MEMRECAM

MLink Ver.1.84b Release note On November 6, 2024

Packaging Software Version:
MLink ver.1.84b
MVIEW ver.3.47a
HXLink ver.1.9.96f

MLink component version

- MLink ver.1.84b
- MVIEW ver.3.47a
- HXLink ver.1.9.96f

Contents

• MLink	MLink installer 64bit / 32bit for windows 10 Pro and 11 Pro High-speed camera control software Supported camera: GX, HX, Q, MX, ACS
• HXLink	HXLink installer 64bit / 32bit for windows 10 Pro and 11 Pro High-speed camera control software (Legacy Edition) Supported camera: fx, GX, HX, Q1m, Q1v and Q5
• MVIEW	MVIEW installer 64bit / 32bit for windows 10 Pro and 11 Pro Viewer software
• HASP driver	Driver for license management dongle key
• USB3.0 driver	Driver for USB3.0 Download for ACS camera.
• GenICam driver	Driver for Q camera
• GigEVision Filter driver	Driver for Q camera

MLink Ver.1.84b Update Information

This section describes the update from MLink Ver.1.84b

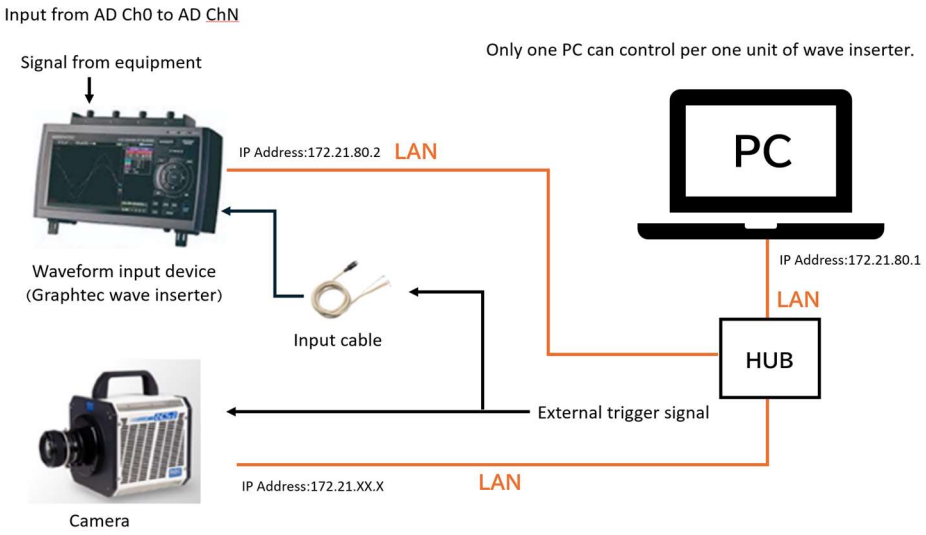
Add new cameras.

GO-4K is now supported.

Add new functionality.

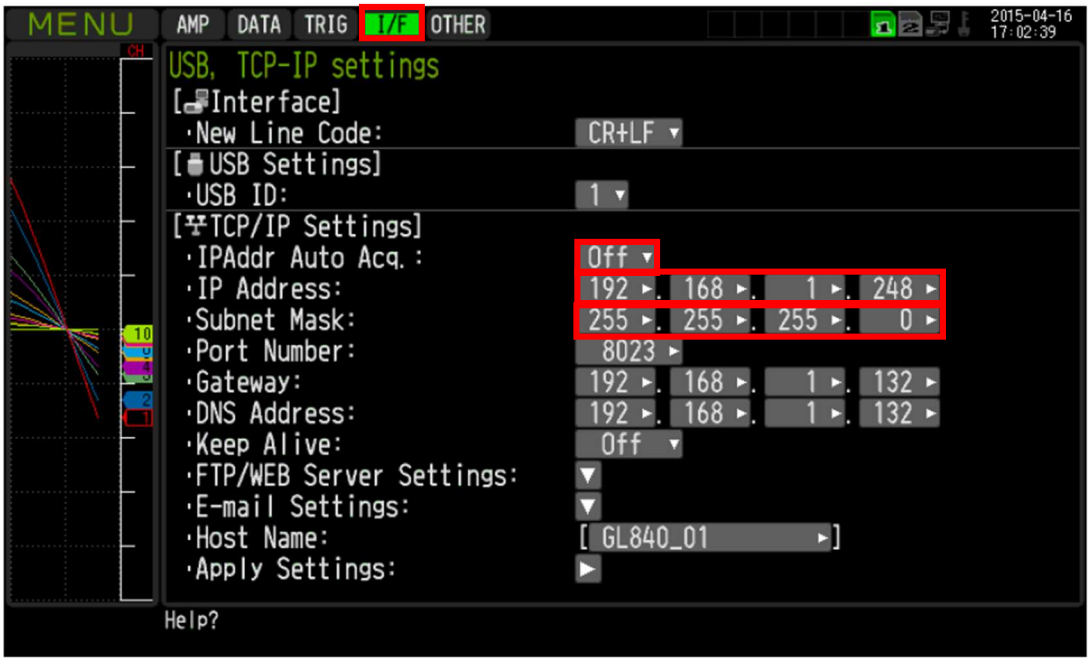
1. Support LAN connection between waveform input device and PC(1/2)

Waveform input device can now be controlled from MLink using a LAN cable. When connecting a waveform input device to a PC, please connect as shown in the diagram below. For information on collecting data from the waveform input device, please refer to the waveform software instruction manual.



※To use the waveform input device, a license dongle with waveform input software CSV extension is required.

Set the conditions for connecting the PC and waveform input device.



Please set as follows on the [I/F] setting tab.

[IPAddr Auto Acq]: Off

[IP Address]: 172.21.80.2

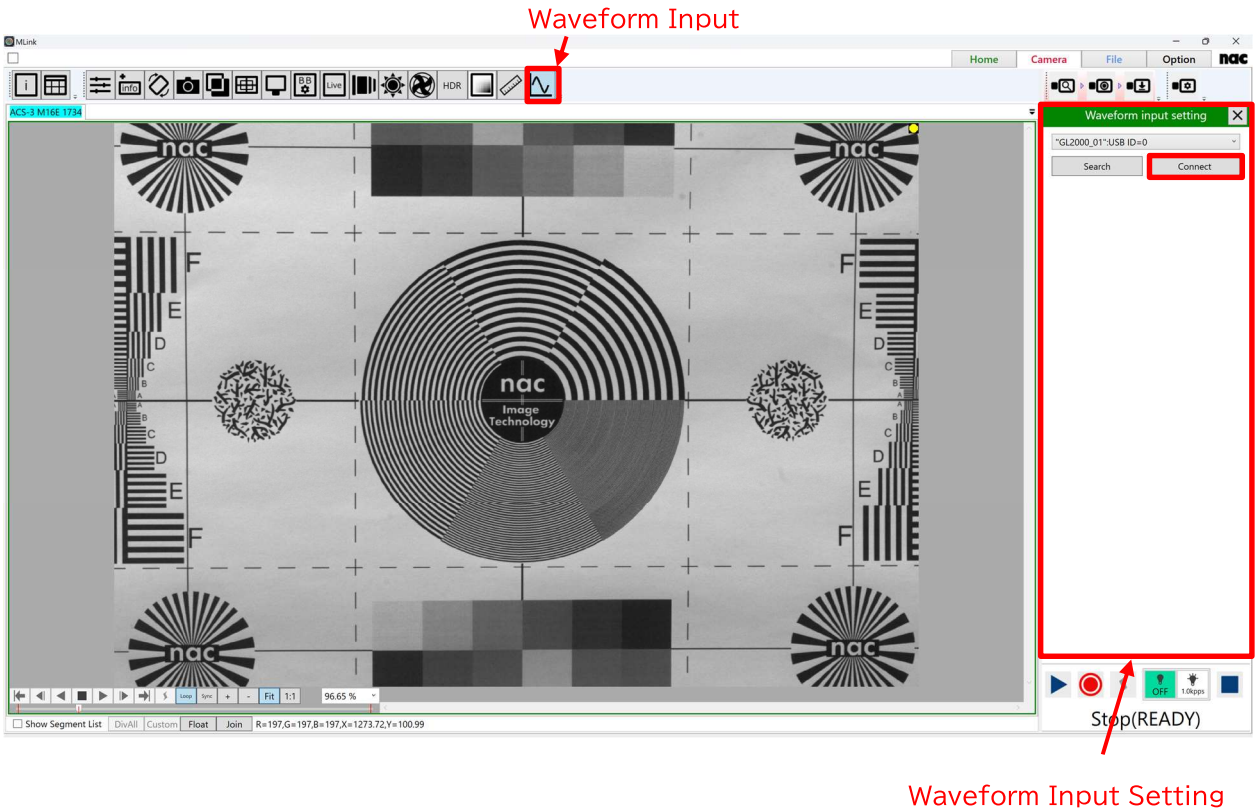
[Subnet Mask]: 255.255.0.0

*Click “▼” in “TCP/IP Settings” and enter the “Subnet Mask”.

It will be reflected if you click [Apply settings] after setting.

2. Support LAN connection between waveform input device and PC(2/2)

After connecting the waveform input device and PC, start MLink and click the [Waveform Input] button from the quick toolbar at the top of the screen. The waveform input setting screen will be displayed as shown on the right side of the screen below. Click the [Connect] button to be able to control the waveform input device from MLink.



3. Added the logger channel conversion parameter/unit setting function

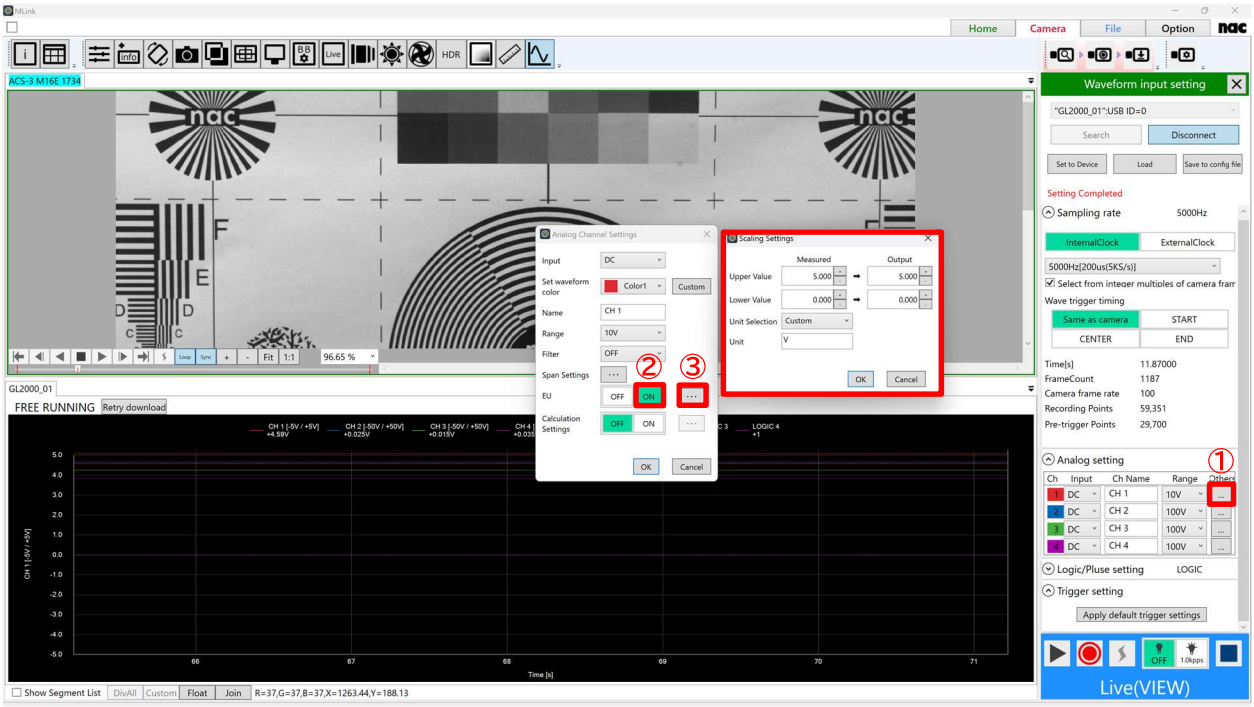
Logger channel conversion parameters and unit setting functions have been added. Please refer to the setting procedure below for how to display the setting screen.

Setting

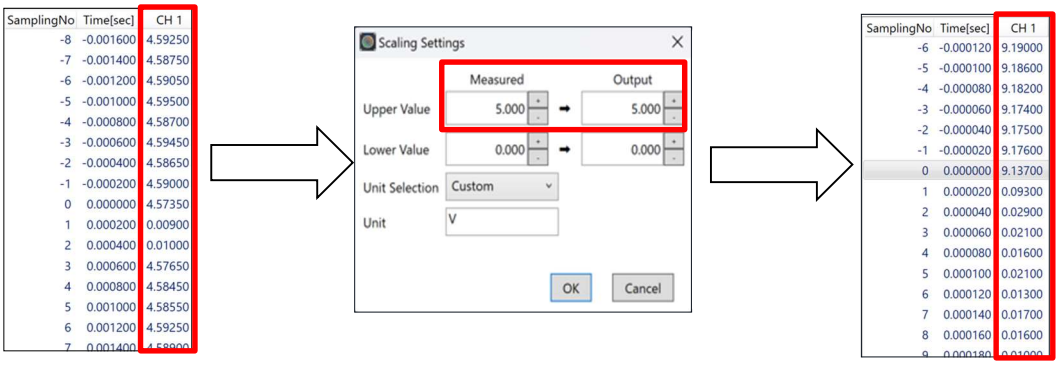
① Click [...] in Analog Settings.

② Turn ON on [EU]

③ Click [...] to display scaling settings.



Changing the upper limit value on the scaling setting screen will reflect in the data output from the waveform input device.



In addition, please check the following settings regarding the unit setting.

・Unit selection

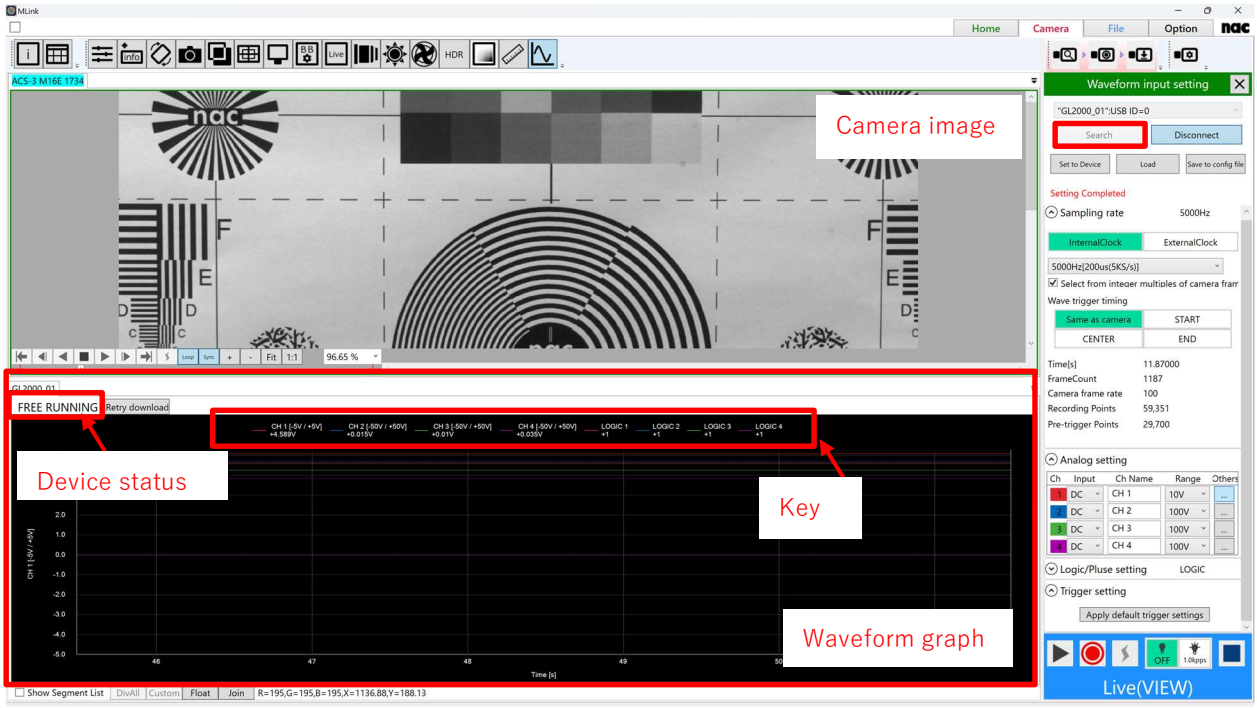
Set the unit type. If you select Custom, you can enter characters.

・Unit

Set the units.

4. Waveform data graph display function during shooting preparation

When the mode is in live (VIEW), it is possible to display waveform data acquired from the waveform input device in real time. When the camera, dongle, and waveform input device are properly connected, click the [Connect] button on the right side of the screen and a real-time waveform graph will be displayed below the camera image display area.



・Device status

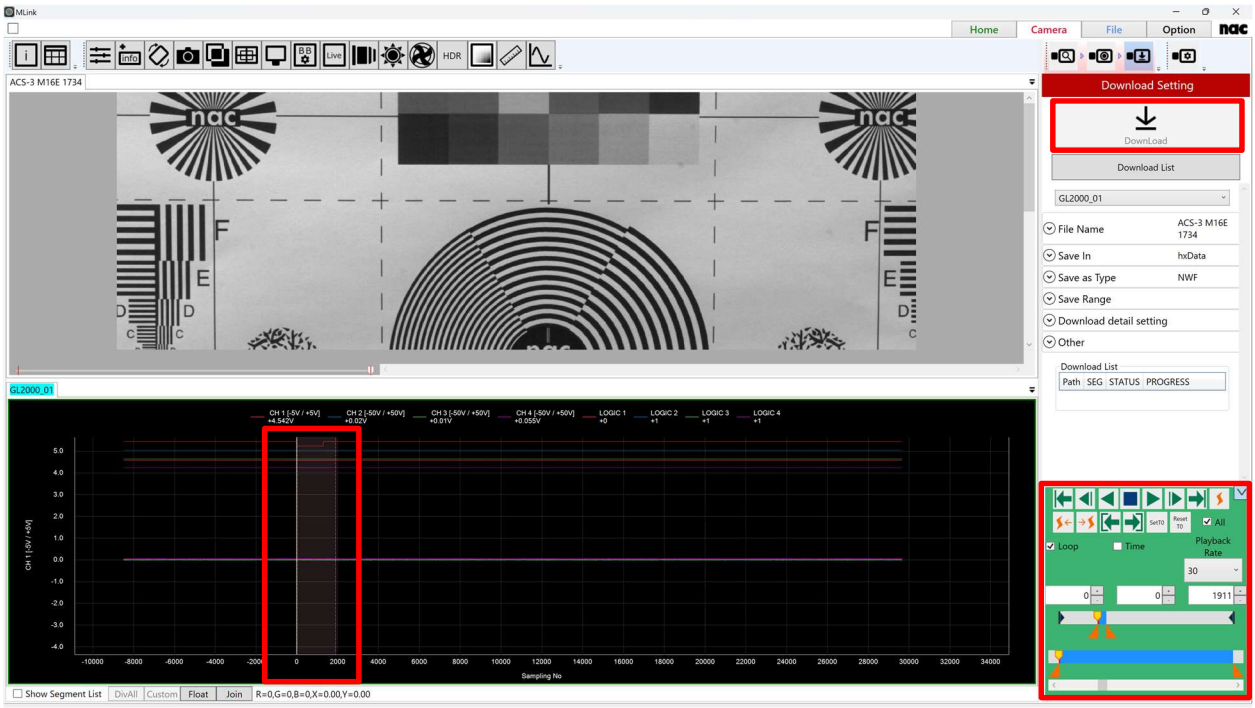
It displays the device status. If you are in free running/waiting for a trigger/recording built-in RAM, the background color is displayed in white/yellow/cyan respectively. Inactive states are grayed out.

・Key

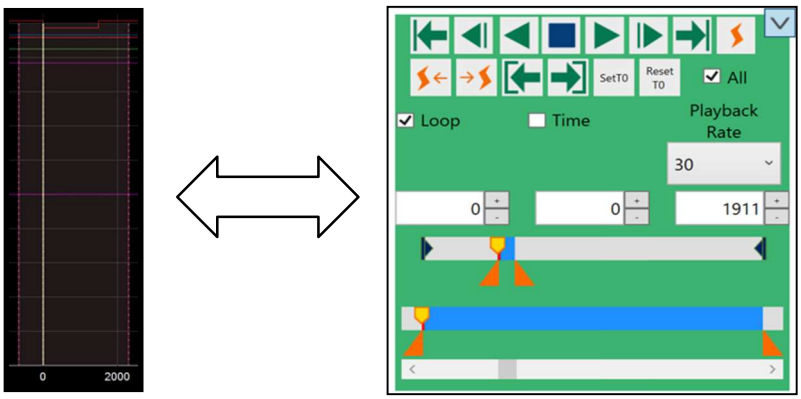
Displays the key for each graph data. The value of each key is obtained in real time.

5. Waveform data graph display and download range specification function after shooting

Added functions to display waveform data graph after shooting and to specify download range.
If you set the save range on the control panel when downloading, the save range will be reflected in the waveform data graph.
Click "Start Download" to download image data and waveform data as files.

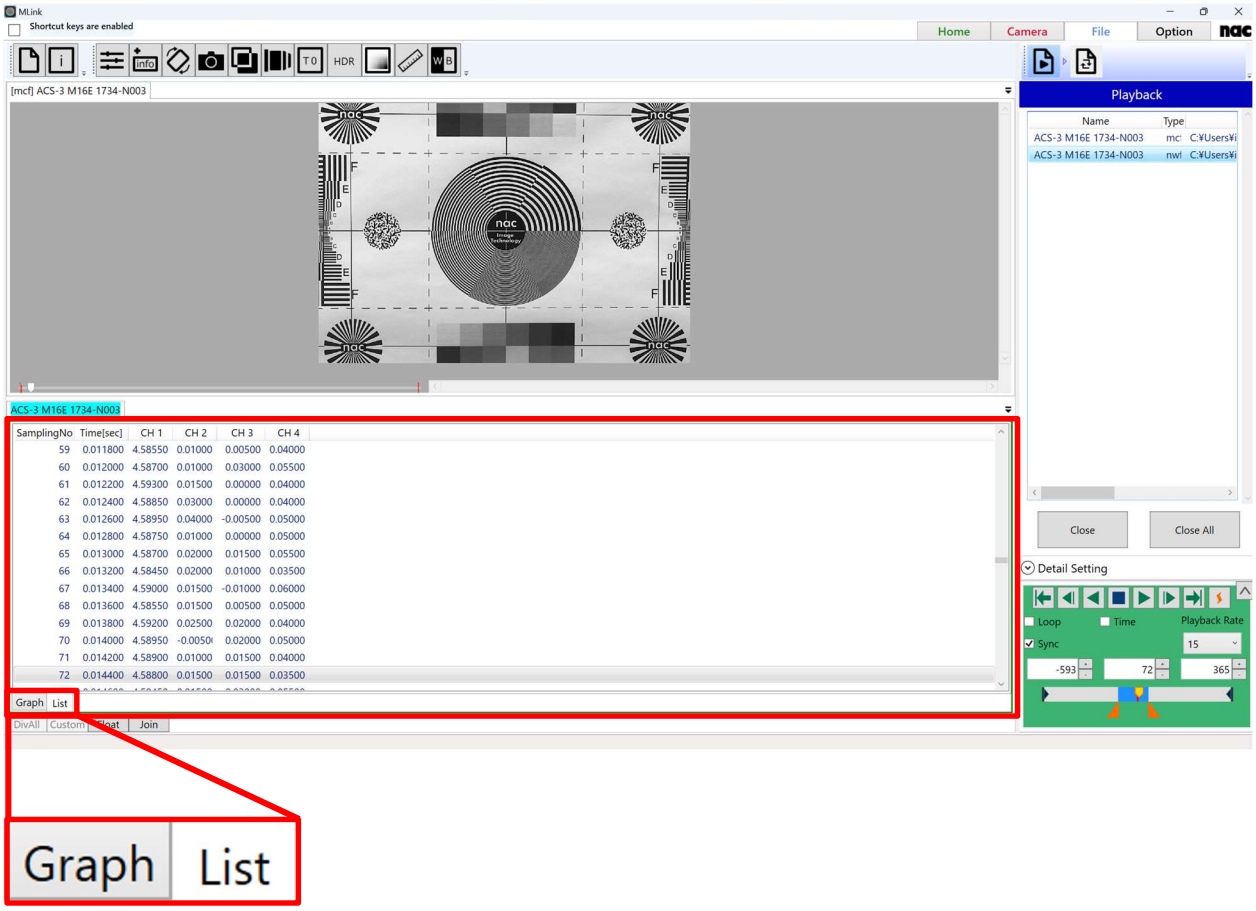


You can check the storage range of the recorded data by operating the slider on the control panel at the bottom right of the screen, or by moving the cursor bar representing the current position in the waveform graph left and right in conjunction with the image data.



6. Waveform data list format display function after shooting.

A function to display waveform data list format after shooting has been added.
Click [List] at the bottom left of the screen to display the recorded waveform data of each channel in a numerical list format. Also, by right-clicking on [List], you can output the numerical values of the waveform data in CSV format.



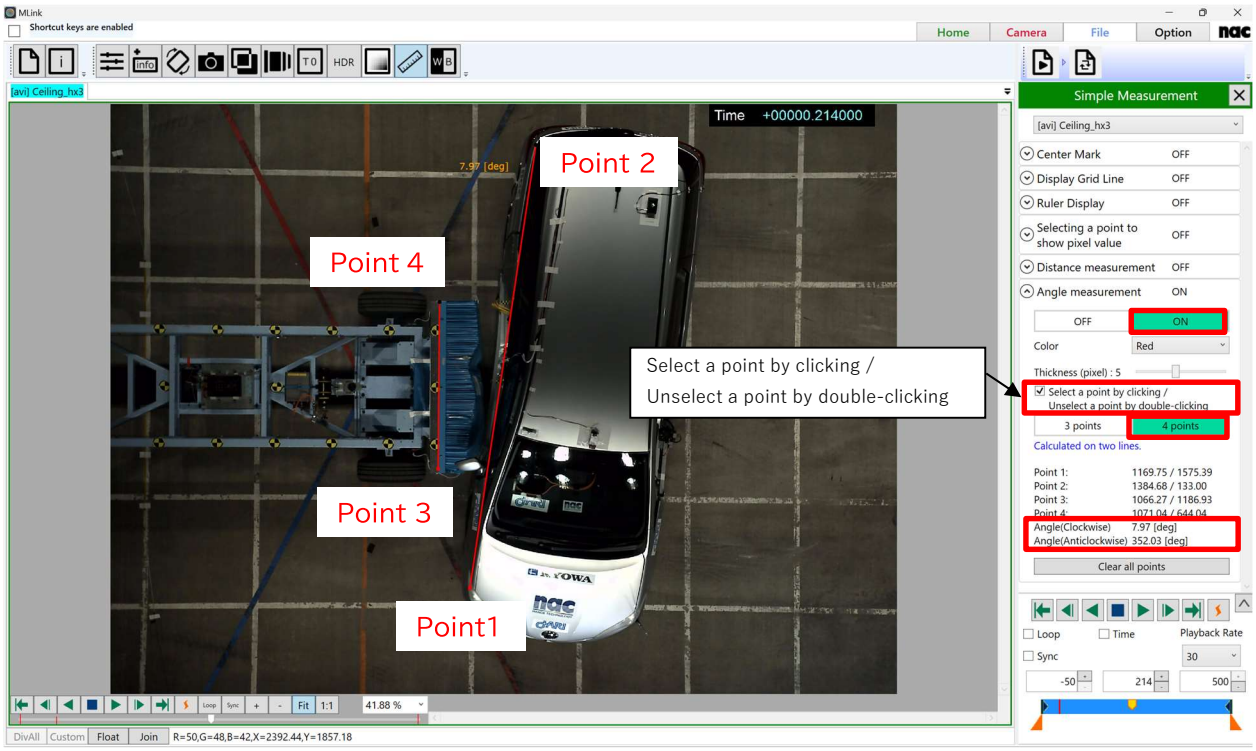
7. Added the function to measure angle by specifying 4 points.

・Added the function to measure angle by specifying 4 points

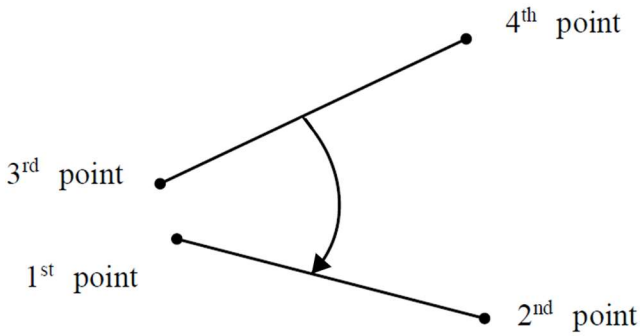
To use this function, turn angle measurement [ON] and select [4-point type]. Also, To select points, please click ‘Select a point by clicking / Unselect a point by double-clicking ‘and click on the image. The coordinates of points are displayed in Point 1, Point 2, Point 3, and Point 4 in the order the points are added, and the points are drawn. If Double-clicking on the image , it wil delete the points in order from the newest one.

・Added function to calculate clockwise angle and counterclockwise angle in angle measurement

The angle from the second line to the first line will be measured in clockwise and counterclockwise direction. The angle is in degrees.

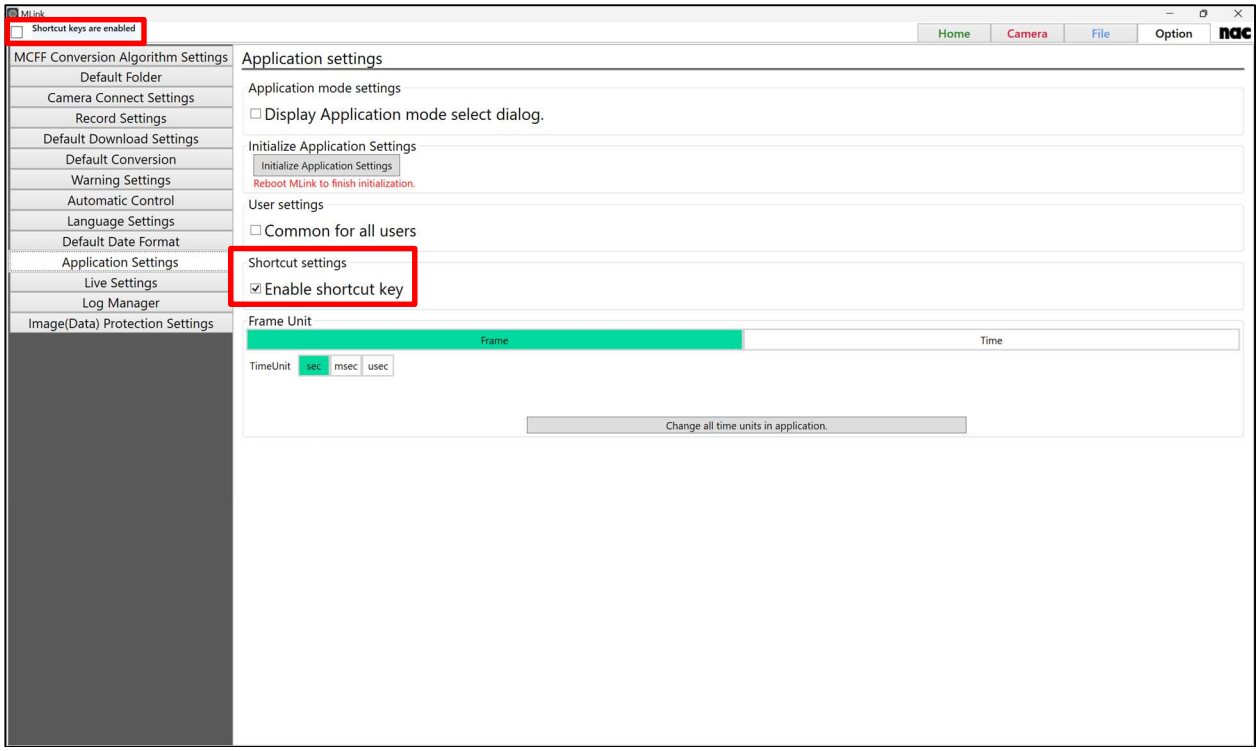


As shown in the following figure, first click on the 1st and 2nd points to measure angles with 4 points. Then make a second line with the 3rd and 4th points. Measuring uses the line connecting the first and second lines as a reference, and the angle counterclockwise or clockwise from there is determined.
(with two vectors, the angle of vector 12 and vector 34.)



8. Added the shortcut function.

Added the shortcut settings to the optional application settings page. When the check box is checked, the following shortcut keys are enabled.

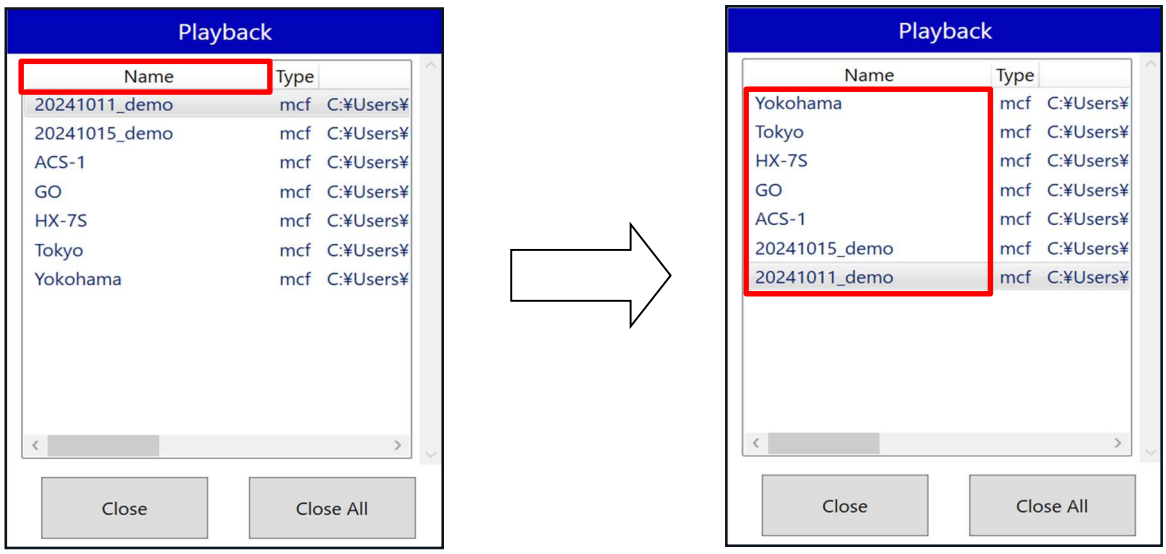


If the checkbox is checked, the following shortcut keys will be enabled. Note that the name and extension of the file output by a snapshot depends on what is specified in the snapshot settings panel.

Shortcut Key	Action
Ctrl + F	Save the snapshot of active file.
Ctrl + Alt + F	Save the snapshots of all opening files.
Ctrl + C	Save the snapshot of active camera.
Ctrl + Alt + C	Save the snapshots of all connecting cameras.
Ctrl + M	Switch camera mode. When camera mode is READY: Switch to VIEW When camera mode is VIEW: Switch to ARM When camera mode is ARM: Switch to REC
Ctrl + Space	Play/Stop
Ctrl + Shift + Space	Reverse play
Ctrl + →	Step one frame forward.
Ctrl + ←	Step one frame backward.
Ctrl + Tab	Switch tabs.

9. Added the ability to sort the list of open files.

Added the ability to sort the list of open files. To sort all opened image files at once, click the list header.
Click "Name" to sort in ascending order by file name, and click "Extension" to sort in ascending order by extension. If you click again, it will sort them in descending order.
When you add files, they will be inserted into the list in the order in which they were added.



10. Added the details of frame size for GO series.

It can set detailed frame sizes for the MEMRECAM GO series. Frame size details allow you to make custom settings for frame size and recording speed. The following items can be set.

・Angle of view display

If you turn on the viewing angle display while the camera is in live (VIEW) mode, the image will be displayed at full resolution, and the currently set resolution range will be displayed as a white rectangular line on the image.

・Priority

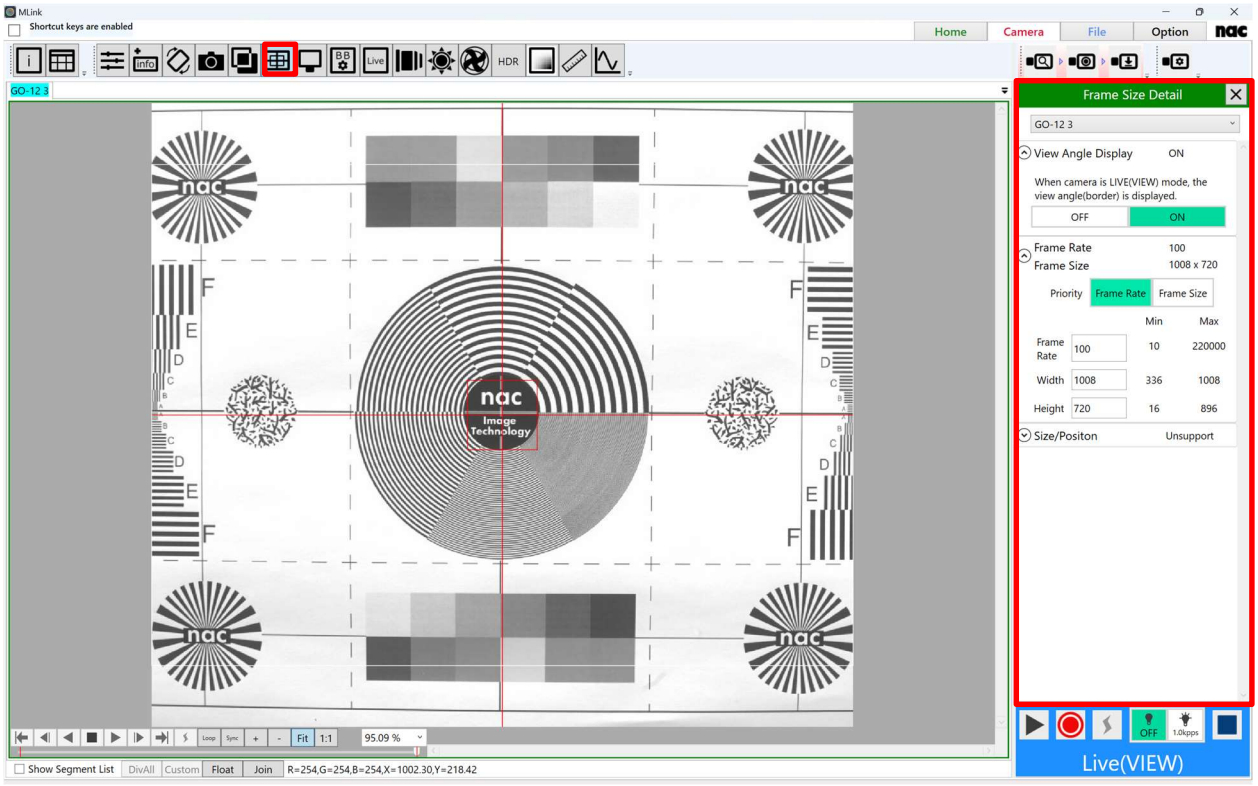
Specify whether to give priority to frame rate or resolution.

・Frame rate

The maximum and minimum frame rate ranges which can be set will be displayed, so you can set a value within that range.

・Resolution

The range of resolution that can be set will be displayed as the maximum and minimum values, so you can set a value within that range.



11. Improvement

1. Fixed an error when downloading MCFF/AVI.

2. Changed the coordinate values when hovering the mouse pointer over the image to be displayed as real numbers.

3. Added the channel data, sampling time, and sampling range to waveform file property items.

12. Bug fix.

1. Fixed a bug where the waveform display area did not follow the current frame when checking the file generated by outputting a combination of waveform and video while band zooming.

2. Fixed a bug where conversion with waveforms failed when the display language was set to English.

3. Fixed a bug where conversion of MCFF with waveform may fail.

4. Fixed an issue where it was not possible to open NWF files with a large number of data points.

5. Fixed a bug where the graph display did not change even if T0 was set in the waveform file.

6. Fixed an issue where the current frame cursor on the waveform graph would be displayed twice when specified by a mouse click and a text box.

7. Fixed a bug where an error occurred after downloading and data could not be acquired when measuring 1MHz with a logger.

8. Fixed an issue where, when recording video with a logger and cutting out the video at a relative time, the video would be downloaded at a different time than expected.

9. Fixed a bug where when the Y-axis setting was set to "Channel voltage range" in the graph display settings, it would be displayed as "Maximum/Minimum value of imported data".

10. Fixed a bug where the maximum value of CH1 was not displayed on the graph when the Y-axis setting was set to "Maximum/Minimum value of imported data" in the graph display settings.

11. When playing back with the band zoomed in the graph display, the Y-axis voltage range was not fixed at the set value and changed due to autoscaling. This has been changed to fixed on the Y-axis.

12. Fixed a bug where an NWF download error screen would appear and the waveform file would not be saved after MCFF was saved when downloading with GO+ waveform import.

13. Fixed a bug where the trigger mark was not displayed superimposed on GO-4K's MCFF when the vertical resolution was not a multiple of 16.

14. Fixed an issue where, when an MCFF file is associated with MLink and MLink is started by double-clicking the MCFF file, a language settings file is generated in the same directory as the MCFF file.

15. Fixed a bug where it took a long time to start converting when trying to convert a large MCFF.

16. Fixed a bug where ARM or REC would return to frame display after turning on time display on the download panel.
17. Fixed a bug where changes to the default snapshot output folder were not reflected.

18. Fixed a bug where the segment number was automatically added to the file name when the option "Automatically load recording/download settings" was set and the files were downloaded in bulk.

19. Fixed a bug where the block number and segment number were duplicated in the file name of the download list.

20. Fixed an issue where the download could not start and could not be canceled.

21. Fixed an issue where MLink would freeze if the EST polarity setting of the Q camera was changed twice.

22. Fixed a bug where it would not be output at the correct size when converting by combining resizing, rotation, and flipping.

23. Fixed an issue where some UI strings would become blank when the display language was set to Simplified Chinese.

24. Fixed a bug where automatic download & automatic ARM function may fail on Qcam.

25. Fixed a bug where even if you changed the superimposition position of an image to a position other than the top left and converted the format, the specified position was not applied and the image was superimposed at the top left.

26. Fixed an issue where files were downloaded as AVI with MJPEG codec even though "Uncompressed AVI" was selected in "Default download settings" during automatic download

13. Restriction of ver.1.84b

1. The converstion with waveform when you connect with wave inserter is not supported.
2. GO-4K and GO-12 does not support change resolution in frame size details.