

## RA3100 software Ver.2.1.1 (2024/6)

### [Bugs fixed]

1. In rare case, the remaining paper amount monitor (PAPER) may show an incorrect value for the remaining paper amount when printing.

## RA3100 software Ver.2.1.0 (2024/4)

### [Additional functions]

1. The RA30-113 (4ch voltage module) is now supported.
2. Communication commands
  - M13: RA30-113 (4ch voltage module) configuration and querying
  - S51: Date and time configuration and querying
  - E27: Recorded data deletion

### [Specification changed]

1. The [Measurement mode] and [Create a config file] buttons have been deleted from the settings menu screen displayed during playback.

### [Bugs fixed]

1. In rare cases, a printer error system error may occur if feeding (idle feeding of recording paper) is performed immediately after real-time waveform printing in the R&D mode.
2. When settings are changed by the following communication commands, the setting values on the setting screen are not updated.
  - S21:Start-trigger configuration and querying (analog input signal)
  - S22:Start-trigger configuration and querying (logical input signal)
  - S24:Memory-trigger configuration and querying (analog input signal)
  - S25:Memory-trigger configuration and querying (logical input signal)
3. Fixed other minor bugs.

## RA3100 software Ver.2.0.1 (2024/4)

### [Bugs fixed]

1. When the RA30-109 (2ch acceleration module) is installed, recording settings are not restored correctly.

2. When real-time waveform printing is performed in the MFG mode after performing pen recording, recording may not terminate correctly and the PRINT key may remain lit.
3. An NAK response may be received when the "E15: Execute adjust paper feed" or "E16: Execute print header, footer and annotation" communication command is sent immediately after recording is finished.
4. When creating a settings file, if a file with the same name but different case characters already exists, it is overwritten without user confirmation
5. When a file is updated using data recorded with a version of the software earlier than version 1.3.0, the graph settings are updated with invalid values and the Y-T waveform is not displayed correctly.
6. In rare cases, recording may not stop with the START/STOP IN signal of the RA30-112 (remote control module).
7. In very rare cases, the next recording may not start if it is started within one second of the previous recording when the MFG mode is set and the recording time is set to the maximum time.
8. Fixed other minor bugs.

#### RA3100 software Ver.2.0.0 (2024/2)

##### [Additional functions]

##### 1. Measurement mode

An "R&D mode" for R&D personnel and "MFG mode" for the manufacturing industry are available.

- R&D mode

Functions for researchers, such as memory recording and FFT can be used (functions equivalent to Ver. 1.x.x).

- MFG mode

Improved response time for recording start/end, and new data transfer function available.

However, there are limitations on recording mode, waveform display, playback function, and some functions.

##### 2. FTP server

Recorded data, image data, and setting data stored in the main unit can be retrieved via LAN.

3. Data transfer (MFG mode only)  
Transfers measurement data sampled by the main unit via LAN.
4. Config file creation  
Creates a single file containing all settings for the main unit and modules.
5. Communication commands
  - S48: Switching measurement mode
  - S49: Setting TRIG key assignment
  - S50: Setting data transfer
  - E29: Manual control of data transfer
  - I09: Obtaining physical value calculation coefficient
  - I10: Obtaining number of records
  - I11: Obtaining data transfer status

[Improved functions]

1. Improved response speed of recording start/end (MFG mode only).
2. Improved response speed of pen recording start/end.
3. Redesigned setting menu screen to improve convenience, including for some existing functions and additional functions.
4. Enabled feed (idle feeding of recording paper) by TRIG key on the operation panel.
5. Added the display of the number of items in recorded/image/setting data lists.
6. Communication commands
  - S command / M command  
Setting values of the main unit can be obtained.
  - S22: Setting start trigger (logic input signal)  
Channel number setting can also be specified for CHA and CHB.
  - S25: Setting memory trigger (logic input signal)  
Channel number setting can also be specified for CHA and CHB.
  - I05: Reading main unit status  
Added "5: Printing stopped" to status.
  - I07: Reading a recording setting error  
"bit 18: Recording mode setting error" is added to status.

[Specification changed]

1. Eliminated automatic transition from record screen to playback screen after recording
2. Changed format of recorded data.  
The recorded data of Ver.1.x.x needs to be updated to the new file format.

[Bugs fixed]

1. Recorded data may be corrupted in cases of very short recording times of up to 500 milliseconds.
2. The Saving dialog box may not close after recording.
3. When the number of Y-T waveform channels is 18 channels or more, printing may not work smoothly.
4. When feed (idle feeding of recording paper) is performed after test printing, it may not be performed correctly.
5. When the data type of SSD recording is P-P, the data size of one sampling in the recording information XML file is set to Normal value.
6. A printer malfunction may occur when printing or feeding is performed while finishing recording.
7. Fixed other minor bugs.

RA3100 software Ver.1.4.5 (2023/10)

[Additional functions]

1. Printer version display in Version Management.

[Bug fixed]

1. System error in printer error may occur after all printing is complete.

RA3100 software Ver.1.4.4 (2023/8)

[Bug fixed]

1. The screen does not transition to the record screen, even when recording is started on the playback screen.

2. The PRINT key remains lit when it is pressed while no recording data is selected on the playback screen.
3. The Y- T waveform may not be displayed when recording at a sampling speed of 2 kS/s or greater with window recording.
4. The PRINT key remains lit when recording is stopped while printing the waveform between cursors.
5. When printing the waveform between cursors with the remote screen (web browser), printing cannot be done unless the control bar is "CURSOR".
6. Other minor bugs fixed.

#### RA3100 software Ver.1.4.3 (2023/6)

[Bug fixed]

1. Data recorded by SSD recording or memory recording may be corrupted and playback may not be possible.

#### RA3100 software Ver.1.4.2 (2023/5)

[Improved functions]

1. Add pen record start/stop and feed start/stop to operation history.

[Bug fixed]

1. Some recorded data cannot use the cursor function in playback mode.
2. Header, annotation and footer on YT waveform cannot be printed with annotation print key and print text print key on control bar.
3. A printer error will occur when performing a short feed if the printer is left for 1 hour and 20 minutes or longer after printing or feeding.
4. If the sampling speed is set to "Ext." and the synchronous clock signal is not input for 1 hour and 20 minutes or longer, it does not print even if the synchronous clock signal is input.

5. Printing between cursors cannot be stopped with the RA3100 operation panel STOP key on the web browser.

#### RA3100 software Ver.1.4.1 (2023/3)

##### [Improved functions]

1. Display maximum/ display minimum setting range changed to 10 times the measurement range.

##### [Bug fixed]

1. When you change the channel display maximum/display minimum with waveform inversion ON using a communication command, the positive and negative.
2. Make an error response when there is no waveform inversion parameter in the channel display setting command.
3. The UI app terminates abnormally when the interval time in the recording settings is changed from 1 day to 0 days.
4. An incorrect recording time may be displayed when the recording mode in the recording settings is changed from interval recording to normal recording.
5. The printer status is not displayed correctly on the maintenance screen.
6. Recording may not end normally if the recording time is less than 1 second.
7. Other minor bug fixed.

#### RA3100 software Ver.1.4.0 (2022/12)

##### [Additional functions]

1. Support for new modules
  - RA30-104 2ch AC strain module
  - RA30-107 2ch High voltage module
  - RA30-108 2ch Frequency module
  - RA30-109 2ch Acceleration module
2. Waveform inversion function  
Displays the waveform and digital value by inverting the positive/negative of the measured value.

3. Web server function

The screen display and operation of the main unit can be performed remotely from a web browser on a PC, etc.

4. Module update function

Updates modules installed only in the main unit.

5. Communication commands

- E17: TRIG output command
- E18: MARK output command
- E19: PRINT control command

[Improved functions]

1. Added prefix selection in numeric input

You can enter numbers with prefixes such as k, m, etc.

2. Print start/stop response time

[Specification changed]

1. Change of communication command

- ACK response  
Changed response timing
- S30: channel display  
Added parameter P12 with the addition of waveform inversion function
- S32: physical quantity conversion  
Changed the data range of parameters P4 to P9
- I05: Get RA3100 status  
Changed response contents of ACK response

[Bug fixed]

1. Deleted automatic backlight OFF function

2. If printing continues for a long time at a sampling speed of 20S/s (chart speed of 2mm/s) or less, printing may occasionally stop.

3. When pen record printing is started with the PRINT IN signal of the RA30-112 remote control module, "0" may not be printed on the time axis of printing.

4. When using physical value conversion, the zero point position of scale value printing is not printed at the correct position
5. When the gain is negative in physical value conversion, the YT waveform, trigger threshold line, and search threshold line are not displayed correctly, and display maximum and display minimum cannot be entered.
6. Thumbnails are not displayed when the recorded data is 1GByte or more and the thumbnail magnification is "1/whole".
7. Cursor values may not be displayed correctly on the playback screen after recording ends
8. When the number of samples between cursors A and B is large, the maximum, minimum, and average values between AB are not displayed.
9. When daylight saving time is ON, the start time of recording is not set correctly.
10. Fixed other minor bugs