

Welcome to S1220 ASK-FSK Demodulation Analysis

Installation Instructions

S1220 ASK-FSK Demodulation Analysis is used to work with **RIGOL** DSA875/TG, DSA832/TG, and DSA832E/TG spectrum analyzer to realize demodulation and analysis for the modulated ASK and FSK signals.

Configuration Requirements

Before using S1220 ASK-FSK Demodulation Analysis, first ensure that your PC and the spectrum analyzer conform to the following configuration requirements.

Hardware Configuration Requirements

- Internal Memory: 1 GB or higher (2 GB or higher recommended)
- Monitor: 1024x800 or higher resolution
- Processor: 1 GHz or higher
- Hard disk: 200 MB or higher

Running Environment

- Operating System: Windows XP (SP3, 32-bit, Chinese and English), Windows 7 (32-bit, Chinese and English; 64-bit, Chinese and English), Windows 8.0 (64-bit, Chinese), Windows 8.1 (32-bit, Chinese and English; 64-bit, English), and Windows 10 (32-bit, Chinese and English; 64-bit, Chinese and English)
- You must have **RIGOL** Ultra Sigma 00.01.06.00 or a later version installed on your PC.

Note: This document takes Windows 7 (64-bit, English) as an example to introduce how to install and run the software.

Spectrum Analyzer

- Model: DSA875/TG, DSA832/TG, DSA832E/TG
- Firmware version: 00.01.05
- Working mode: DMA mode (press **Meas** → **DMA** to enter the DMA mode).

Software Installation

- (1) Before installing the software, first install Ultra Sigma 00.01.06.00 or a later version. For the installation procedures, refer to the relevant documents of Ultra Sigma.
- (2) **RIGOL** provides you with the PC installation package of S1220 ASK-FSK Demodulation Analysis (download it from the website www.rigol.com). Double-click the "S1220 ASK-FSK Demodulation Analysis Setup. exe" file, and then click **Next** according to the procedures until you finish the installation. After you have properly installed the software, a shortcut icon named "S1220 ASK-FSK Demodulation Analysis" will appear on the desktop.

Software Running

1. Connect to the instrument

- (1) Use the USB cable to connect the required spectrum analyzer to the PC properly. For the requirements for the spectrum analyzer, refer to "[Configuration Requirements](#)".
- (2) Connect the signal under test to the spectrum analyzer.
- (3) Start the spectrum analyzer, and then press **Meas** → **DMA** to enter the DMA mode.

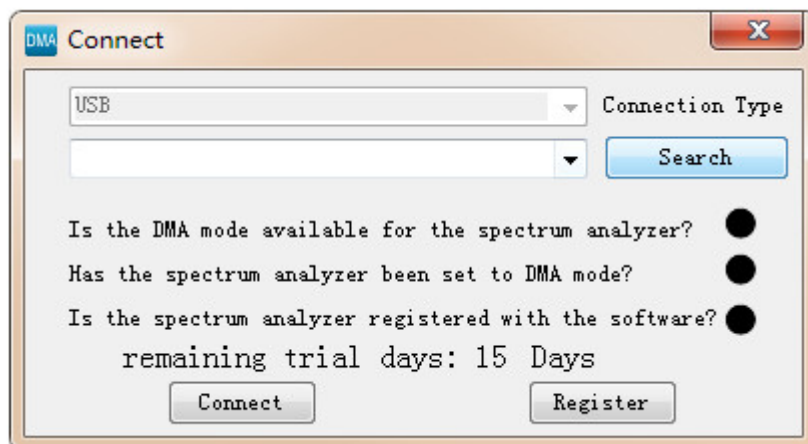
2. Start the software

After you have successfully installed S1220 ASK-FSK Demodulation Analysis, start the software in either of the following two ways:

- Click **[Start]** → **[All Programs]** → **[S1220 ASK-FSK Demodulation Analysis]** to start the software.
- Double-click the shortcut icon named "S1220 ASK-FSK Demodulation Analysis" to start the software.

3. Build communication between the PC and the instrument

- (1) Click **Device** in the menu bar, and then select **Connect**. Then, the following dialog box is displayed.
- (2) In the displayed dialog, click the drop-down list of **Connection Type** to choose USB.
- (3) Click **Search** to select the desired instrument from the drop-down list box at the left section.
- (4) Check whether the spectrum analyzer meets the three conditions, as shown in the dialog box. If yes, the corresponding indicators following the questions are illuminated in blue. At this time, click **Connect**; if some of the conditions are not met, the indicators are not illuminated, then check and perform the corresponding operations:



- Upgrade the firmware version to 00.01.05 or a later version.
- Set the spectrum analyzer to work in DMA mode (press **Meas** → **DMA** to enter the DMA mode).
- Register the spectrum analyzer with the software (refer to "[Trial and Registration](#)").

Note: If the software is in its trial period, you only need to check whether the DMA mode is available for the spectrum analyzer and whether it has been set to DMA mode. If yes, the corresponding indicators following the questions are illuminated in blue. At this time, click **Connect**.

If the trial period for the software has expired, you should not only check the first two items, but also should register the spectrum analyzer with software to build communication between the software and the spectrum analyzer (The registration steps are as follows: click **Register** to enter the "Register" interface, and then input the registration code. Click **OK** to complete registration.)

Trial and Registration

The software offers a free trial of 15 days. During the trial period, the software can be connected to any spectrum analyzer that is compatible with the software to analyze the ASK/FSK signal. For specific requirements for the spectrum analyzer, refer to "[Configuration Requirements](#)". After the trial period has expired, the software is unavailable for you unless you register the software.

The procedures for registration are as follows:

1. Click **Device** in the menu bar, and then select **Connect**.
2. Click **Register** in the displayed interface.
3. Input the right registration code, and click **OK**.



After you complete the registration, the registration code you input has been successfully bound to the spectrum analyzer.