

RA3100 Viewer

Instruction Manual



CAUTION

- (1) Turn off the power when the operation is abnormal.
If it is impossible to trace the causes of an abnormal operation, please contact our sales representative.
- (2) The contents of this manual are subject to change without notice.
- (3) This manual is copyrighted with all rights reserved. This manual may not be reproduced, modified, or translated without the written permission of A&D Company, Limited. No parts of this manual may be transcribed without permission.
- (4) Please let us know if there are any points that are unclear or missing in this manual.
- (5) A&D Company, Limited, will not be held responsible for any damages or loss of income caused by the operation of this device or any direct, indirect, special, or inevitable damages caused by defects in the product, even if there is notice that the corresponding damages may occur. We will also not be held responsible for any third party claims of rights. At the same time, we will not be held responsible for any loss of data. We will not be held responsible for any of such points as those indicated in item (4).

© 2021 A&D Company, Limited.

- ☐ Omniace is a registered trademark of A&D Company, Limited.
- ☐ Microsoft Windows, Word, and Excel are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.
- ☐ Intel and Intel Core are trademarks of Intel Corporation in the United States and/or other countries.
- ☐ Product names and company names in this manual are trademarks or registered trademarks of their respective owners in Japan and other countries.

Introduction

RA3100 Viewer is computer software for displaying the waveforms of recorded data exported to external media from our data acquisition product OMNIACE RA3100.



RA3100

Symbols in This Manual

Terms and symbols used in this manual denote as follows.

	This indicates a condition or practice that could result in incorrect operation or damage to data if this equipment is misused due to neglect of a Note.
	This indicates measurement limitations and additional explanations.
	Reference page
	Indicates a mouse click. Used for an operation using a key or other item displayed on the screen. Example Used for selecting or setting screen keys.
	Enclosed characters represent a key name on the operation panel. Example key
	Text enclosed in indicates keys displayed on the screen. Example key
	Text enclosed in indicates the text of items on the screen. Example screen

CONTENTS

Introduction	3
Symbols in This Manual	3
CONTENTS	4
1. Environment	5
1.1. System Requirements	5
1.2. Setup Method	5
1.2.1. Windows Settings	5
1.2.2. Extracting the ZIP File	7
1.3. Installation Method	8
2. Functions	9
2.1. Differences between the RA3100 and RA3100 Viewer	9
2.1.1. Hamburger Button	10
2.2. Mouse Operations (Used as Substitute for the Touch Panel and Jog Dial)	11
2.2.1. Basic Operations	11
3. Usage Method	13
3.1. Flow of Operations	13
3.2. Starting the Software	13
3.3. Creating a New Recording Folder for the RA3100	14
3.4. Opening a Recording Folder for the RA3100	15
3.5. Copying the Recorded Data from the RA3100	16
3.5.1. Copying the Recorded Data to External Media	16
3.5.2. Copying the Recorded Data on External Media to a Windows PC	17
3.6. Downloading Recorded Data from the RA3100	18
3.6.1. Registering a Target	18
3.6.2. Downloading the Data	19
3.7. Specifying Replay Data	20
3.8. Replay Function and Operations	20
3.9. Capturing and Printing Waveform Images	21
3.10. Saving Display Settings	21
3.11. Closing the RA3100 Viewer	21

1. Environment

This section describes the system requirements and installation procedure.

1.1. System Requirements

Item	Contents
Operating system	Windows 10 x64 (64-bit) (Ver1809 or later) Japanese, English, Korean, Chinese (Traditional) For other languages, the software is displayed in English.
CPU	Intel Core i series
Memory	1 GB or more of free memory
Display	Resolution of 1280 x 1024 or higher

Perform installation and execute the RA3100 Viewer using an **account with administrator privileges**.
The RA3100 Viewer does not support multiple accounts. It does not operate with accounts other than the account used for installation.

1.2. Setup Method

Download the RA3100ViewerSetup_vx.x.x.zip file from our website.

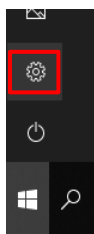
Japan: https://www.aandd.co.jp/support/soft_download/industrial.html

Overseas: https://www.aandd.jp/support/industrial/soft_download.html

1.2.1. Windows Settings

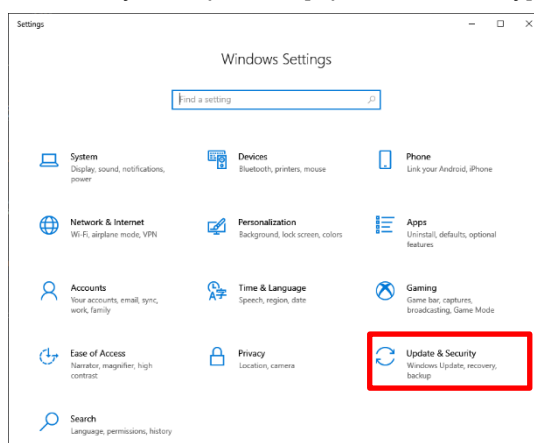
Windows settings must be configured before installing the software.

Click the 【】 in the Windows Start menu.



The [Windows Settings] screen is displayed.

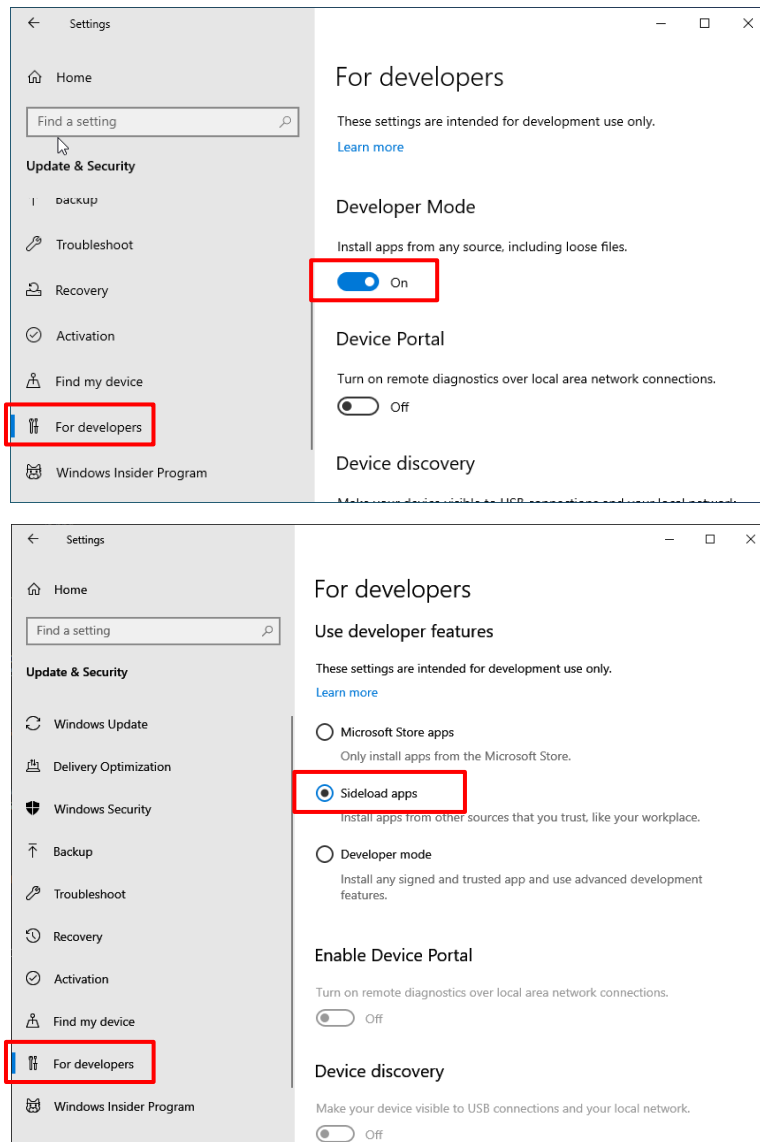
Click 【Update & Security】 to open the [Update & Security] screen.



The settings differ according to the version of Windows.

Enable [Developer Mode] or select [Sideload apps].

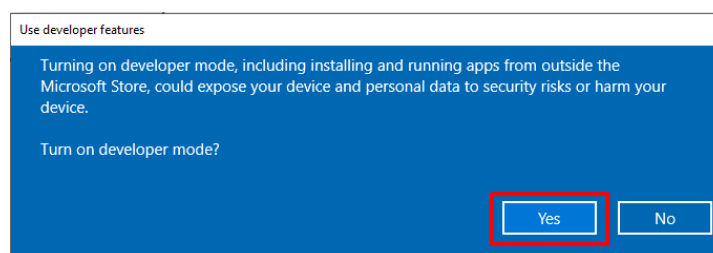
If [Developer mode] is set instead of [Sideload apps], [Developer mode] is acceptable.



The [Turn on developer mode?] dialog is displayed.

Click the [Yes] .

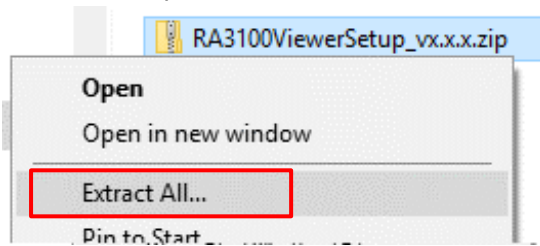
If you selected [Sideload apps], the [Turn on app sideloading?] dialog is displayed.



1.2.2. Extracting the ZIP File

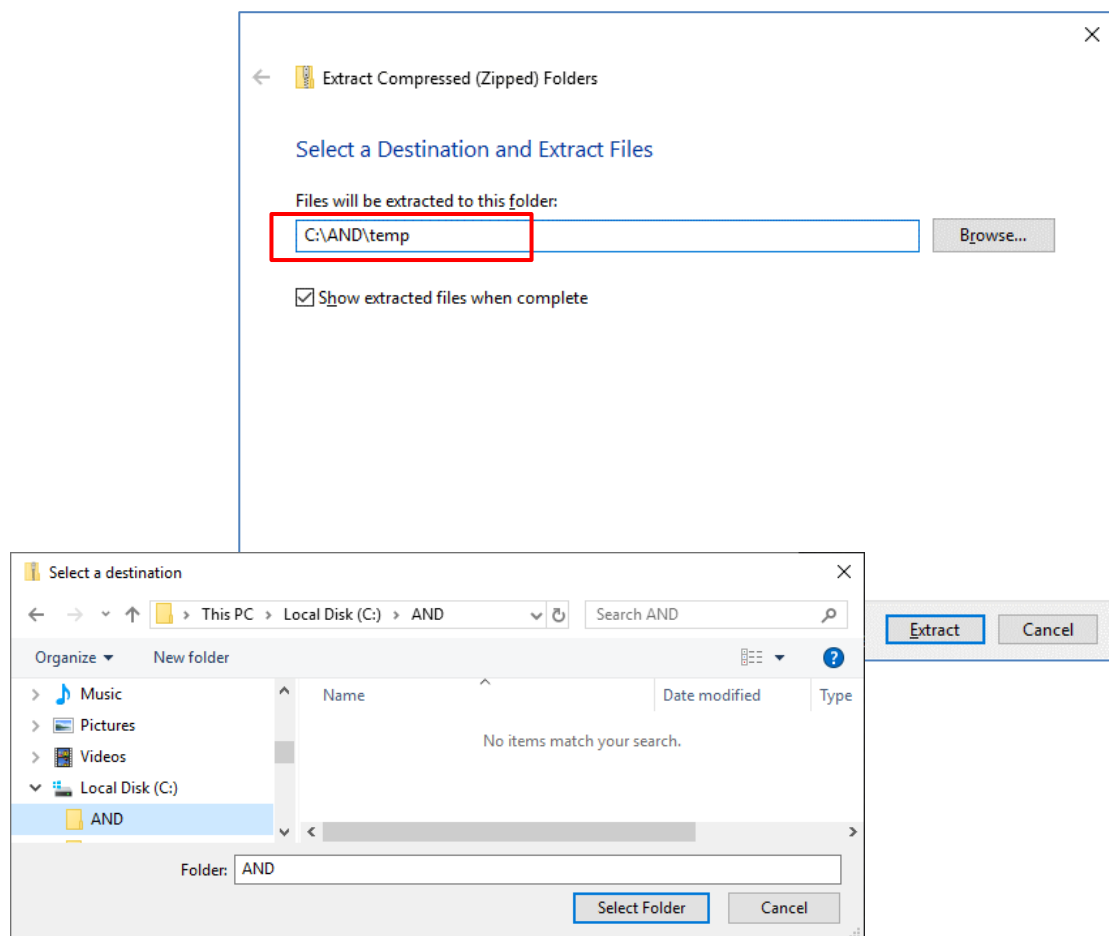
Use the standard software of Windows 10 or other compression/extraction software to extract the file. The procedure for using the standard software of Windows 10 is indicated below.

Right-click the ZIP file in Explorer, and select **【Extract All】**.

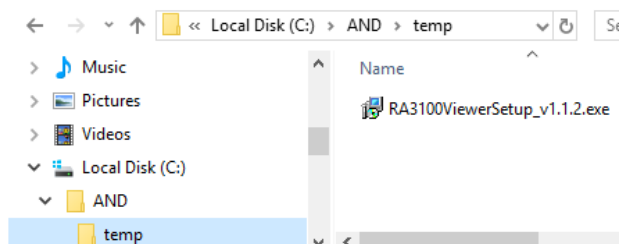


The [Extract Compressed (Zipped) Folders] screen is displayed.

Specify the destination by entering a path in the area above indicated in red or clicking the **【Browse】**.



Click the **【Extract】** to extract the files.

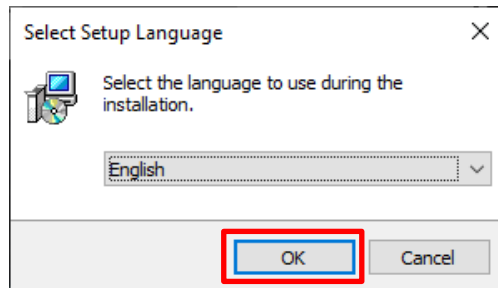


1.3. Installation Method

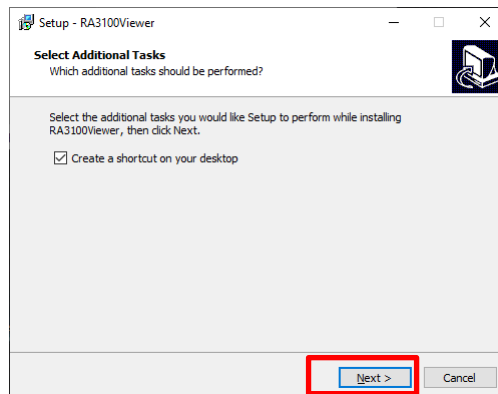
Double-click the RA3100ViewerSetup_vx.x.x.exe file extracted in the previous step.

The [Select Setup Language] screen is displayed.

Click the **【OK】** .



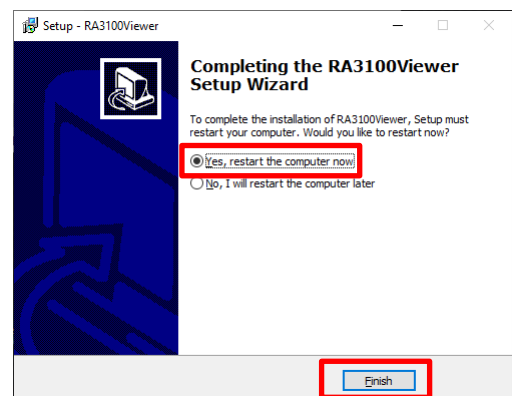
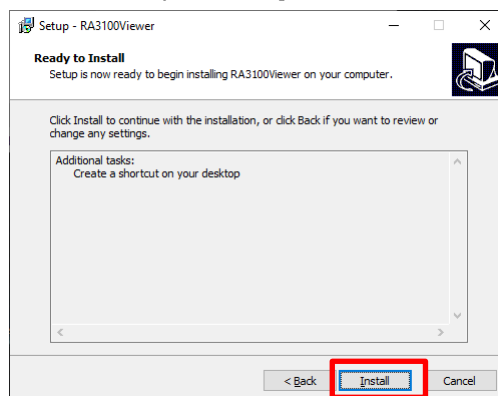
To create a shortcut on the desktop, select [Create a shortcut on your desktop], and click **【Next】** .



Click the **【Install】** to start installation.

When the [Completing the RA3100Viewer Setup Wizard] screen is displayed, installation is complete.

Select [Yes, restart the computer now], and click **【Finish】** .



2. Functions

Operate the playback function of the RA3100 main unit (to perform operations such as displaying waveforms and searching) on a Windows PC.

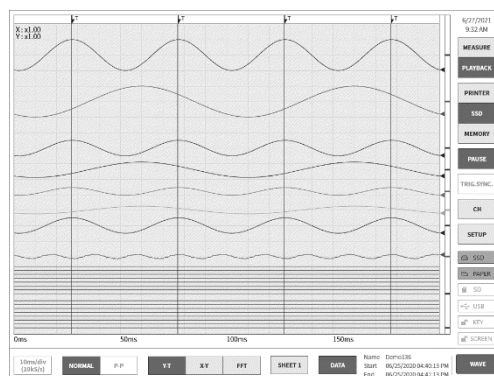
For details on the playback function, see the instruction manual included with the main unit.

2.1. Differences between the RA3100 and RA3100 Viewer

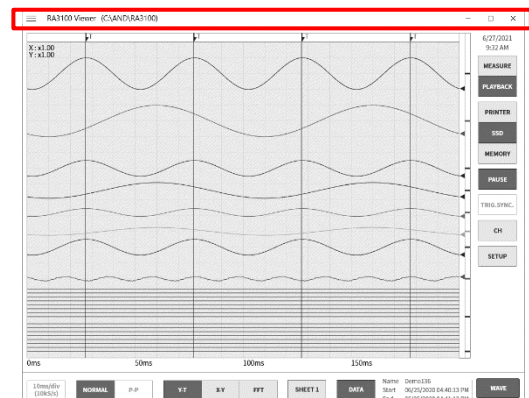
An example of displaying the waveform for the same recorded data with the RA3100 and RA3100 Viewer is indicated below.

The differences in functions are as follows.

- (1) The RA3100 Viewer has a title bar and hamburger button on the top of the screen.
- (2) The touch panel and jog dial operations of the RA3100 are performed using the mouse with the RA3100 Viewer.



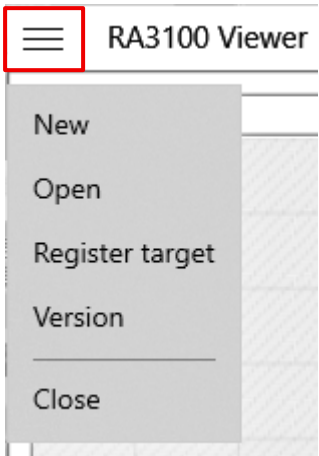
RA3100



RA3100 Viewer

2.1.1. Hamburger Button

The 【≡】 on the top left of the [RA3100 Viewer] screen is called a "hamburger button".
Click it to display the menu.



Menu	Description
New	Creates a new recording folder for the RA3100. For details, see " 3.3 Creating a New Recording Folder for the RA3100 ".
Open	Opens a recording folder for the RA3100. For details, see " 3.4 Opening a Recording Folder for the RA3100 ".
Register target	Configures the IP address, etc. of the target (RA3100) to connect the RA3100 Viewer to. For details, see " 3.6.1 Registering a Target ".
Version	Displays the version information of this software.
	
Close	Closes the RA3100 Viewer.

2.2. Mouse Operations (Used as Substitute for the Touch Panel and Jog Dial)

2.2.1. Basic Operations

The Ctrl, Shift, and Alt keys on the keyboard can be combined with mouse wheel operations to configure settings and move or enlarge/reduce the waveform.

Press the Z key at the same time to reduce the step for updating. (This enables fine adjustment.)

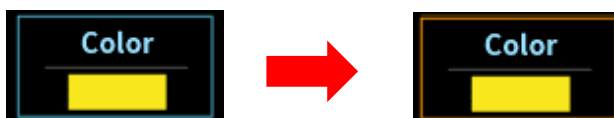
Example 1) Enlarging the waveform X axis with fine adjustment
Press the Ctrl + Z keys and rotate the mouse wheel up

Example 2) Moving the waveform Y axis with coarse adjustment
Press the Alt key and rotate the mouse wheel down

Tips

- When the waveform cannot be moved, it means that there is no data that can be displayed.

Action	Mouse operation and behavior
Changing a setting (mouse wheel)	Click the 【CH】 key on the right side of the [RA3100 Viewer] screen to display the channel settings. Click a setting to change the frame to orange and enable the setting value to be changed using mouse wheel operations. For example, selecting 【Color】 enables the color to be changed and selecting 【Disp. pos.】 enables the ratio number of the display width to be changed.



Changing a setting (dialog)	Right-click a setting to display the dialog corresponding to that setting.
--------------------------------	--

- Selection palette dialog

Select a setting value to reflect the setting and close the dialog. Click outside the dialog to return without changing the setting.



- Number entry dialog

Operate the buttons on the screen or perform keyboard entry to enter a number. When performing keyboard entry, press the [Enter] key to reflect the setting value and close the dialog.



Action	Mouse operation and behavior	
Changing the X axis scale of the waveform	Ctrl key + rotate mouse wheel up:	Enlarge scale
	Ctrl key + rotate mouse wheel down:	Reduce scale
Changing the Y axis scale of the waveform	Shift key + rotate mouse wheel up:	Enlarge scale
	Shift key + rotate mouse wheel down:	Reduce scale
Moving the waveform in the X axis direction	Rotate mouse wheel up:	Move left
	Rotate mouse wheel down:	Move right
Moving the waveform in the Y axis direction	Alt key + rotate mouse wheel up:	Move up
	Alt key + rotate mouse wheel down:	Move down

Click the cursor A or B mark above the waveform area to change the cursor line to orange. The specified cursor line can be moved by operating the mouse wheel.

Rotate mouse wheel up: Move left
 Rotate mouse wheel down: Move right

Moving the cursor



You can also drag the specified cursor line left or right to move it.



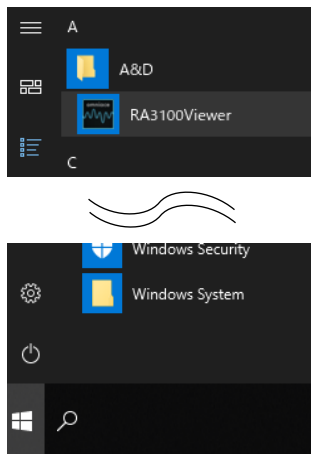
3. Usage Method

3.1. Flow of Operations

Operation	Overview	Reference
(1)	Start the RA3100 Viewer.	"3.2 Starting the Software"
(2)	Specify the recording folder for the RA3100. • If a recording folder does not exist, create one. • If a recording folder exists, open it.	"3.3 Creating a New Recording Folder for the RA3100" "3.4 Opening a Recording Folder for the RA3100"
(3)	Use either of the following methods to retrieve recorded data from the RA3100. • Copy recorded data from the RA3100 using external media. • Download recorded data from the RA3100 via a LAN.	"3.5 Copying the Recorded Data from the RA3100" "3.6 Downloading Recorded Data from the RA3100"
(4)	Select the data to replay from the recorded data.	"3.7 Specifying Replay Data"
(5)	Perform operations such as enlarging and moving the waveform.	"3.8 Replay Function and Operations"
(6)	This section describes the procedure for copying the waveform image to create a report.	"3.9 Capturing and Printing Waveform Images"
(7)	You can change the waveform position and waveform color and overwrite the settings.	"3.10 Saving Display Settings"
(8)	Closes the RA3100 Viewer.	"3.11 Closing the RA3100 Viewer"

3.2. Starting the Software

Click the [A&D] - [RA3100Viewer] in the Windows Start menu.



Note

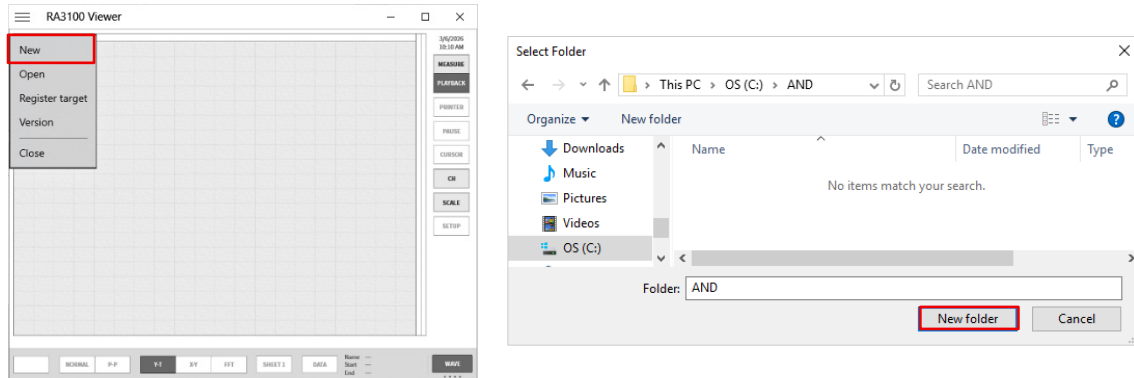
- ❑ The display of the Windows Start menu differs according to the version of Windows and the environment settings.
- ❑ RA3100 Viewer cannot start normally if Universal Windows Platform (UWP) apps are blocked by the system administrator using AppLocker or a group policy at the domain level. In this case, contact the system administrator in charge of the PC.

3.3. Creating a New Recording Folder for the RA3100

Create a new recording folder for the RA3100 and open that folder.

Click the **☰** on the top left of the [RA3100 Viewer] screen.

Select **【New】** from the displayed menu to open the [Select Folder] dialog box.



Select the folder where you want to create the recording folder for the RA3100, then click **【New folder】**.

The path to the RA3100 recording folder is displayed in the title bar on the top of the screen.



Tips

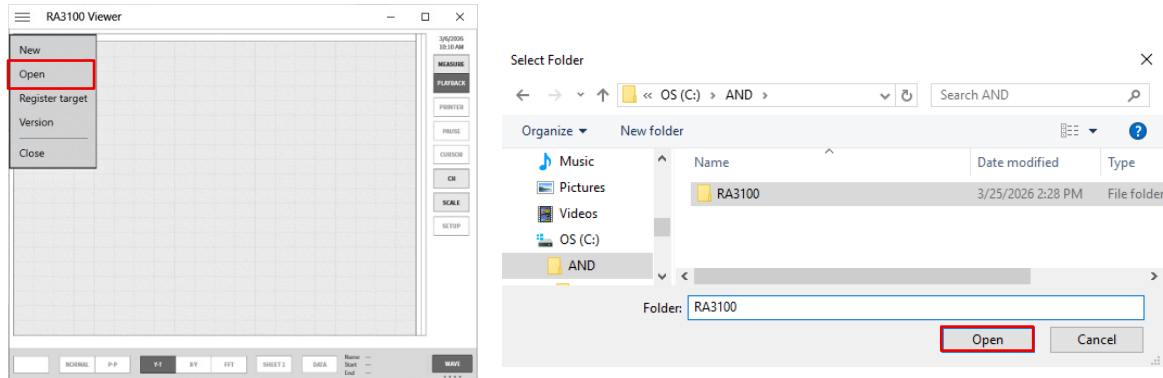
- Structure of RA3100 recording folder
 - RA3100 : Recording folder
 - └ CSV : Stores CSV files
 - └ Env : Stores config files
 - └ Image : Stores image files
 - └ PDF : Stores PDF files
 - └ Record : Stores recorded data

3.4. Opening a Recording Folder for the RA3100

Specify an existing recording folder for the RA3100.

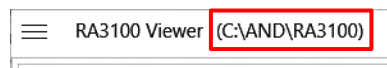
Click the **【≡】** on the top left of the [RA3100 Viewer] screen.

Select **【Open】** from the displayed menu to open the [Select Folder] dialog box.



Select the RA3100 folder, and click the **【Open】**.

The selected path is displayed in the title bar on the top of the screen.



For information on the RA3100 recording folder, see ["3.3 Creating a New Recording Folder for the RA3100"](#) or ["3.5.2 Copying the Recorded Data on External Media to a Windows PC"](#).

3.5. Copying the Recorded Data from the RA3100

3.5.1. Copying the Recorded Data to External Media

Connect external media (such as an SD memory card or USB stick) to the "RA3100 Main Unit".

Click the **【Import/Export】** key on the bottom right of the [File management] screen to display the external media selection dialog and select the target external media.

Click the **【OK】** key to switch to the [Import/Export] screen.

Please select SD card or USB.

SD card

OK Cancel

List of recorded data in RA3100 internal storage

Recorded data list on external media

Internal storage

Choice	Data name	Date/Time
	Environmental test25	01/22/2021 02:01:18 PM
	Environmental test26	01/22/2021 02:03:18 PM
	Environmental test27	01/22/2021 02:05:18 PM
	Environmental test28	01/22/2021 02:07:18 PM
	Environmental test29	01/22/2021 02:09:18 PM
	Environmental test30	01/22/2021 02:11:18 PM
	Environmental test31	01/22/2021 02:13:18 PM
	Environmental test32	01/22/2021 02:15:18 PM
	Environmental test33	01/22/2021 02:17:18 PM
	Environmental test34	01/22/2021 02:19:18 PM
	Environmental test35	01/22/2021 02:21:18 PM
✓	Environmental test36	01/22/2021 02:23:18 PM
✓	Endurance test37	01/22/2021 02:26:08 PM
✓	Endurance test38	01/22/2021 02:27:17 PM

SD card

Choice	Data name	Date/Time
	Environmental test25	01/22/2021 02:01:18 PM
	Environmental test26	01/22/2021 02:03:18 PM
	Environmental test27	01/22/2021 02:05:18 PM
	Environmental test28	01/22/2021 02:07:18 PM

Place a check mark (✓) in the selection field of the data to export

Place a check mark (✓) in the selection field of the data in the recorded data list, then click the **【Export】** key to export the data.

RA3100 Main Unit

Front view



SD card slot

USB

USB

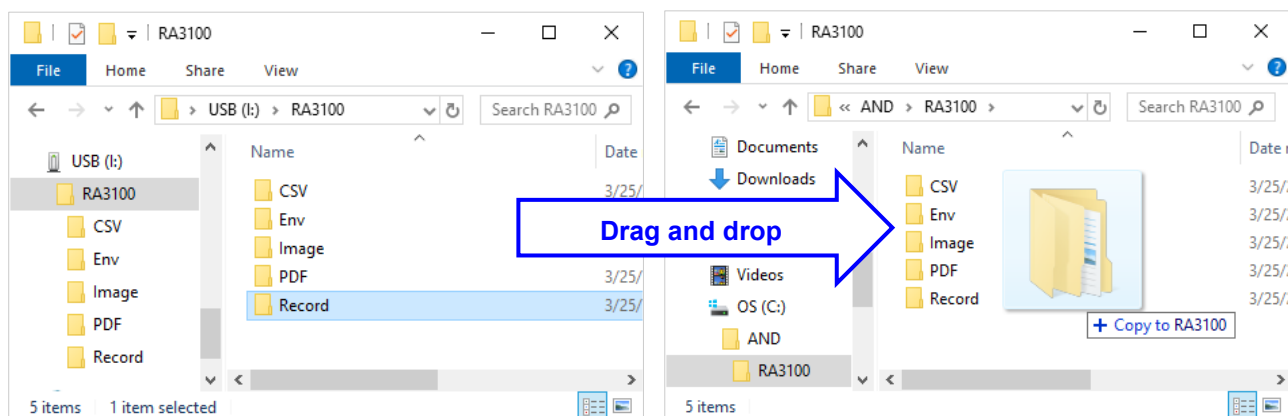


Right view

3.5.2. Copying the Recorded Data on External Media to a Windows PC

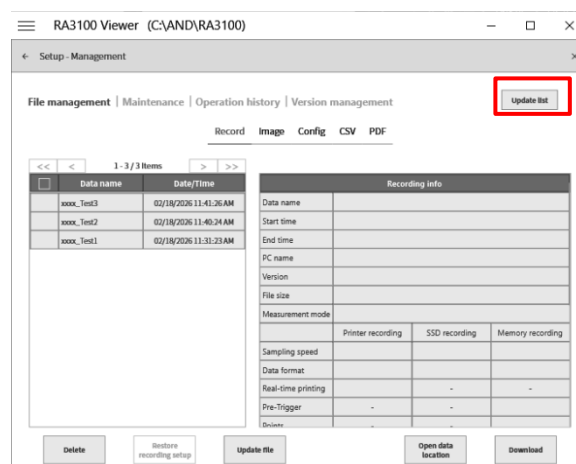
Connect the external media (such as SD memory card or USB stick) used in "3.5.1 Copying the Recorded Data to External Media" to a Windows PC.

Copy the "RA3100" folder on the external media to the "RA3100" folder on the PC, overwriting the existing files.



Tips

- If you copied data to the recording folder, click the **【Update list】** key to reflect the changes.



3.6. Downloading Recorded Data from the RA3100

3.6.1. Registering a Target

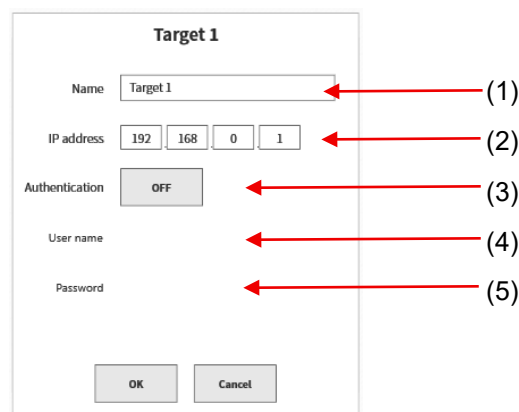
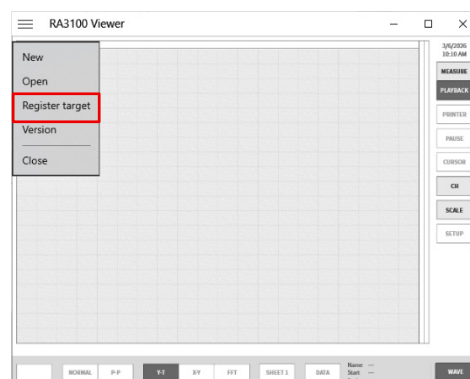
Register the target to connect to for downloading data.

Click the **☰** on the top left of the [RA3100 Viewer] screen.

Select **Register target** from the displayed menu to display [List of targets].

Click a target of your choice to display the configuration screen. Configure the settings for the target RA3100 to connect to.

Click **OK** , then click **Close** for [List of targets] to close the list.



- (1) Name: Enter a name to use for identifying the target.
- (2) IP address: Configure the IP address of the RA3100.
- (3) Authentication: Match the settings with the FTP server authentication settings of the RA3100.
- (4) User name: If authentication is enabled, configure the user name used for authentication in the RA3100.
- (5) Password: If authentication is enabled, configure the password used for authentication in the RA3100.

3.7. Specifying Replay Data

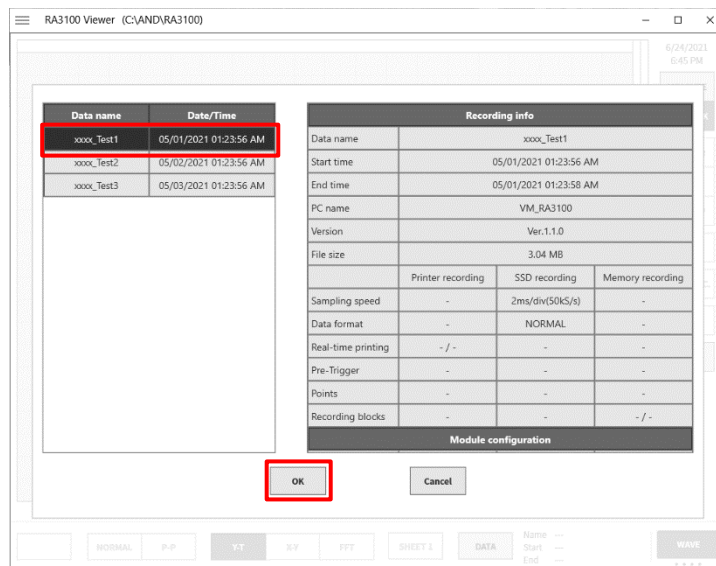
Click the **【DATA】** key on the bottom right of the [RA3100 Viewer] screen.

The recorded data list is displayed.



Select recorded data from the data names on the left to display the recording information on the right.

Click the **【OK】** key to confirm the data to replay.



Tips

- The **【DATA】** key is displayed when **【WAVE】** is displayed as the function on the bottom right of the screen.

Click **【WAVE】** to switch the functions in the following order.

【WAVE】 ⇒ **【THUMBNAIL】** ⇒ **【CURSOR】** ⇒ **【PENREC】**

3.8. Replay Function and Operations

The replay function is the same as the RA3100 main unit. See the instruction manual included with the main unit.



Refer to "[2.2 Mouse Operations \(Used as Substitute for the Touch Panel and Jog Dial\)](#)", as there are differences between the input device of the RA3100 main unit and the PC.

3.9. Capturing and Printing Waveform Images

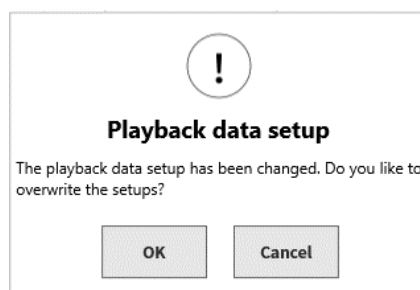
Use the standard Windows capture function. To print captured images, paste the image to an application such as Word or Excel and use the print function of that application.

Capture range	Operation
Entire [RA3100 Viewer] screen	You can press the Alt + PrintScreen keys with the [RA3100 Viewer] screen on top to copy the entire screen to the clipboard.
Part of [RA3100 Viewer] screen	Press the Windows + Shift + S keys to specify a range to copy to the clipboard.

3.10. Saving Display Settings

The save confirmation dialog is displayed when performing the operation in "[3.7 Specifying Replay Data](#)" or "[3.11 Closing the RA3100 Viewer](#)".

Click the **【OK】** key to overwrite the settings such as the waveform position and waveform color.



3.11. Closing the RA3100 Viewer

Select **【Close】** from the "[2.1.1 Hamburger Button](#)" menu.

Or, click **【X】** on the top right of the [RA3100 Viewer] screen.

MEMO

Viewer
RA3100

Instruction Manual

1WMPD4004532B

3rd Edition



A&D Company, Limited

3-23-14 Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013, JAPAN

Telephone: [81] (3) 5391-6132

Fax: [81] (3) 5391-1566

A&D ENGINEERING, INC.

Headquarters Office: 4622 Runway Boulevard, Ann Arbor, Michigan 48108, U.S.A.

Sales Office: 47747 Warm Springs Boulevard, Fremont, California 94539, U.S.A.

Tel: [1] (800) 726-3364

Weighing Support: [1] (888) 726-5931

Inspection Support: [1] (855) 332-8815

A&D INSTRUMENTS LIMITED

Unit 24/26 Blacklands Way, Abingdon Business Park, Abingdon, Oxfordshire OX14 1DY United Kingdom

Telephone: [44] (1235) 550420

Fax: [44] (1235) 550485

A&D AUSTRALASIA PTY LTD

32 Dew Street, Thebarton, South Australia 5031, AUSTRALIA

Telephone: [61] (8) 8301-8100

Fax: [61] (8) 8352-7409

A&D KOREA Limited

한국에이.엔.디(주)

서울특별시 영등포구 국제금융로6길33 (여의도동) 맨하탄빌딩 817 우편 번호 07331

(817, Manhattan Bldg., 33. Gukjegeumyung-ro 6-gil, Yeongdeungpo-gu, Seoul, 07331 Korea)

전화: [82] (2) 780-4101

팩스: [82] (2) 782-4264

ООО A&D RUS

ООО "Эй энд Ди Рус"

Почтовый адрес: 121357, Российская Федерация, г.Москва, ул. Вереysкая, дом 17

Юридический адрес: 117556 г. Москва, Варшавское шоссе, д. 95, корп. 1.

тел.: [7] (495) 937-33-44

факс: [7] (495) 937-55-66

A&D Instruments India Private Limited

ऐ&डी इन्स्ट्रुमेंट्स इण्डिया प्रा० लिमिटेड

D-48, उद्योग विहार , फेस -5, गुडगांव - 122016, हरियाणा , भारत

(D-48, Udyog Vihar, Phase-V, Gurgaon - 122016, Haryana, India)

फोन : [91] (124) 4715555

फैक्स : [91] (124) 4715599

A&D SCIENTECH TAIWAN LIMITED.

艾安得股份有限公司

台灣台北市中山區南京東路2段206號11樓之2

(11F-2, No.206, Sec.2, Nanjing E.Rd., Zhongshan Dist., Taipei City 10489, Taiwan, R.O.C.)

Tel : [886](02) 2322-4722

Fax : [886](02) 2392-1794

A&D INSTRUMENTS (THAILAND) LIMITED

บริษัท เอ แอนด์ ดี อินสตรูमेंท์ (ไทยแลนด์) จำกัด

168/16 หมู่ที่ 1 ตำบลรังสิต อำเภอธัญบุรี จังหวัดปทุมธานี 12110 ประเทศไทย

(168/16 Moo 1, Rangsit, Thanyaburi, Pathumthani 12110 Thailand)

Tel : [66] 20038911