# Safety Symbols

Warnings and precautions noted in this manual and the instrument are indicated by the following markings, designed to prevent accidents caused by erroneous handling of the equipment.



This indicates text consisting of a warning or precaution relating to safety. Please read the text carefully and use the equipment safety.



This indicates an action which is prohibited. The prohibited action should never be carried out, under any circumstances.



This indicates an action which is prohibited. Never disassemble the product or unit.

## **Registered Names and Trademarks**

Registered names for products appearing in this manual are as follows.

Windows 8 Microsoft® Windows® 8 Pro Operating System Microsoft® Windows® 8 Operating System Windows 8 Microsoft® Windows® 7 Professional Operating System Windows 7 Microsoft® Windows® 7 Home Premium Operating System Windows 7 Microsoft® Windows® VIsta Business Operating System Windows Vista Microsoft® Windows® VIsta Home Premlum Operating System Windows Vista Microsoft® Windows® Vista Home Basic Operating System Windows Vista Windows XP Microsoft® Windows® XP Professional Operating System Microsoft® Windows® XP Home Edition Operating System Windows XP

★In this manual, "Windows" is sometimes used as a general name to cover the Windows operating systems above.

#### Trademarks

- Microsoft and Windows are either trademarks or registered trade-marks of Microsoft Corporation in the USA and other countries.
- Other product names and trademarks appearing in this manual are the property of their respective owners.

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# **Introduction and Preparation**

## Introduction

The product consists of a UA cable (to connect the product to the pulse oximeter), USB adapter UA-300, and a USB cable to connect the adapter to a personal computer. These components are packaged separately. Before use this adapter, connect them according to the procedure below.

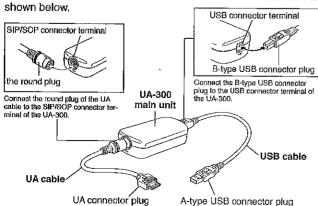
## Package contents

A package includes products as shown below.

- UA-300 main unit (x1)
- UA cable for connecting to PULSOX (x1)
- USB cable for connecting to a computer (x1)
- Setting-up guide (This manual) (x1)
- UA-300 USB Driver CD-ROM (x1)

#### Preparation

Connect the UA cable and USB cable to the UA-300 main unit as



ХP

Click the "Hardware" tab, Click [Device Manager] button in the device manager window.

The [Device Manager] dialog box appears.



ΧP

Activate the USB Control (click ⊞ next to the icon to show ⊞) in the Device Manager list, and select the Pulsox UA-300 driver



ХP

With the Pulsox UA-300 driver selected, right-click the mouse to open a pop-up menu and select "Uninstall" there.

The [Confirm Device Removal] dialog box appears, therefore click the [OK] button.

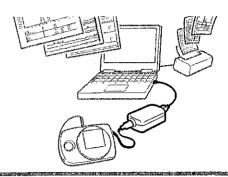


35



Communication Interface Unit for PULSOX-300i

# USB Adapter Setting-up Guide



This manual explains for using a UA-300 interface unit that should be used with PULSOX-300i series pluse oximeters for connecting to the computer.

Introduction and Preparation	4
<ul> <li>Connecting to the computer and installing the USB driver</li> </ul>	5
Connecting to PULSOX-300i series oximeter	18
• Notes	19
Specifications	21
Driver Uninstallation	22

Before using the UA-300, read the manuals of the PULSOX-300i series pulse oximeter and the computer as well as this manual to use the equipment correctly and safely.

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BDIAKK Printed in Japan

## ΧP

After uninstallation has been completed, check that the Pulsox UA 30 driver of the USB Controller has been deleted from the Device Manager list.

Close the [Device Manager] dialog box to quit the device manager.



## Notes on This Manual.

- Copyling or reproduction of all or any part of the contents of this manual without KONICA MINOLTA's permission is strictly prohibited.
- The contents of this manual are subject to change without prior notice.
- ●Every effort has been made in the preparation of this manual to ensure it is correctness. However, should you have any questions or find errors or omissions, please contact a KONICA MINOLTA authorised service facility.
- ●KONICA MINOLTA will not accept responsibility for any consequences arising as a result of not using this software according to this manual.

# **Safety Precautions**

To ensure correct use of this instrument, read the following points carefully and adhere to them. After you have read this manual, keep it in a safe place where it can be referred to anytime a question arises.



WARNING (Failure to adhere to the following points may result in death or serious injury.)



Do not use the instrument in places where flammable or combustible gases (anesthetic gas etc.) are present. Doing so may cause a fire.



Do not disassemble or modify the instrument and accessories. Doing so may cause a fire or electric shock.



The instrument should not be operated if it is damaged, or smoke or odd smells occur. Doing so may result in a fire. In such situations, turn OFF the power immediately, remove the battery, and contact the nearest authorized service facility.

## Install the driver

## For:Windows 8

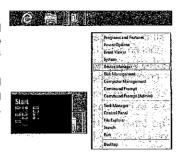
Connecting the instrument to a USB port of the PC requires the device driver to be installed.

Please follow the steps below.

8

With the UA-300 USB Driver CD-ROM inserted in the PC, connect the instrument to a USB port of the PC.

Device driver installation will begin, and the task bar will show an icon named "Installing device driver software".



Place the cursor at the lower left of the screen.
When a window opens, right-click.

Clicking on 'Device Manager' will open the screen as shown to the right.

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Right click on 'Pulsox UA-300' and select 'Update Driver Software'.



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## For Windows 7

When "Windows needs your permission to continue," appears, click the [Continue] button to Install the driver.

7

When UA-300 is connected to a USB port of the computer with the UA-300 USB Driver CD-ROM inserted in the CD-ROM drive, the device driver installation program will start.

From the taskbar, select the icon indicating the device driver is being searched for.



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Click on "Skip obtaining driver software from Windows Update".



7

Click "Yes" in the Confirmation window.



Vista

After uninstallation has been completed, check that the Pulsox UA-300 driver of the USB Controller has been deleted from the Device Manager list.

 Close the [Device Manager] dialog box to exit the device manager.

31

# For Windows Vista

 When "Windows needs your permission to continue." appears, click the [Continue] button to uninstall the software.

### Vista

Select [Control Panel] from the Start menu in Windows.

The [Control Panel] window appears.



## Vista

Click "System and Maintenance".

The [System and Maintenance] window appears.



#### Vista

6 Click "Device Manager" amongst the window tasks.

When the [User Account Control] dialog box appears, click [Continue]. The [Device Manager] dialog box appears.



## ΧP

Select [Control Panel] from the Start menu in Windows.

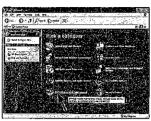
The [Control Panel] window appears.



ΧP

Click "Performance and Maintenance".

The [Performance Maintenance] window appears.



ΧP

Click "System".

The [System Properties] dialog box appears.



32

Vista

Activate the Universal Serial Bus controllers (click ⊞next to the icon to show ⊟) in the Device Manager list, and select the Pulsoy UA-300 driver.

the Pulsox UA-300 driver.



Vista

8 With the Pulsox UA-300 driver selected, right-click the mouse to open a pop-up menu and select [Uninstali] there.



 The [Confirm Device Uninstall] dialog box appears, therefore place a checkmark in the "Delete the driver software for this device" checkbox, and click the [OK] button.



# Connecting to the computer and installing the USB driver

## **System Requirements**

To use the UA-300 by connecting it to a personal computer, make sure that the personal computer has at least one USB port (USB1.1 or higher) as a standard accessory.

\*If the personal computer has two or more USB ports, make sure that no other USB devices are connected when the UA-300 is used. If any other USB devices are connected, the UA-300 may not be properly recognized, hindering correct operation.

For supported instrument models and specification of a computer, refer to the specifications of the data analysis software.

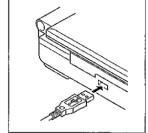
The other performance items of the personal computer must comply with the system requirements of the software used.

## Connecting the UA-300 to the computer

Connect the A-type USB connector of the UA-300 to the USB port terminal of the computer.

★Since the UA-300 is hot-pluggable, it is not necessary to power OFF the computer.

\*Since the UA-300 is electrically isolated internally, the UA-300 can be connected to PULSOX-300i series before it is connected to the personal computer.



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8

Click on 'Browse my computer for driver software'.



8

Designate the driver folder in the UA-300 USB Driver CD-ROM and click Next].

(Example) In the case of CD-ROM in E drive.



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Click Close .



Click "System" in the System and Security window.

The [System] window appears.



Click "Device Manager" in the System window.



7

Activate the Other devices (click) next to the icon to show (1) in the Device Manager list, and select the Pulsox

UA-300 driver.



10

When the driver has been detected, a [Windows Security] dialog box appears explaining that the driver has not been authorized by Microsoft.

Click "Install this driver software anyway" at the bottom of the dialog box to proceed with installation.



When driver installation has been completed, a dialog box appears explaining that.

Click the [Close] button to quit the update wizard.

 When properly installed, the UA-300 driver can be used as the interface for communicating with the PULSOX-300i.

Proceed to "Connecting to PULSOX-300i series oximeter" on page 18.



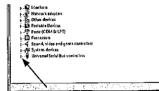
Click "Device Manager" in the System window.

When the [Windows needs your permission to continue) dialog box appears, click [Continue]. The [Device Manager] dialog box appears.



7

Activate the Universal Serial Bus controllers (click) next to the icon to show 1) in the Device Manager list, and select the Pulsox UA-300 driver.



7

With the Pulsox UA-300 driver selected, right-click the mouse to open a pop-up menu and select [Uninstall] there.



27

After uninstallation has been completed, check that the Pulsox UA 300 driver of the USB Controller has been deleted from the Device Manager list.

Click the [Close] button to quit the update wizard.

 Close the [Device Manager] dialog box to exit the device manager.



 The [Confirm Device Uninstall] dialog box appears, therefore place a checkmark in the "Delete the driver software for this device" checkbox, and click the [OK] button.



7

10 After uninstallation has been completed, check that the Pulsox UA 300 driver of the USB Controller has been deleted from the Device Manager list.

Click the [Close] button to quit the update wizard.

 Close the [Device Manager] dialog box to exit the device manager.



7

Wait for the screen below to appear and click "Close".

Please wait for a while as this may take several minutes.



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Select [Control Panel] from the Start menu in Windows.

The [Control panel] window appears.



7

Click "System and Security" in the Control Panel window.

The [System and Security] window appears.



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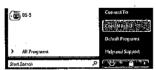
For Windows 7

When "Windows needs your permission to continue," appears, click the [Continue] button to uninstall the software.

7

Select [Control Panel] from the Start menu in Windows.

The [Control Panel] window appears.



7

Click "System and Security"

The [System and Security] window appears.



7

Click "System" in the window.

The [System] window appears.



7

10 With the Pulsox UA-300 driver selected, right-click the mouse to open a pop-up menu and select "Update Driver Software..." there.



7

Specify the driver search method.

Click on "Browse my computer for driver software",



7

12 Designate the driver folder in the UA-300 USB Driver CD-ROM and click "Next".

Example: In the case of CD-ROM in E drive.



9

When the driver has been detected, a [Windows Security] dialog box appears explaining that the driver has not been authorized by Microsoft.

Click "Install this driver software anyway" at the bottom of the dialog box to proceed with installation.



## Vista

When driver installation has been completed, a dialog box appears explaining that.

Click the [Close] button to quit the detection wizard.

 When properly installed, the UA-300 driver can be used as the interface for communicating with the PULSOX-300i.

Proceed to "Connecting to PULSOX-300i series oximeter" on page 18.



- Directly connect the USB cable to a USB port on the computer. Do not go through a USB hub, etc.
- UA-300 supports hot plug connections. Before connecting to it, power to the computer does not have to be OFF.

The uninstalling procedure after here will be described for **B**, **Z**, **Vista** and **XD** respectively. The device manager for each will be displayed for uninstalling the UA-300. If Windows 8 is used, proceed to "4" on this page, If Windows 7 is used, proceed to "4" on page 28, If Windows Vista is used, proceed to "4" on page 29, and If Windows XP is used, proceed to "4" on page 32.

## For Windows8

Connecting the instrument to a USB port of the PC requires the device driver to be installed.

Please follow the steps below.

8

Place the cursor at the lower left of the screen. When a window opens, right-click.

Clicking on 'Device Manager' will open the screen as shown to the right.



23

14

#### ΧP

Select the driver installation method in the [Found New Hardware Wizard] dialog box.

Select "Install from a list or specific location (Advanced)" and click the [Next] button.



- Do not select "Install the software automatically (Recommended)". Using automatic installation cannot detect the correct driver of the UA-300 and the driver cannot be installed, causing improper operation.
- When the driver has not been detected and installed, a dialog box appears explaining that. In such a case, click the [Back] button to display the [Found New Hardware] dialog box and reselect [Install from a list or specific location (Advanced).
- If you cannot detect the driver after that, see the "Troubleshooting Guide" on page 41.



3 Specify the driver search method.

Select "Search removal media (floppy, CD-ROM...)" and click the [Next] button.





# **Specifications**

■ Model Name USB Adapter UA-300

■ Main Functions

Acts as an interface to convert the communication protocol when the pulse oximeter is connected to a computer.

- Operating Conditions
- Temperature of 0 to 40°C (32 to 104°F), relative humidity of 30 to 85%, with no condensation.
- · Atmospheric pressure of 700 to 1060 hPa (altitude of -400 to 3000m).
- Storage Conditions
- Temperature of -10 to  $60^{\circ}$ C (14 to  $140^{\circ}$ F), relative humidity of 10 to 85%, with no condensation.
- Atmospheric pressure of 700 to 1060 hPa (altitude of -400 to 3000m).
- Connecting devices

PULSOX-300i series oximeters

A computer that has a USB port (USB1.1 or higher) as a standard accessory

\*For supported instrument models and specification of a computer, refer to the specifications of the data analysis software.

Power Supply

Power is supplied via the connector from the connected devices (PULSOX-300) and the computer)

- $\blacksquare$  Dimensions (W × H × D), size, or cable length (unit: mm)
  - · UA-300 main unit: 47 x 90 x 25mm
- · UA cable: 300mm length cable
- · USB cable: 1000mm length cable
- Weight

72g (without cables)

■ Warranty period

1 (one) year after purchase

Activate the Universal Serial Bus controllers (click > next to the icon to show ▲) in the Device Manager list, and select the Pulsox UA-300 driver.

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With the Pulsox UA-300 driver selected, right-click the mouse to open a pop-up menu and select [Uninstall] there.



 The [Confirm Device Uninstall] dialog box appears, therefore place a checkmark in the "Delete the driver software for this device" checkbox, and click the [OK] button.



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## **Driver Uninstallation**

A computer recognizes the USB adapter UA-300 used for communications with the PULSOX-300i as a USB device. This USB driver for the UA-300 does not have to be deleted when uninstalling this software, but to uninstall it, do so as follows.

To uninstall the driver, log in with administrator privileges.

This driver is deleted in a different way from that of earlier version drivers.
 To uninstall the driver for an earlier version of UA-300, read the installation guide of the earlier version software and uninstall the driver correctly.

## Driver Uninstallation Procedure

#### B/7/Vista/XP

Turn ON power to the computer and start up Windows.

### 8/7/Vista/XP

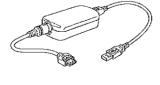
2 Connect a USB cable to the UA-300.

 For connection, read the user's manual of the UA-300.

## 8/7/Vista/XP

3 Connect the UA-300 to the computer.

 Connect the open end of the USB cable that is connected to the UA-300 to a USB port on the computer.





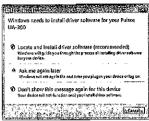
## For Windows Vista

 When "Windows needs your permission to continue," appears, click the [Continue] button to install the driver.

#### Vista

The UA-300 is detected. Select the driver installation method.

Click "Locate and install driver software, (recommended)"



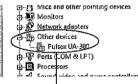
### Vista

2 Select the driver installation method in the [Found New Hardware] dialog box.

Load the UA-300 USB Driver CD-ROM into the CD drive.

- When the driver has not been detected and installed, a dialog box appears explaining that. In such a case, specify the "USB driver" folder on the installation CD and try to detect the driver.
- if you cannot detect the driver after that, see the "Troubleshooting Guide" on page 41.





The UA-300 cannol correctly be recognized.

13

#### or Windows XF

ΧP

# The "Pulsox USB Adapter" is detected and driver installation

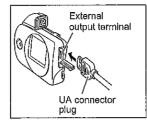
- ♦ A dialog box may appear if you access Windows Update. The UA-300 driver cannot be installed using Windows Update, therefore select "No, not this time" and click the [Next] button.
- If you accidentally access Windows Update, note that the UA-300 driver cannot be installed.



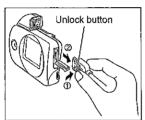
# Connecting to PULSOX-300i series oximeter

To connect the UA-300 and PUL-SOX-300i series pulse oximeter, use the UA cable to connect the UA connector plug to the external output terminal of the PULSOX.

The external output terminal of PULSOX-300i is protected with connector cover. Remove the connector cover to expose the connector, align the connectors properly, and carefully connect them in a straight line without forcing them.



- Since the UA-300 is electrically isolated internally, it can be connected to PULSOX-300i series while connected to the computer.
- When connecting the PULSOX-300i to the UA-300, the power of the instrument will be set to OFF automatically.
- •If connecting the PULSOX-300i with the power off, turn the power ON after connecting.
- When connecting the PULSOX-300i and turning the power ON, "UA" indicating that the PULSOX-300i is in UA communication mode will appear.
- •When disconnecting the UA connector plug of the UA cable from the output terminal of PULSOX-300i, push the unlock button of the connector plug, and then pull it out straightly and carefully.



## **Notes**

## Notes on Use

- This instrument should be used under the following operating conditions.
- Temperature of 0 to 40°C (32 to 104°F), relative humidity of 30 to 85%, with no condensation.
- Atmospheric pressure of 700 to 1060 hPa (altitude of -400 to 3000m).
- This is a precision instrument. To avoid the possibility of it being damaged, the instrument should not be dropped nor should heavy objects be placed on top of it.
- •Do not expose this instrument to rain and water.
- ●Do not use the instrument on a point where there is excessive vibration. In addition, to avoid excessive impact on the instrument, it should be handled gently. Fallure to observe this may cause breakdown.
- When connecting the PULSOX-300i series pulse oximeter to a computer, use this USB adapter UA-300 to connect it.

  Use this USB adapter together with the data analysis software.
- Do not use any cables other than those specified by KONICA MINOLTA.
- ●The computer to be connected must have at least one USB port (USB1.1 or higher) as a standard accessory. The supported operating system (OS) is Windows 8, Windows 7, Windows Vista or Windows XP. The specifications of the computers comply with the operating environmental conditions of the data analysis software.

\*Make sure that this USB adapter is connected directly to a USB port on the personal computer.

## **Notes on Storage**

- This instrument should be stored under the following storage conditions.
- Temperature of --10 to 60°C (14 to 140°F), relative humidity of 10 to 95%, with no condensation.
- Atmospheric pressure of 700 to 1060 hPa (altitude of -400 to 3000m).

- •When storing the instrument:
- Do not store the instrument in an area where it will be exposed to water.
- Do not store the instrument in an area where direct sunlight, pressure, temperature, humidity, ventilation, sunlight, dust, strong magnetic fields, and/or saline or sulphurous atmospheres may affect the instrument.
- Do not store the instrument on an inclined surface or on a surface which may be subject to vibrations or physical shock. (Also avoid vibrations or physical shock during transportation.)
- Do not store the instrument in areas where chemicals are stored or where gas may be emitted.
- •This USB adapter is powered from the pulse oximeter and personal computer via the UA and USB cables. Before storing this USB adapter, make sure that these cables are disconnected and the power is turned OFF.
- •To avoid any problems occurring the next time the instrument is used, make sure the instrument, cords, and other accessories are cleaned and stored safely.

## **Disposal Method**

 Make sure that the instruments or cables are either disposed of or recycled correctly in accordance with local laws and regulations.

## Maintenance and Inspection

 Before using the instrument, make sure that there is no damage to the instrument, no damage or wire-breakage in the cable and the instrument operates correctly and safely.

## Cleaning

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ODampen a soft cloth with neutral detergent or water, wipe the instrument with it, then wipe off carefully with a dry cloth. In this way, make sure the instrument is cleaned and never use solvent.

When cleaning, take care not to touch the connector terminals. Touching them may break terminal pins, resulting in breakdown or damage.

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Clicking on the [Next] button starts searching the "Pulsox UA-300" driver.

With Windows XP, a dialog box appears explaining that the driver has not been authorized by Microsoft. Click the [Continue Anyway] button to proceed with installation.





ΧР

When driver installation has been completed, the "Completing the Hardware Update Wizard" dialog box appears.

Click the [Finish] button to exit the search wizard.

 When properly installed, the UA-300 driver can be used as the interface for communicating with the PULSOX-300i.

Proceed to "Connecting to PULSOX-300l series oximeter" on the next page.



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