

PAM Control Software Operation Manual

1 Outline

This software performs remote control over Ethernet of the 32G PPG output interface to obtain the optimum 4PAM and 8PAM waveform outputs when connecting the MU183020A 28/32 Gbit/s PPG and MU183021A 28/32 Gbit/s 4ch PPG (32G PPG hereafter), and the MZ1834A 4PAM Converter and MZ1838A 8PAM Converter (PAM Converter hereafter).

Note:

The MP1800A-002 Ethernet option is required to use this software.

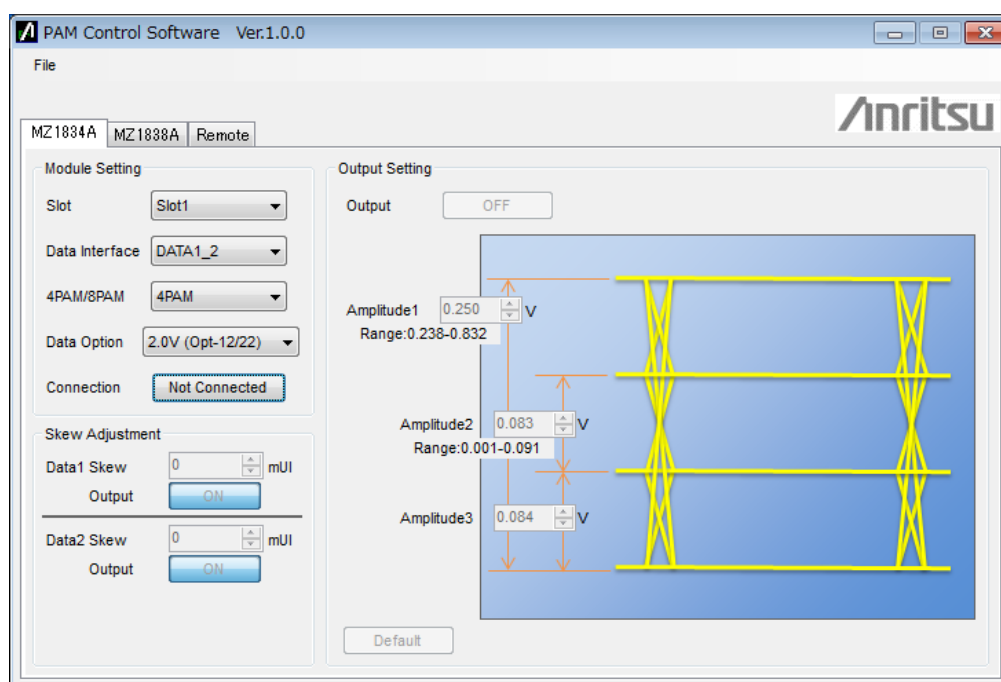


Figure 1-1 PAM Control Software display

2 Installing/Uninstalling

2.1 Installing

Copy the installer .exe file to the MP1800A and then double-click it.

Note:

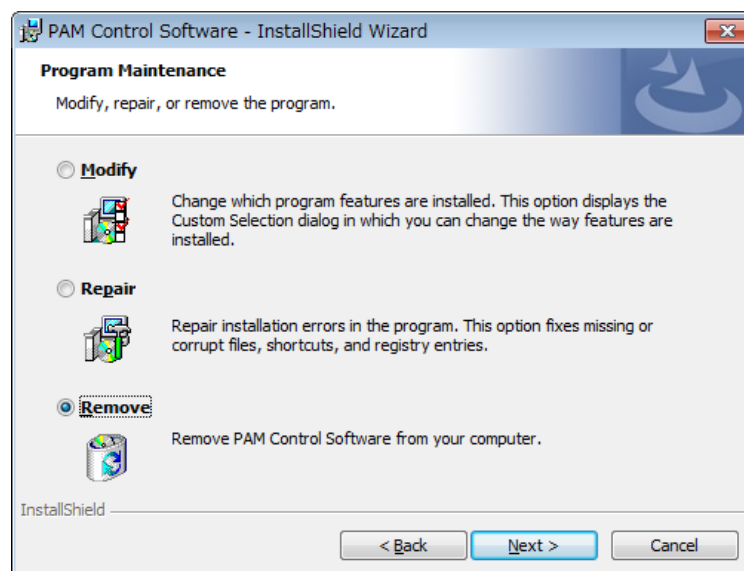
- At first installation of this software, about 30 minutes is required to install the .NET Framework.
- About 1 GB of free HDD space is required to install this software.

2.2 Uninstalling

Double-click the installer .exe file and select [Remove]. Alternatively, run the software uninstaller from the Windows Control Panel.

Note:

This software uninstaller does not uninstall the .NET Framework.



2.3 Version Upgrade

Install version upgrades after first uninstalling the old software version as described above.

3 Usage

This section explains the MU183021A configuration mounted in the MP1800A. The option configuration and used instruments are listed below.

- MP1800A-015
- MU181000A
- MU183021A-x13 + x30
- Sampling Oscilloscope

3.1 Connecting with 32G PPG

Connection Setup

Refer to sections 3.1.1 Connecting MZ1834A and 3.1.2 Connecting MZ1838A in the MZ1834A/MZ1838A Operation Manual for details of the 32G PPG and PAM converter connections.

Setting 32G PPG

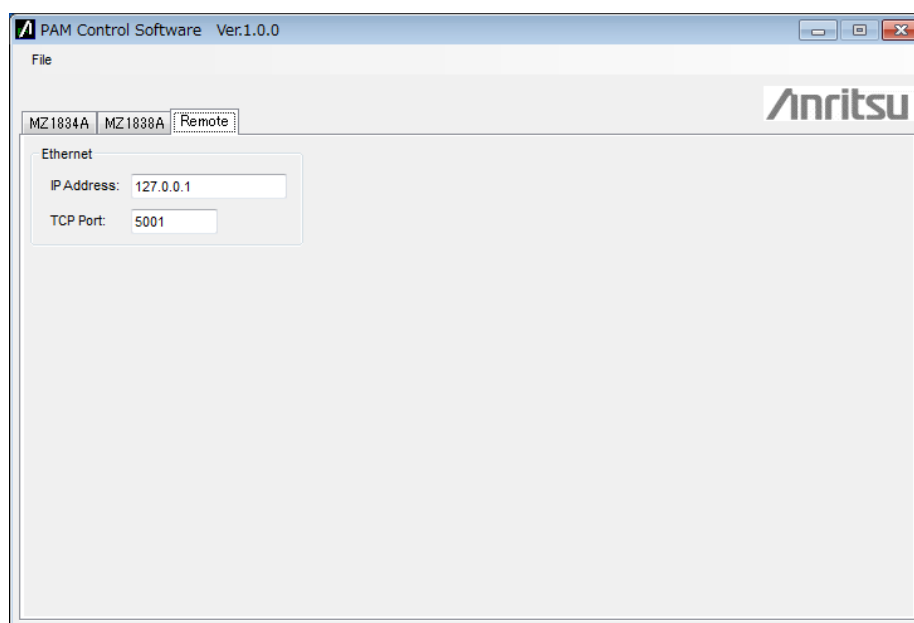
Set the MU183021A combination, bit rate and pattern. Refer to the operations manuals for the MU183020A 28/32 Gbit/s PPG and MU183021A 28/32 Gbit/s 4ch PPG for more details.

Setting MP1800A Remote Interface

Set the MP1800A remote setting to Ethernet.

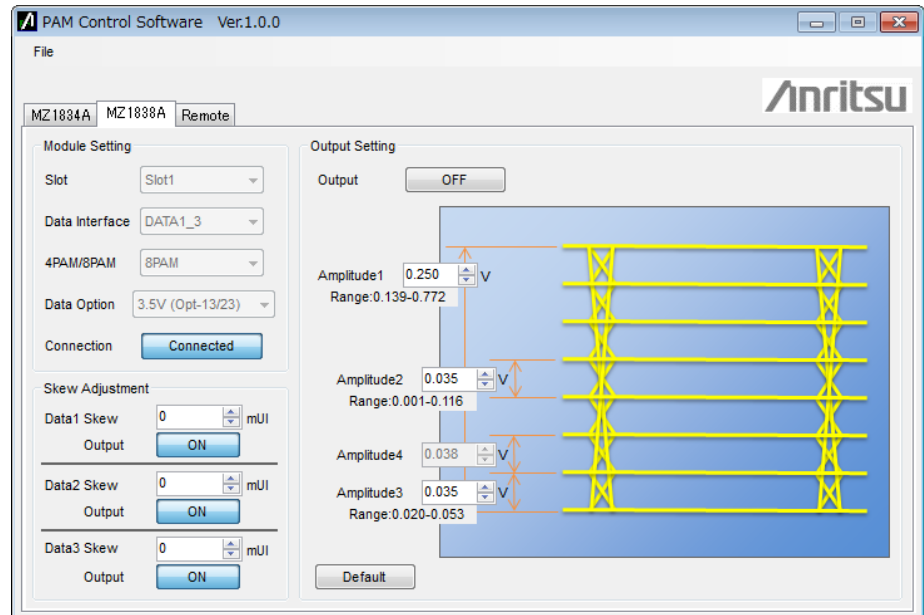
Refer to the MP1800A Installation Guide for details.

1. Set the IP Address and TCP Port at the [Remote] tab.
Connection using the default settings is possible without changing the Port setting of the MP1800A Ethernet Remote settings.



3.2 Setting PAM Signal Amplitude

This section explains how to set the PAM signal modulation using this software.



1. Select the PAM converter.
Choose the tab for PAM converter being used.
2. Set the control target.
Set the Module Setting items:
 Slot: Specifies Slot No. for controlled 32G PPG
 Data Interface: Specifies controlled data interface
 4PAM/8PAM: Selects output PAM waveform
 Data Option: Selects controlled 32G PPG data output option
3. Click the [Connection] button.
Check that the display changes to [Connected].
4. Adjust the PAM waveform amplitude.
The signal is output when the [Output] button is set to ON. Set Amplitude1 to Amplitude3 while monitoring the output waveform.
5. Fine-adjust the PAM waveform (skew).
Fine-adjust the skew between the 32G PPG data interface using the Data1 to Data3 settings.
Note:
 - Skew adjustment requires Data Delay Opt-30 or -31 in the 32G PPG.
 - The skew setting range of this software is the 32G PPG Combination value.