

PSA Series 2

Firmware Updates

Changes in version 2.x



1 Firmware Updating

PSA Series handheld spectrum analyzers incorporate field updatable firmware.

Firmware updates are available free of charge from the Support section of the Aim-TTI web site. The update process involves the use of a USB Flash drive.

This note relates to PSA Series 2 models (PSA1302 and PSA2702) and the changes introduced from firmware version 2.0 onwards.

1.1 Changes from version 2.0

Version 2.0 of the firmware incorporates a significant number of improvements as follows:

1.1.1 Trace Display and Control

Dual Trace Mode

When using Peak Hold or multi-trace Averaging, it is now possible to display both the “processed” and “un-processed” traces simultaneously.

This enables the trace from the current sweep to be viewed along with the peak-held or averaged trace.

Improved Trace On/Off

The Trace Control menu now has individual keys to turn the Live, View and Reference traces On or Off. This is quicker and more convenient than the previous pop-up menu system.

1.1.2 Channel Markers (only with Option U01)

Channel Markers are a special case of a Limit Pattern which consists only of vertical lines at frequency points defined within the file. These can be displayed as an alternative to limit lines/patterns on the PSA. Creation of Channel Markers require PSA-Manager (version 2).

1.1.3 Trace Files and Log Files

Earlier versions of the PSA Series 2 (prior to version 1.x) stored trace file data and log file data in a format where the trace amplitude values were relative to the Reference level. This has been changed in version 2.x so that the values are absolute. This can be important when using the files for external applications.

PSA Manager version 2 automatically recognizes which format is being used. However, third party programs which were adapted to use the previous relative format may now give incorrect results. In these cases, the original format can be used by selecting “Relative to Ref.” from the pop-up menu within the “Prefs.” function of the System Utilities menu.

1.2 Consequences of Firmware Updating

Updating of the firmware applies a full hardware level reset to the instrument. This clears all data within the buffers, although it does not affect data stored in files.

A further consequence is the destruction of the User Preset which is cleared and set equal to the Standard Preset. The contents of the original User Preset can be retained by the following process:

Load the User Preset (Presets > User Preset > Execute) and then immediately Save a Set-up file under an appropriate name (e.g. USERPRST). Perform the firmware update and then Recall the Set-up file. Recreate the User Preset from Presets > User Preset > Save Current.

1.3 Further Recommendations

1.3.1 User Manuals

Changes within version 2 of the firmware will result in the original Instruction Manual and Short Guide being incorrect in places.

New versions can be downloaded from the Support section of the Aim-TTi web site. The issue number should be Iss. 6 or above for the Instruction Manual and Iss. 5 or above for the Short Guide.

1.3.2 PSA Manager

To be fully compatible with version 2.x of the firmware, the PSA-Manager software application must be version 2.0 or above.

PSA-Manager is a free application and the latest version can be downloaded from the support section of the Aim-TTi website.