector or the standard TRS jack. If microphones are connected to both inputs, the signal from the microphone connected to the standard TRS jack receives priority and the signal from the microphone connected to the XLR connector is cut.

To activate the microphone input, set the switch on the rear panel to **MIC**. When using a **MIC** input, do not connect anything to the **GUITAR IN** jack on the front panel.

Microphones
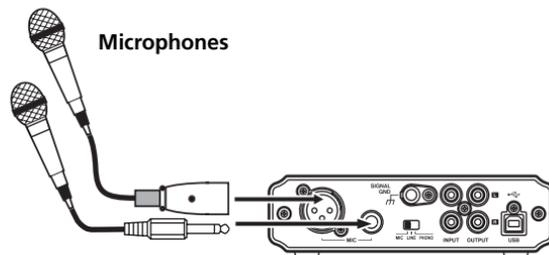
NOTE

This unit does not provide phantom power. To use a condenser mic that requires power, use an external phantom power source.

Connecting guitars

Connect a guitar or bass to the **GUITAR IN** jack on the front panel.

The **GUITAR IN** jack receives priority when something is plugged into it, and signals from other inputs are cut off regardless of the input switch setting.

3 – Connections

Guitar

OUT

Keyboard/ drum machine/ cassette player/ MD/CD
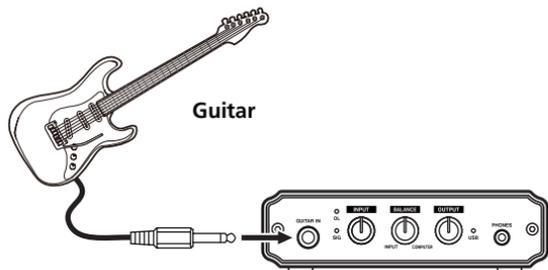
Connecting electronic instruments and CD/MD/cassette players

Connect the analog outputs of keyboards, drum machines and CD/MD/cassette players to the line input (**INPUT**) jacks on the rear panel.

To activate line input, set the input switch on the rear panel to **LINE**. When using the line input (**INPUT**) jacks, do not connect anything to the **GUITAR IN** jack on the front panel.
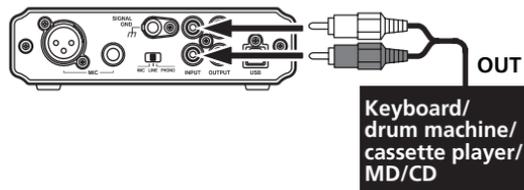
Connecting analog record players

This unit has a built-in phono amplifier, allowing the direct connection of analog record players. Connect the analog record player's audio output to the line input (**INPUT**) connectors on the rear panel. Connect the analog record player's grounding wire to this unit's **SIGNAL GND** connector.

To activate the analog record input, set the input switch on the rear panel to **PHONO**. When using the line input (**INPUT**) jacks, do not connect anything to the **GUITAR IN** jack on the front panel.

GND

Analog record player

OUT
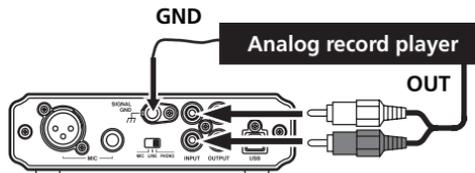
Connecting monitor speakers

Connect monitor speakers (powered speakers or an amplifier and speakers) to the line output (**OUTPUT**) connectors on the rear panel.

**Powered speakers
or amplifier and speakers**

Connecting headphones

Connect headphones to the **PHONES** connector (stereo mini jack) on the front panel.
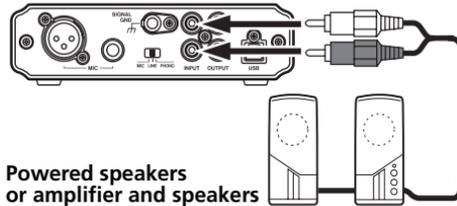
Headphones

NOTE

If you connect headphones to the PHONES connector, sound cannot be heard from the monitor speakers connected to the line output (OUTPUT) connectors. Do not connect headphones when you use monitor speakers.
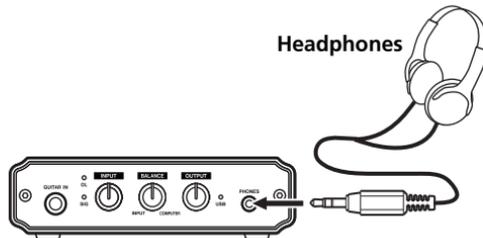
4 – Application Guide

This unit uses standard operating system drivers, so the necessary settings are the same for all audio applications, including Windows Media Player and iTunes.

For information about how to use the Audacity application, which is included on the CD-ROM, please see the documents on the CD-ROM, the Audacity help menu and the following website.

http://audacity.sourceforge.net/help/?lang=en

Since Audacity is free software, we do not provide support for it.

CAUTION

Before connecting headphones or speakers to this unit, minimize the volume using the OUTPUT level knob. Sudden loud noises could damage hearing or cause other harm.

NOTE

- *If you set the unit as the input/output source for the computer while an application is running, that software might not recognize the device. In this case, restart the application software.*

- *If no sound can be heard even though you have made the settings and are operating the unit correctly, try restarting the computer.*

- *When you connect the unit to a computer, sound is output via the device, but sound stops being output from the computer's speakers and headphones jack.*

Windows XP

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

2 **Open the "Sounds and Audio Devices" panel.**

NOTE

If you do not see the above panel, click "Sounds, Speech, and Audio Devices" and then select the "Sounds and Audio Devices" panel.

Sounds and
Audio Devices

3 **Click the "Audio" tab, and set the "Default device" under both "Sound playback" and "Sound recording" to "USB Audio CODEC."**

5 To adjust the output level, use the OUTPUT level knob on the front panel of this unit, as well as the "Volume" tab of the computer "Sounds and Audio Devices" Control Panel.

These settings adjust the level output from the line output (OUTPUT) connectors and PHONES jack.

4 To adjust the input level, use the INPUT knob on the front panel of this unit. Adjust it so that the overload indicator (OL) does not light.

Overload indicator

4 – Application Guide

Set the level of the "Device volume" to the highest position. Do not check the "Mute." Then, click "OK" at the bottom of the window to close it.

6 **Use the BALANCE knob to adjust the volume balance between the computer and input signals.**
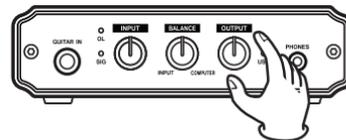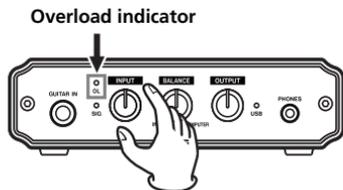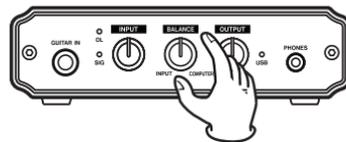
Windows Vista

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

2 **Open the "Sound" panel.**

NOTE

If you do not see the above panel, click "Hardware and Sound" and then select the "Sounds" panel.

3 **Click the "Playback" tab, click "Speakers: USB Audio CODEC," and then click "Set Default." The green checkmark is moved to "Speakers: USB Audio CODEC."**
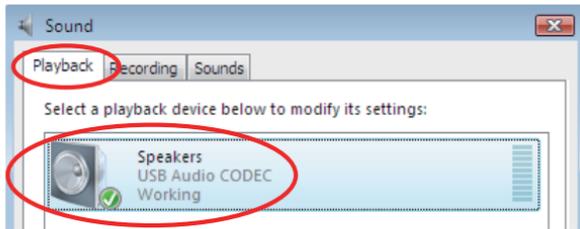
4 Click the "Recording" tab, click "Microphone: USB Audio CODEC," and then click "Set Default." The green checkmark is moved to "Microphone: USB Audio CODEC."
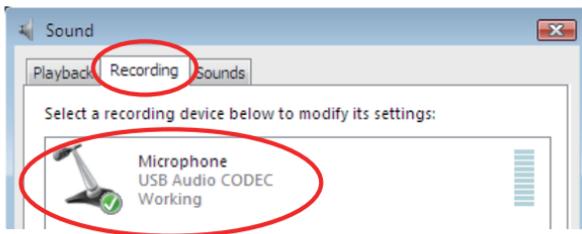
5 To adjust the input level, use the INPUT knob on the front panel of this unit. Adjust it so that the overload indicator (OL) does not light.

Overload indicator
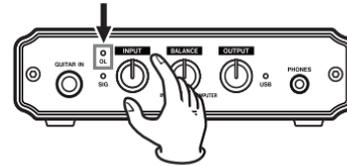
6 To adjust the output level, use the OUTPUT level knob on the front panel of this unit, as well as the "Levels" tab of the computer "Speakers Properties" control panel.

These settings adjust the level output from the line output (**OUTPUT**) connectors and **PHONES** jack.
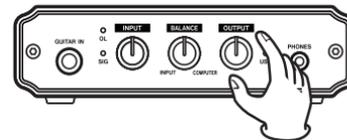
Open the "Playback" tab of the "Sound" Control Panel. Click "Speakers: USB Audio CODEC," and then click "Properties" at the bottom right of the window.
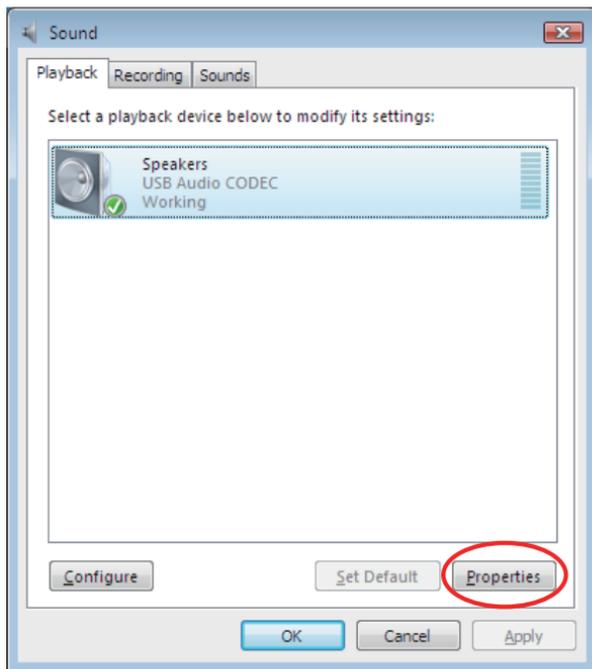
Click the "Levels" tab.
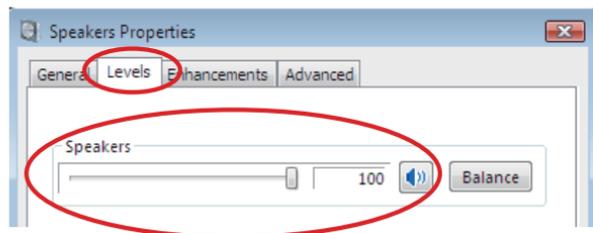
Set the level for "Speakers" to the maximum, then click "OK" at the bottom of both windows to close them.

7   Use the BALANCE knob to adjust the volume balance between the computer and input signals.
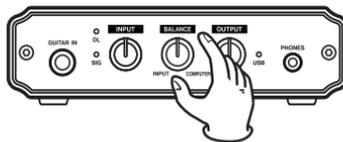
Mac OS X and iTunes

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 "USB Audio CODEC." For the "Format" in the "Audio Input" section, set the sampling frequency and number of channels so that they match that used in your audio application.

3 Use the INPUT knob on the front panel of the unit to adjust the input level. Adjust the level so that the overload (OL) indicator does not light

Overload indicator
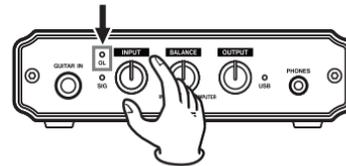
4 To adjust the output level use the knobs on the front panel, as well as the settings in Audio MIDI Setup. Use the BALANCE knob to adjust the monitoring balance between the input and computer sounds, and use the OUTPUT knob to adjust the level output from the OUTPUT and PHONES jacks.
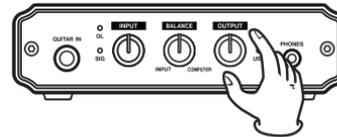
Set the level to the maximum with the "volume" control. Do not check the "Mute". Then, close the window.

5 Use the BALANCE knob to adjust the volume balance between the computer and input signals.
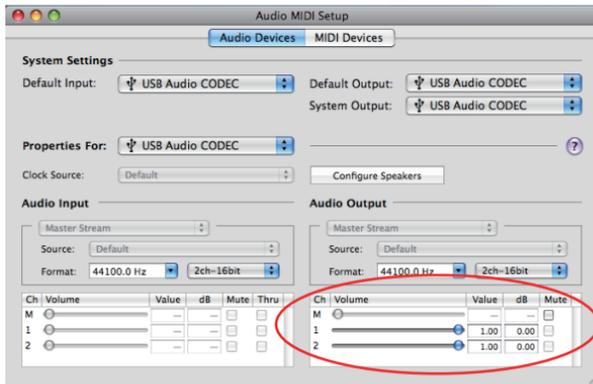
Audio application settings

Please consult the documentation or the maker of the audio application that you are using for how to make the necessary settings.
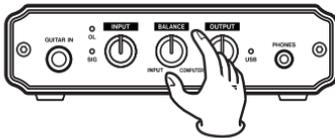
If the unit does not function properly even though you have made setting according to the procedures in this Owner's Manual, please review this chapter before requesting service.

If you are still unable to resolve the problem, contact TASCAM customer support. Please prepare to provide the following information about your operating environment before you contact us. See the last page for contact information.

Operating environment

- Computer manufacturer
- Model
- CPU
- Installed memory
- OS
- Applications used with this product
- Virus software used if any
- Wireless LAN used or not

• The sound cuts out or there is noise.

The processing load on the computer could cause noise or the sound to cut out. Try the following techniques to reduce the load on your computer.

1) The use of wireless LAN, antivirus software and other software that runs in the background can cause periodic processing loads on the computer, causing noise or sound dropouts.

Stop wireless LAN transmissions and turn off antivirus software and other background applications during use to reduce such loads.

2) Try increasing the buffer size used with your audio software (DAW).

3) Change computer settings to improve computer audio performance.

Windows XP

1 Right-click "My Computer" (or open the "System" Control Panel) 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 (or open the "System" Control Panel) and select "Personalize" to open the "Personalize appearance and sounds" screen.

2 Choose "Window Color and Appearance."

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

5 – Troubleshooting

B) Performance settings

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

2 Click the "Advanced" tab.

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

4 On the "Performance Options" screen, select the "Adjust for best performance" option.

Mac OS X

1 Open "System Preferences" 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.

• **Sound cannot be input through the MIC or LINE/PHONO INPUT connector**

When a cable is connected to the **GUITAR IN** jack on the front panel, all other input connectors are deactivated. To input sound

through a **MIC** or line input (**INPUT**) connector, do not connect anything to the **GUITAR IN** jack.

• **Sound cannot be heard from the speakers connected to the OUTPUT jacks.**

Is the power for the amplifier or speakers turned ON?

Is the volume level raised?

Are headphones connected?

• **About Audacity**

For help with Audacity, which is free software and not supported by TASCAM, please see the documents included on the CD-ROM, the Audacity help menu and the following website.

http://audacity.sourceforge.net/help/?lang=en

NOTE

Since Audacity is free software, we do not guarantee its operation. We will not take responsibility for any loss that occurs during the use of this software. This includes compensation related to the contents of a recording.

Input and output ratings

MIC IN XLR connector

Connector: XLR-3-31 (1: GND, 2: HOT, 3: COLD)
Input impedance: 2.2 kΩ or more
Nominal input level: –62 dBu to –23 dBu
Maximum input level: –7 dBu

MIC IN TRS connector

Connector: 6.3 mm (1/4") standard TRS jack (Tip: HOT,
Ring: COLD, Sleeve: GND)
Input impedance: 2.2 kΩ or more
Nominal input level: –62 dBu to –23 dBu
Maximum input level: –7 dBu

INPUT connectors (LINE mode)

Connectors: RCA pin jack
Input impedance: 10 kΩ
Nominal input level: –10 dBV (**INPUT** knob minimized)
Maximum input level: +6 dBV

INPUT connectors (PHONO mode)

Connectors: RCA pin jack
Input impedance: 47 kΩ
Nominal input level: –50 dBV (**INPUT** knob minimized)
Maximum input level: –34 dBV

GUITAR IN connector

Connector: 6.3 mm (1/4") standard jack

Input impedance: 1 MΩ
Maximum input level: +3 dBV

OUTPUT connectors

Connectors: RCA pin jack
Output impedance: 200 Ω
Maximum output level: 0 dBV

PHONES connector

Connector: 3.5 mm stereo mini jack
Maximum output: 15 mW + 15 mW or more (32 Ω load,
THD+N 0.1% or less)

USB connector

Connector: USB B type 4 pin
Formats: USB 2.0 Hi-speed (480 MHz)
USB 2.0 Full-speed (12 MHz USB 1.1 equivalent)

Audio performance

Frequency response (MIC IN to OUTPUT)
20 Hz to 20 kHz, +1/-2 dB

Noise level (MIC IN to OUTPUT, when direct monitoring)
–90 dB

(Input: 150Ω terminated, **INPUT** knob minimized, **BALANCE**
knob **INPUT**, OUTPUT level: FS-10dB, A-weighted)

6 – Specifications

Total harmonic distortion (MIC IN to OUTPUT, when direct monitoring)

0.1% or less
(**INPUT** knob minimized: 1 kHz, –7 dBu input, Output level: FS –10 dB)

System requirements

See the TASCAM website for updated information about OS compatibility. (http://www.tascam.com/).

Supported OS:

Windows XP 32-bit/64-bit
Windows Vista 32-bit/64-bit
Mac OS X 10.3.9 or later

Drivers

Windows: WDM (standard Windows driver)
Mac OS X: Core Audio (standard Macintosh driver)

General

Sampling frequency: 44.1/48 kHz

Quantization bit rate: 16-bit

Power: Supplied from computer by USB

Power consumption: 1 W

Dimensions (W x H x D):
150 x 40.6 x 127.7 mm
5.91 x 1.60 x 5.03 in.

Weight: 530 g/17.11 oz

Operating environment temperature: 5–35º C (41º–95º F)

Bundled software: Audacity (for Windows and Mac OS X)

Dimensional drawings
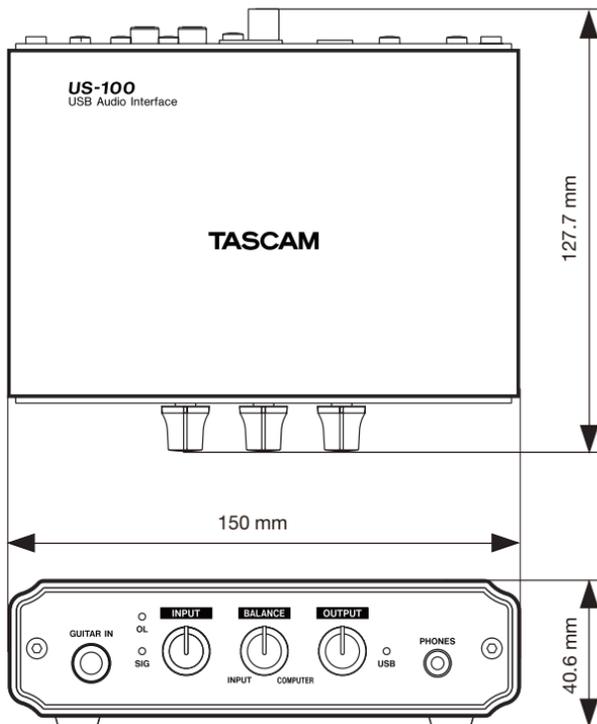
- Illustrations and other depictions may differ in part from the actual product.
- Specifications and external appearance may be changed without notification to improve the product.

TASCAM
TEAC PROFESSIONAL

US-100