

MT9085 Series ACCESS Master

Release Notes

Version 3.00

Thank you for choosing the Anritsu MT9085 Series ACCESS Master.

This document explains the functions updated by firmware version 3.00 for the MT9085 Series ACCESS Master.

It also provides notes on known software issues and usage precautions.

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1. Release Software and Manuals

This upgrade contains the following MT9085 Series software and manuals.

Software	Version
MT9085 Series Firmware	3.00
Operation Manual	Edition
MT9085 Series ACCESS Master Operation Manual	16.0
MT9085 Series ACCESS Master SCPI Remote Control Operation manual	4.0
MT9085 Series ACCESS Master Quick Guide	7.0

2. Target Models

MT9085A, MT9085B, MT9085C

3. Version Information

This table shows the firmware version. Confirm the firmware version of your MT9085 Series ACCESS Master at the Setup Key and “About “screen.

Product Name	Version
MT9085 Series Firmware Update File	3.00

4. New Features

Function added and changed by v3.00

- None

Function added and changed by v2.04

- Changed the lower limit of the range of the threshold for return loss pass/fail evaluation from -50 dB to -60 dB.

Function added and changed by v2.03

- Added language support for Dutch.

Function added and changed by v2.02

- None

Function added and changed by v2.01

- None

Function added and changed by v2.00

- None

Function added and changed by v1.14

- Supported G0306C.

Function added and changed by v1.13

- None

Function added and changed by v1.12

- None

Function added and changed by v1.11

- None

Function added and changed by v1.10

- Added the enable or disable setting of fiber length check.
When this setting is enabled, it checks if the fiber length exceeds the distance range before measurement and automatically adjusts the launch interval of the optical pulse to prevent unnecessary reflections other than the event point. Disabling this setting will reduce the time to start measurement. The above function was always enabled in v1.07 and later versions, but it is now possible to enable / disable it in this version. If the language setting is other than Japanese, the default value will be automatically enabled by the version upgrade.
- Added the following SCPI commands.

SOURCE:AVERages:COUNT	Sets and queries the average count.
SOURCE:AVERages:EXPonent	Sets and queries the average count in an exponential format of 2.
SENSe:FIBCheck	Sets and queries whether the fiber length check is enabled or not.

Function added and changed by v1.09

- Added reflectance to the auto-detection threshold for the far end.
Events with reflectance or loss of equal to or greater than its threshold are detected as far end events. When you set it to -20 dB, the detection conditions are the same as in v1.08. Added SCPI command SENSe:ANALyze:PARAMeters:ENDRefl to set and get the far end reflectance threshold.

Function added and changed by v1.08

- None

Function added and changed by v1.07

- Added the Cable Certification test application.
This function automatically evaluates whether a fiber under test complies with de jure standards, ISO/IEC or JIS, on a pass/fail basis. For details, refer to Chapter 7 in the Operation Manual.

- Added "All" as a Wavelength option for the Fiber Visualizer application.
This enables all wavelengths installed to OTDR to be tested continuously (including Option 055 with two measurement ports, except Option 063). Measured data of all wavelengths can be output together into a single PDF report.
- Added support for the ZIP file format.
The Fiber Visualizer application can save/load multiple waveforms measured simultaneously to/from ZIP file format.
- Added support for displaying text in the title display field of the measurement screen.
The text set by the user can be displayed at the top of the OTDR (Standard) screen.

Function added and changed by v1.06

- None

Function added and changed by v1.05

- None

Function added and changed by v1.04

- None

Function added and changed by v1.03

- None

Function added and changed by v1.02

- Added a function that creates a summary of waveform files.
The summary of the waveform files (.SOR) can be saved in a text file.
For details, refer to Section 3.5.9 in the MT9085A Series ACCESS Master Operation Manual.
- Changed the display position of the Trace Overview.

The Trace Overview can now be displayed at "Lower Left" or "Upper Right".
Additionally, the height of the Trace Overview was adjusted.

- Changed the Overlay function
Even when there is only the primary trace, "Set to Overlay" is now available. If you execute this function after a measurement or after reading a waveform file, the measured waveform can be displayed as reference waveform.

Function added and changed by v1.01

- Added the function to display waveform enlarged.
Displaying the graph on the full screen is possible. Switching between normal display and enlarged display is possible by touching the icon on the left side of the graph.
- Added the function to set the color of the graph and background.
The setting "Background color and trace color" is added to "General" of setup. This enables selecting combination of background (white or black) and trace color (red, black or yellow).
- Changed the horizontal axis grid number of the graph.
The horizontal axis grid interval of the graph is narrower, and the number of displayed grids is increased. This makes visual evaluation of trace easier.
- Made it possible to perform Real time measurement in automatic mode.
Real-time measurement is possible not only manually but also automatically.
- Made it possible to perform measurement while displaying the measurement condition setting dialog.
When the measurement condition setting dialog is displayed, pressing Start or Realtime key fixes the setting and performs the measurement.
- Added the function to easily switch active waveform
"Next Trace" key is added to the second page of the function keys. Switching active trace by touching this key is possible.

- Added the function to hide the cursor.
Hiding the cursor at marker mode is possible. It is useful when taking screen capture only of waveform.

5. Resolved Software Issues

Model Name	Description
MT9085 Series ACCESS Master Ver. 3.00	Improved the function relating to manufacturing inspection of MT9085x. (14999)
MT9085 Series ACCESS Master Ver. 2.05	Fixed a bug that results of ORL (Total Return Loss) were not saved in the file. Also fixed a bug that the ORL display was *** when the screen transitioned. (14694) Fixed a bug that the time zone is not reflected. (14682) Fixed a translation mistake in Dutch. (14692)
MT9085 Series ACCESS Master Ver. 2.04	Fixed the issue, found in v2.03, that may not correctly display analysis results (dB/km and Total Loss) under certain conditions. Fixed the issue, found in v2.03, where a start point was not displayed when Auto Patch-cord Removal was set to On. (14667) Fixed the issue, found in v2.03, that displayed a Total Loss value different from the one saved to an SOR file when the SOR file was loaded. (14663)
MT9085 Series ACCESS Master Ver. 2.03	Improved the event detection function that was inferior in terms of detecting low connection losses, comparing to MT9083x2. (Detailed description is available at the bottom of this table.) (14606) Modified the specification that the fiber Visualizer splitter event icons were flipped horizontally. (13523)
MT9085 Series ACCESS Master Ver. 2.02	Fixed the issue that the MT9085A might freeze when creating a report before saving a waveform file in Fiber Visualizer. (14590) Fixed the issue that connection check might not work correctly in certain environments. (14574) Fixed the issue that waveform files downloaded by remote GUI were saved as text files on some operating systems and browsers. (14454)
MT9085 Series ACCESS Master Ver. 2.01	Fixed the issue that reflectance or level difference of reflective events might be low when average measurement is performed at 850nm or 1300nm wavelength. (14464) Fixed the issue that spike noise might be caused in a waveform. (14457) Improved the function relating to manufacturing inspection of MT9085x. (14496)
MT9085 Series ACCESS Master Ver. 2.00	Improved the function relating to manufacturing inspection of MT9085x. (14430)
MT9085 Series ACCESS Master Ver. 1.14	Fixed the issue that the MT9085A might freeze when the measurement conditions were changed during measurement. (14421)
	Fixed the issue that the following item is not deleted when Restore Default is executed. • Trace data when last powered off. (13525)
	Improve the accuracy of calculating event lose values. (13935)
	Improved stability of Scenario Manager Lite. (13935)
	Improved stability of Remote GUI. (14239)

MT9085 Series ACCESS Master Ver. 1.13	Improved the function relating to manufacturing inspection of MT9085x. (13935)
MT9085 Series ACCESS Master Ver. 1.12	Fixed the issue that the MT9085x might not respond to commands when receiving SCPI or remote commands consecutively. (13713) Fixed the issue that the auto-save setting is turned off when returning to local operation after using SCPI commands. (13714) Fixed the issue that the MT9085x cannot return to the local operation when closing the dialog while using SCPI commands. (13785) Fixed the issue that MT9085x might not respond to SCPI commands after running a scenario in Scenario Manager Lite. (13784) Improved the file upload speed in the remote GUI. (13627)
MT9085 Series ACCESS Master Ver. 1.11	Fixed the issue that caused the MT9085x to freeze during measurement when the distance range was 200 km or more and the pulse width was 4 μs or more for the following models. • MT9085B-056 • MT9085B-058 • MT9085C-053 • MT9085C-057
MT9085 Series ACCESS Master Ver. 1.10	Fixed a bug that after interrupting a measurement, the connection check of the next measurement may display as bad even though it is good. (13670) Fixed a bug that the number of hardware additions displayed in the averaging and measurement condition dialog boxes may not match the actual measurement when the averaging unit is set to the number of times. (13583) Changed the German translation of "power meter" from "Strommessgerät" to "Leistungsmesser". (13650)
MT9085 Series ACCESS Master Ver. 1.09	Fixed the issue that the macro bend and splitter losses are not displayed after loading or saving thresholds on Fiber Visualizer. (13584) Improved the accuracy of detection of non-reflective events. (13616)
MT9085 Series ACCESS Master Ver. 1.08	Fixed the issue that the noise floor may be not displayed correctly when the resolution of the measured waveform is 10, 20, or 40 meters, in any of the following combinations. (13546) - Distance Range is set to 50 to 200 km and Resolution is set to "Low Density". - Distance Range is set to 200 or 300 km and Resolution is set to "High Density".
MT9085 Series ACCESS Master Ver. 1.07	Improved the accuracy of automatic event detection when Auto Test Mode of Fiber Visualizer is set to "Advanced". (12805) Improved the accuracy of splitter detection when Test Mode is set to "Auto". (13521) Fixed the issue that may cause unnecessary reflection in the measured trace, other than events including connectors and fusion splices. This issue occurred when Distance Range is set to a shorter length with respect to the fiber under test, in version 1.06 or lower. (13520) Fixed the issue that performed measurement with the averaging time

	different from the displayed one when the setting for "Unit of averaging" is changed. (13533)
	Fixed the issue that caused the MT9085x to freeze when trying to save a file with a name including double-byte characters in VIP. (13513)
	Fixed the issue that the power may be turned off during measurement with Fiber Visualizer when Auto Power Off is set to "ON". (13501)
	Fixed the issue that a wavelength not installed to the module may be selected by touching a part other than numerical values or check boxes within the "Wavelengths" area of the OTDR (Construction) Setup screen. (13516)
MT9085 Series ACCESS Master Ver. 1.06	Improved event detection accuracy when measuring multi-mode fibers. (12909)
MT9085 Series ACCESS Master Ver. 1.05	Improved event detection accuracy when measuring fibers including splitters in the function of analyzing measured waveforms. (12582)
	Fixed a bug where the connection check level is low even though the fiber is connected correctly when there is a connector around 40m of the fiber. (12583)
	Fixed a bug where the MT9085A may freeze when saving the measured waveform after loading a damaged file. (12707)
	Fixed a bug where the MT9085A may freeze during measurement in the Fiber Visualizer when the auto test mode was set to "Advanced". (12708)
MT9085 Series ACCESS Master Ver. 1.04	Fixed a bug where MT9085A performed the measurement in Auto mode when pressing the Start key during the Realtime measurement even if the wavelength was set to "All" and the test mode was set to "Manual". (12457)
	Fixed a bug where the trace(s) measured in the Fiber Visualizer mode was displayed on the OTDR (Standard) trace screen when restarting MT9085A. (12059)
MT9085 Series ACCESS Master Ver. 1.03	Fixed a bug where the MT9085A may freeze when removing the Bluetooth dongle. (12302)
	Fixed a bug where the communication stops during the transfer of a large number of files via Bluetooth. (12253)
	Fixed a bug where file transfer cannot be performed after attempting the following procedure from the PC via Bluetooth. (12259) 1. In the File Explorer, open the MT9085 root folder (internal memory). 2. In the MT9085 root folder, open a sub folder. 3. Return to the MT9085 root folder.
	Fixed a bug where 0 byte data may be returned when sending the DAT? command continuously. (12247)
	Fixed a bug where MT9085 failed auto placement of markers on a waveform with no noise floor when Marker Mode was Placement. (12225)
MT9085 Series ACCESS Master Ver. 1.02	Fixed a bug where the battery/power icon was not updated immediately when the AC adapter was plugged in or unplugged in some instances. (11924)
	Fixed a bug where the unit of cursor distance was not displayed correctly in some instances. (12036)
	Fixed a bug where the SCPI command was executable without entering

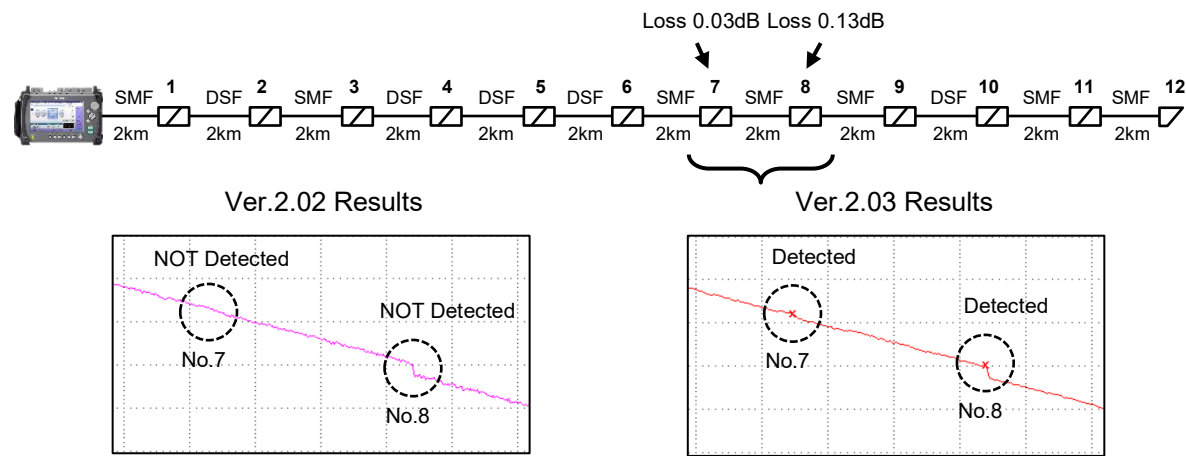
	password. (12046)
	Fixed a bug where the Test Parameters screen was displayed incorrectly on Fiber Visualizer in some instances. (12052)
	Fixed a bug where "Set to all wavelengths" was displayed incorrectly on the parameter screen of all wavelength tests in some instances. (12051)
	Fixed a bug where the total loss was miscalculated in some instances. (12069)
	Fixed a bug where the average count was displayed incorrectly on Fiber Visualizer in some instances. (12071)
	Fixed a bug where an unnecessary log file was output to the USB memory stick in some instances. (12072)
	Fixed a bug where the "Local Operation" button was not operable while controlling with remote command in some instances. (12075)
	Fixed a bug where the vertical axis of the graph was displayed incorrectly in some instances. (12080)
MT9085 Series ACCESS Master	Fixed a bug where Markers 1, 2, 3 and 4 disappear when measuring with "wavelength" set to "all". (12029)
Ver. 1.01	Fixed a bug where markers were placed at inappropriate positions with "Put All" function and "Auto Marker" function. (11994, 11973)

※*Details of improvements in Ver.203

We have improved the detection rate of events with low connection losses or that are adjacent. Note that this improvement applies only when measuring using Ver 2.03. When reanalyzing the loaded trace file measured by Ver 2.02 or earlier versions, analyzed results are the same as those of Ver 2.02 or earlier.

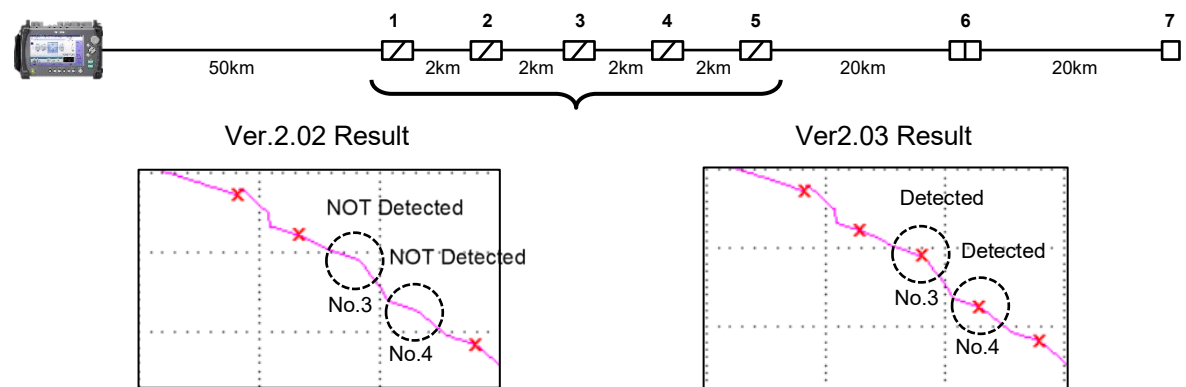
(Improvement Example 1)

Ver. 2.02 or earlier occasionally failed to detect such low loss events as shown below. Ver. 2.03 can detect these events.



(Improvement example 2)

Ver. 2.02 or earlier occasionally failed to detect some of adjacent events existing in the long-distance fiber as shown in the figure below. Ver. 2.03 can detect these events.



6. Known Problems

Firmware version 3.00 for the MT9085 Series ACCESS Master contains the following known problems:

Model Name	Description
MT9085 Series ACCESS Master	➤ None

7. Cautions

Read the following terms and conditions carefully before using the MT9085 Series ACCESS Master.

Model Name	Description
MT9085 Series ACCESS Master	➤ Some commercially available USB memory may not be supported. Refer to Section 8. Upgrade Precautions for details of USB memory supported by Anritsu. ➤ BEFORE upgrading the firmware, ALWAYS read the MT9085 Series ACCESS Master Firmware Upgrade Procedure and the MT9085 Series Operation Manual.

8. Upgrade Precautions

- Anritsu has confirmed compatibility with USB memory from the makers listed in the following table. If your USB memory is not recognized by the MT9085 Series ACCESS Master, please purchase one of the supported media types.

Manufacturer	Model/capacity
Biocryptodisk	ISPX/4GB
Sony	POCKET BIT/32MB
Sony	POCKET BIT 512MB Turbo
GREEN HOUSE	PicoDrive/64 MB
TOSHIBA	TransMemory/256 MB
TOSHIBA	TransMemory/512 MB
ADTEC	DATASTICK/64 MB
Princeton	X i a o Jr./64 MB
BUFFALO	RUF2 - E1G - B/512 MB
I-O DATA	ToteBag/512 MB
Scan Disk	Cruzer Micro with Skins USB Flash Drive/256 MB
imation	Flash Drive Mini with swivel cap/256 MB
Transcend	JetFlash/256 MB
Sony	POCKET BIT/8GB USM8GJ-B
I-O DATA	ToteBag/4GB TB-AT4G/B
BUFFALO	RUF2-J4GS-BK

- ❑ NEVER remove the USB memory inserted into the MT9085 Series ACCESS Master while updating, otherwise the firmware update will fail, leaving the MT9085 Series ACCESS Master unable to restart.
- ❑ When updating the firmware, do not press any key on the MT9085 Series ACCESS Master, otherwise the firmware update may fail, leaving the MT9085 Series ACCESS Master unable to restart.
- ❑ When updating the firmware, do not turn off the power to the MT9085 Series ACCESS Master, otherwise the firmware update will fail, leaving the MT9085 Series ACCESS Master unable to restart.
- ❑ When updating the firmware, do not remove the AC adapter plug from the MT9085 Series ACCESS Master, otherwise the firmware update may fail, leaving the MT9085 Series ACCESS Master unable to restart.
- ❑ Note that firmware downgrade from 3.00 or later to 2.05 or earlier is not possible.

If the firmware update fails and the MT9085 Series ACCESS Master cannot restart, please contact our Anritsu sales representative.