

MP1595A

40G SDH/SONET Analyzer
(SDH/SONET version)

MP1595A 40G SDH/SONET Analyzer Quick Start Guide (SDH/SONET Version)

June 1, 2007

Anritsu Corporation

IP Network Measurement Division

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MP1595A Quick Start Guide
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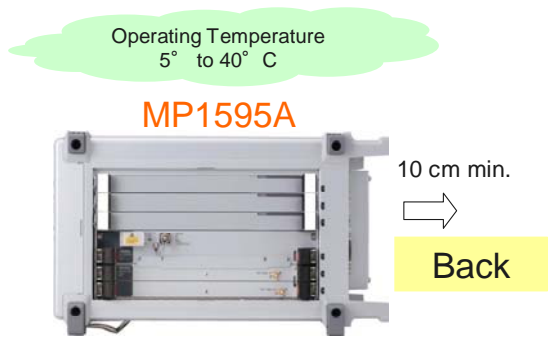
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1. Preparing for Use

✧ Main Frame Location

- The MP1595A has internal cooling fans. Allow at least 10 cm of clearance from walls, obstructions, etc., to ensure sufficient air flow through the air intake and exhaust.



1. Preparing for Use

✧ Modules

- The installed modules can be changed to match the required bit rate.



Slot No.	40G Optical	40/43G Optical	Multi Bit Rate (1.5M to 43G)
1			MU150100A
2			
3			
4	MU150141A	MU150141B	MU150141B
5	MU150140A	MU150140A	MU150140A
6			



2. Powering On

✧ Power Switch

- The MP1595A has two power switches – the main power switch and a power switch.

📄 Power-on

- (1) First, check that the Main Power Switch is OFF and connect the power cord to the power outlet.
- (2) Set the Main Power Switch to ON.
- (2') To change from the Standby to Power-on status, press the Power Switch.

📄 Power-off

- (1) Press the Power Switch.
- (2) Check that the MP1595A is in the Standby status and set the Main Power Switch to OFF.



Use a power supply rated at 100–120 V/200–240 V and 50–60 Hz.
The MP1595A switches automatically to match the supplied power.

2. Powering On

✧ Starting MP1595A Application Software

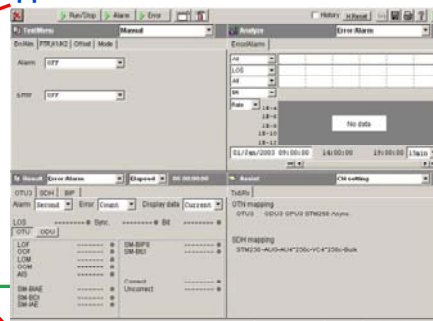
- Start the MP1595A Application Software as follows:

1. Set the Main Power Switch to ON.
2. After the Selector screen is displayed automatically, select “Main application”.
3. After the MP1595A Application Software starts, the Application screen is displayed.

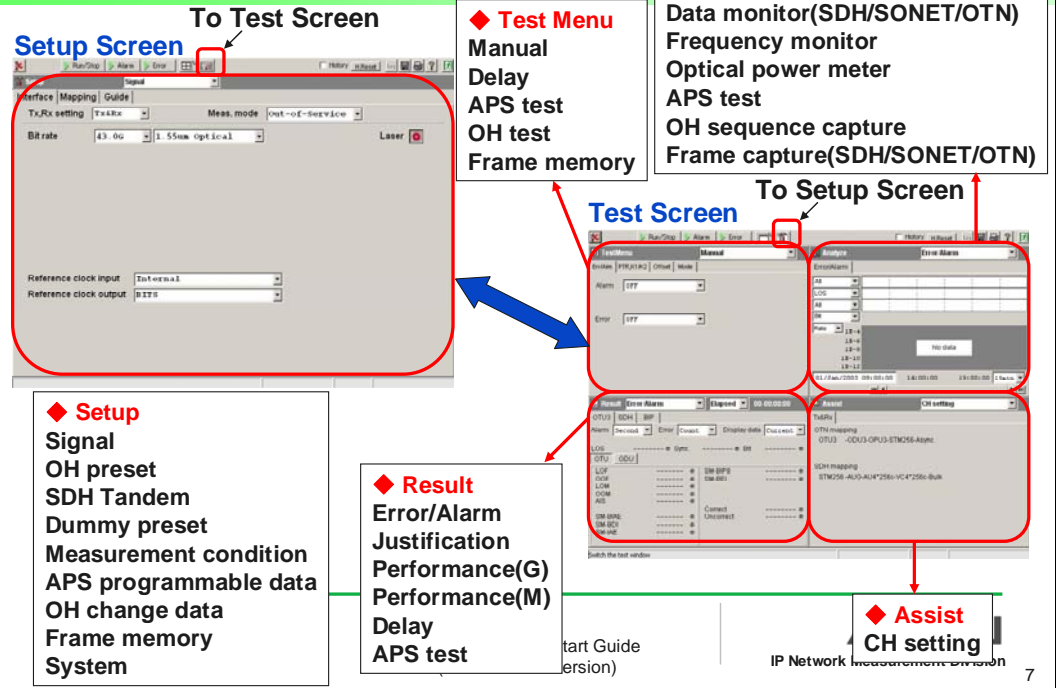
Selector Screen



Application Screen



3. Application Screen

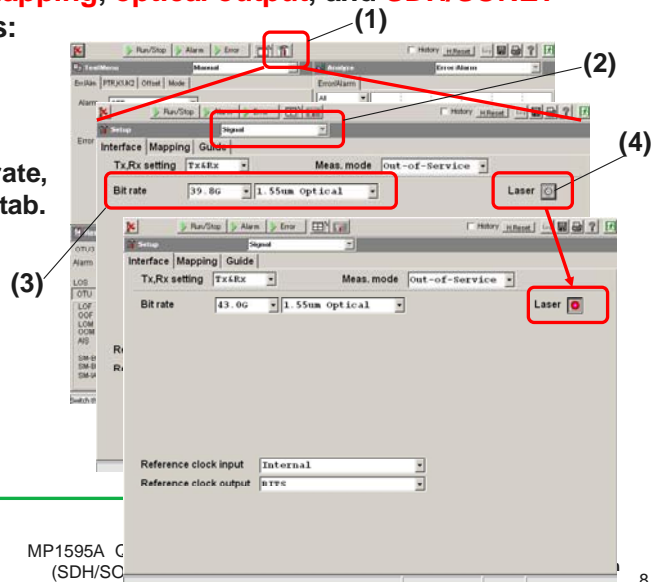


4. Measurement Procedure (Shared Settings)

4-1. Shared Settings

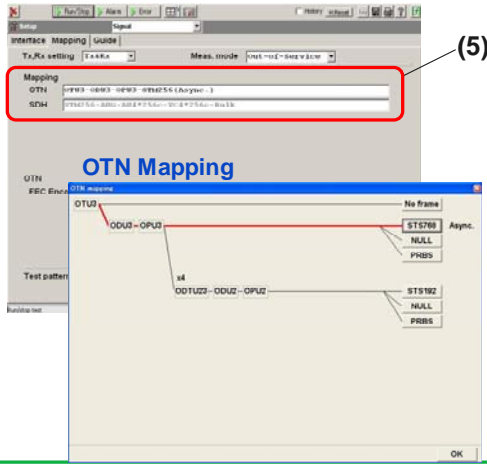
➤ Set the **bit rate, mapping, optical output, and SDH/SONET display** as follows:

1. Open the Setup screen.
2. Select "Signal".
3. Specify the Bit rate, at the Interface tab.
4. Set the optical output to ON.

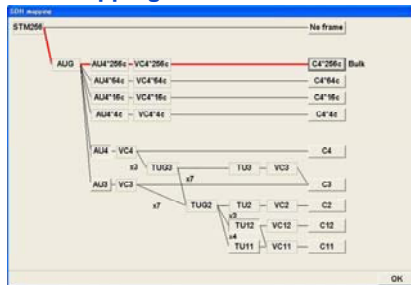


4. Measurement Procedure (Shared Settings)

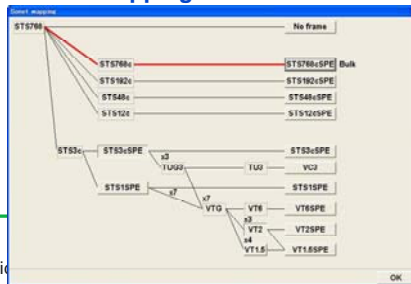
5. Specify the Mapping at the Mapping tab.



SDH Mapping



SONET Mapping



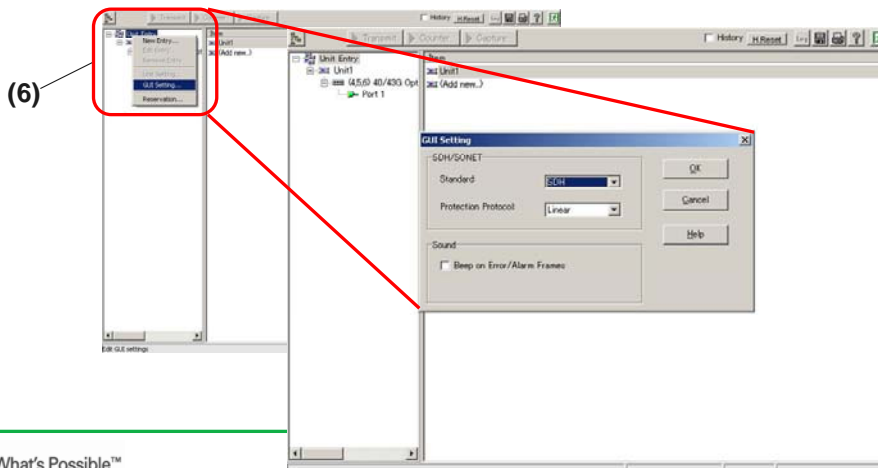
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4. Measurement Procedure (Shared Settings)

6. Right-click the Unit icon, select "GUI Setting..." and set Standard. The SDH/SONET display can be switched.



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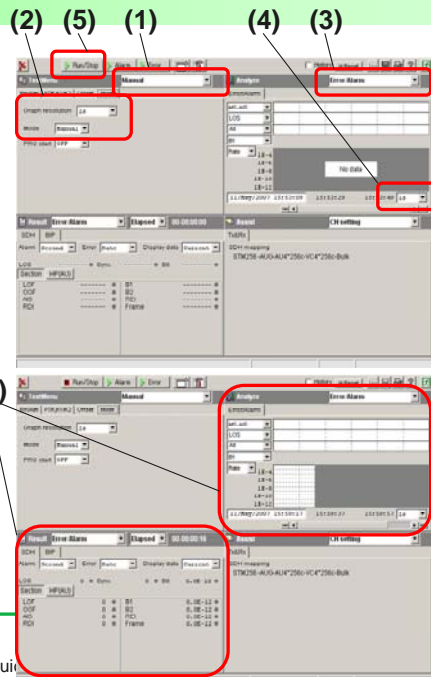
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4. Measurement Procedure (Detecting Error/Alarms)

4-2. Generating/Detecting Errors and Alarms

4-2-1. Detecting Error/Alarms

- Detect Error/Alarms as follows:
 1. Set Test Menu to “Manual”.
 2. Set Graph resolution and Mode at the Mode tab.
 3. Set Analyze to “Error/Alarm”.
 4. Set Graph resolution.
 5. Start Error/Alarm measurement.
 6. Display the measurement results.



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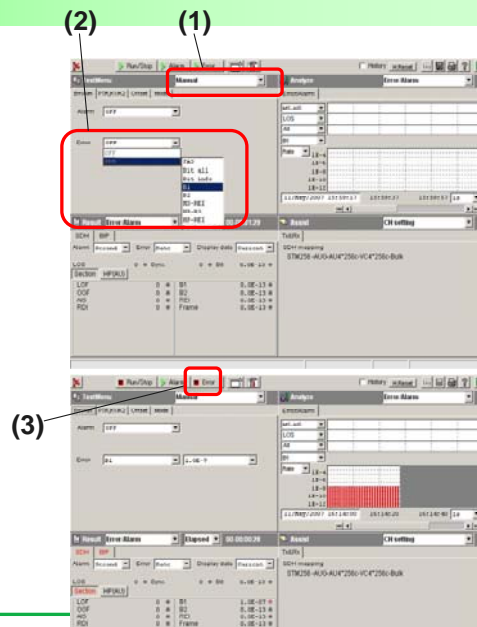
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4. Measurement Procedure (Adding Errors)

4-2-2. Adding Errors

- Add Errors as follows:
 1. Set Test Menu to “Manual”.
 2. Set the Errors to be added at the Err/Alm tab.
 3. Add the Errors.



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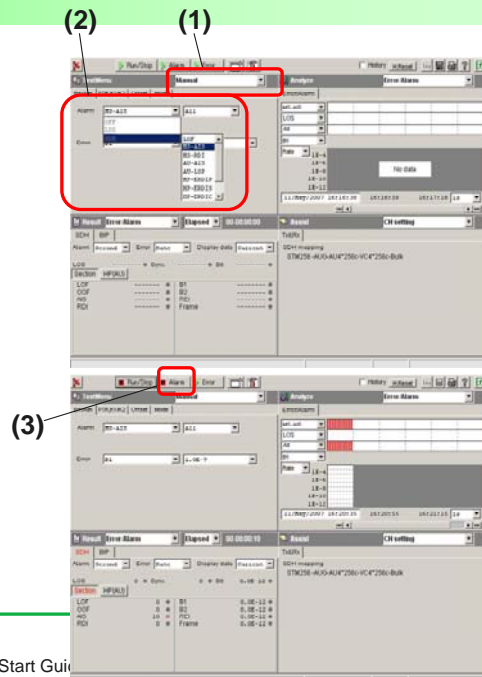
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4. Measurement Procedure (Adding Alarms)

4-2-3. Adding Alarms

➤ Add Alarms as follows:

1. Set Test Menu to “Manual”.
2. Set the Alarms to be added at the Err/Alm tab.
3. Add the Alarms.



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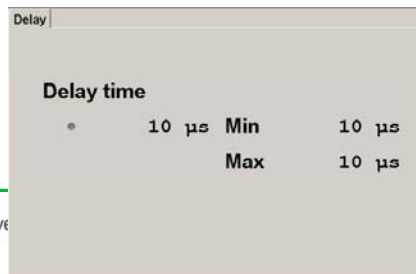
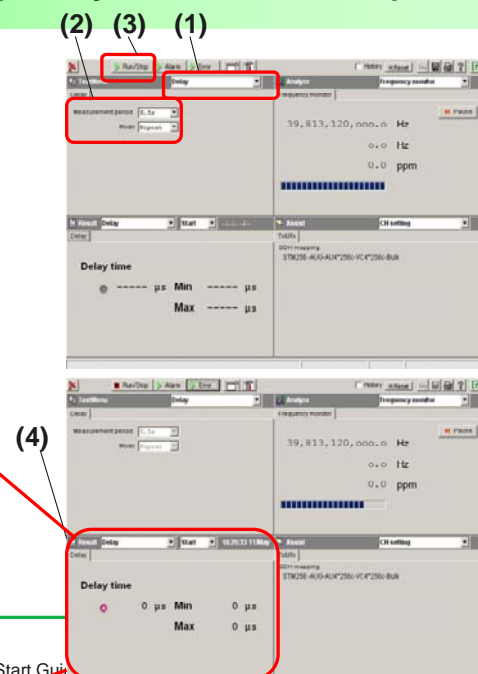
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4. Measurement Procedure (Delay Measurement)

4-3. Delay Measurement

➤ Measure **Delay** as follows:

1. Set Test Menu to “Delay”.
2. Set Measurement period and Mode at the Delay tab.
3. Start Delay measurement.
4. Display the measurement results.



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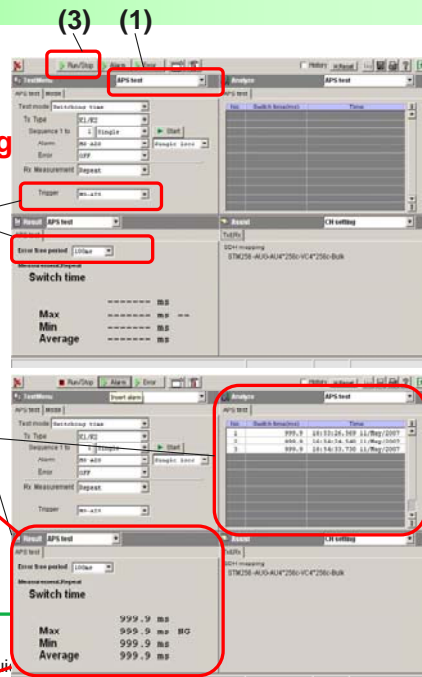
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4. Measurement Procedure (APS Switching Time)

4-4. APS Switching Time

- Measure the **Automatic Protection Switch (APS) Switching Time** as follows:

1. Set Test Menu to "APS test". (2)
2. Set Trigger and Error free period at the APS test tab.
3. Start APS Switching Time measurement.
4. Display the measurement results.



Switch time	
Max	35.1 ms
Min	20.1 ms
Average	23.7 ms

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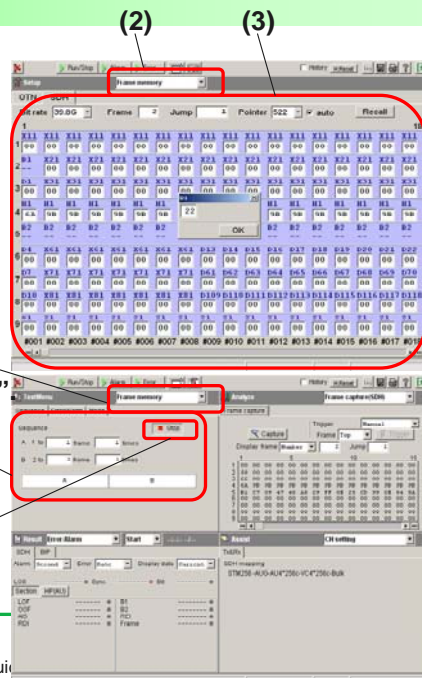
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4. Measurement Procedure (Frame Memory Function)

4-5. Frame Memory Function

- Edit the **Frame Memory** and send the Frames as follows:

1. Open the Setup screen.
2. Select "Frame memory".
3. Edit the Frames set in Frame Memory. (256 OTN Frames and 16 SDH/SONET Frames can be edited.)
4. Set Test Menu to "Frame memory"
5. Set the send Frame Sequence.
6. Send the Frames.



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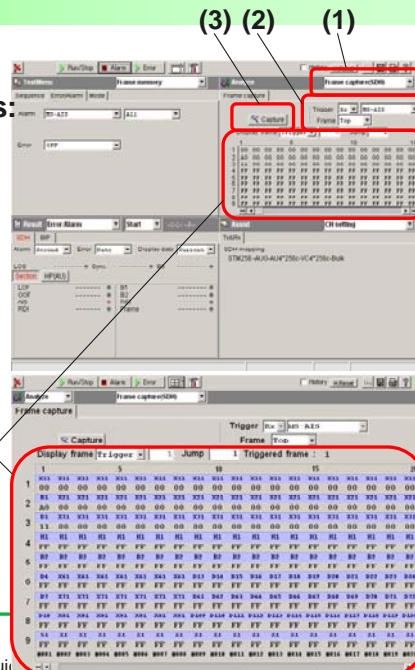
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4. Measurement Procedure (Frame Capture Function)

4-6. Frame Capture Function

➤ Perform **Frame Capture** as follows:

1. Set Analyze to “Frame capture”.
2. Set the Trigger type and Trigger Frame position.
3. Start Frame Capture.
4. Capture stops when the Trigger occurs and the captured Frames are displayed. (256 OTN Frames and 16 SDH/SONET Frames can be captured.)



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