Mentor A²B Analyzer (Gen 2)

Initial Setup

Before an A²B Analyzer can be used with APx500 Flex, the proper firmware, software, and ASIO driver must be installed. Follow the steps below to set up your device.

1. Connect an A²B Analyzer to your PC over USB.
2. Install the latest A²B analyzer firmware.
3. Install the latest A²B ASIO driver.
4. Install the latest version of the Mentor A²B Application.
5. Reboot your PC.
6. Run the Mentor A²B Analyzer Application.
7. Click the settings cog in the upper right corner of the application and select Preferences.
8. View the Node Simulation tab and enable “Force USB Streams to 32-bit”.
9. Click OK to confirm the selection. (Note: this setting is global and does not get saved or restored through session files).

Note that the following firmware, driver, and software versions have been tested with APx500 Flex:

- A²B Analyzer Firmware v5.1.5
- A²B ASIO driver v3.19
- Mentor A²B Analyzer Application v4.0.1

Calibration

Once the device is configured, the input and output sensitivities of the device need to be adjusted so that signals can be generated and measured accurately in analog units. With the Mentor A²B Analyzer powered on and connected,

1. Configure the Mentor A²B Application to route the A²B analyzer’s external analog I/O over ASIO.
2. Start streaming.
3. Run APx500 Flex.
4. Set “Device” to “A2B ASIO”.
5. Set the output “Scaling Mode” to “Analog”.
6. Set the output scaling factor to the appropriate output scaling factor below.
7. Set the input “Scaling Mode” to “Analog”.
8. Set the input scaling for each channel to the appropriate input scaling factor below.
### Output Sensitivities*

| Analog Out (Left/Right) | 0.9 V/FS |

*Measured with stream volume set to 0 dB.

### Input Sensitivities*

| Analog In (Left/Right) | 0.9 FS/V |

*Measured with stream volume set to 0 dB.