



Quick Guide

RSSA3000X

Spectrum Analyzer







General Safety Summary

Carefully read the following safety precautions to avoid any personal injury or damage to the instrument and any products connected to it. To avoid potential hazards, please use the instrument as specified.

Use Proper AC Power Line

Only the power cord designed for the instrument and authorized by local country should be used.

Ground the Instrument

The instrument is grounded through the protective earth conductor of the power line. To avoid electric shock, please make sure the instrument is grounded correctly before connecting its input or output terminals.

Connect the Probe Correctly

If a probe is used, do not connect the ground lead to high voltage since it has isobaric electric potential as the ground.

Look Over All Terminals' Ratings

To avoid fire or electric shock, please look over all ratings and sign instruction of the instrument. Before connecting the instrument, please read the manual carefully to gain more information about the ratings.

Use Proper Overvoltage Protection

Make sure that no overvoltage (such as that caused by a thunderstorm) can reach the product, or else the operator might be exposed to danger of electrical shock.

Electrostatic Prevention

Operate the instrument in an electrostatic discharge protective area environment to avoid damages induced by static discharge. Always ground both the internal and external conductors of the cable to release static before connecting.

Maintain Proper Ventilation

Inadequate ventilation may cause an increase in the instrument's temperature, which will eventually damage the instrument. So keep well ventilated and inspect the intake and fan regularly.

Avoid Exposed Circuit or Components

Do not touch exposed contacts or components when the power is on.

Do Not Operate Without Covers

Do not operate the instrument with covers or panels removed.

Use Only the Specified Fuse.

Keep Product Surfaces Clean and Dry

To avoid the influence of dust and/or moisture in the air, please keep the surface of the device clean and dry.

Do Not Operate in Humid Conditions

In order to avoid short circuiting to the interior of the device or electric shock, please do not operate the instrument in a humid environment.

Do Not Operate in an Explosive Atmosphere

In order to avoid damage to the device or personal injury, it is important to operate the device away from an explosive atmosphere.

General Safety Summary

Safety Terms and Symbols

Terms on the product. These terms may appear on the product: **DANGER** Indicates direct injuries or hazards that may happen. **WARNING indicates** potential injuries or hazards that may happen.

CAUTION Indicates potential damages to the instrument or other property that may happen.

Symbols on the product. These symbols may appear on the product:



Warning



Hazardous
Voltage



Protective
Earth Ground



Earth
Ground



Chassis
Ground



General Care and Cleaning

Care

Do not store or leave the instrument in direct sunshine for extended periods of time.

Notice:

To avoid damages to the instrument, please do not leave it in fog, liquid, or solvent.

Cleaning

Please perform the following steps to clean the instrument regularly according to its operating conditions.

1. Disconnect the instrument from all power sources, and then clean it with a soft cloth.
2. Clean the loose dust on the outside of the instrument with a soft cloth. When cleaning the LCD, take care to avoid scratching it.

Notice:

To avoid damages to the surface of the instrument, please do not use any corrosive liquid or chemical cleanser. Make sure that the instrument is completely dry before restarting it to avoid short circuits or personal injuries.



General Inspection

1. Inspect the shipping container

Keep the damaged shipping container or cushioning material until the contents of the shipment have been completely checked and the instrument has passed both electrical and mechanical tests.

2. Inspect the instrument

If the instrument is found to be damaged, defective or fails in electrical or mechanical tests, please contact your sales representative.

3. Check the accessories

Please check the accessories according to the packing list. If the accessories are incomplete or damaged, please contact your sales representative.



Appearance and Dimension

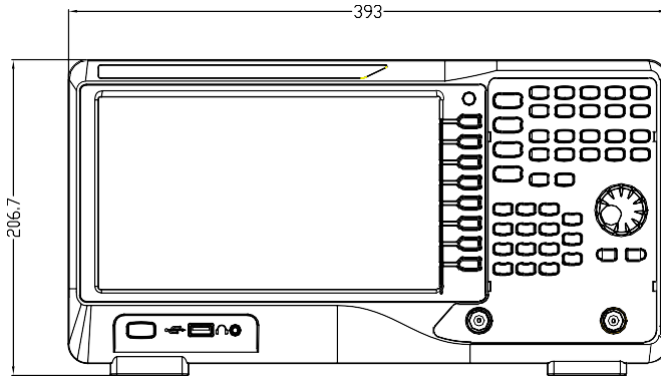


Figure 1 Front View

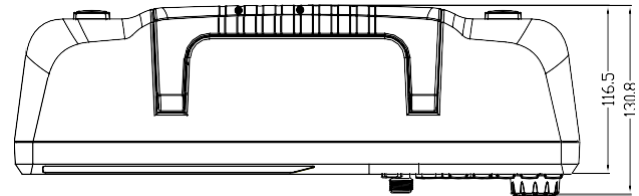
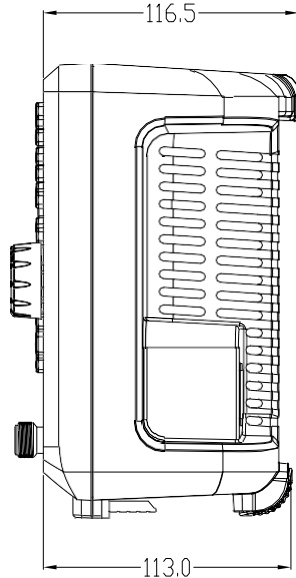


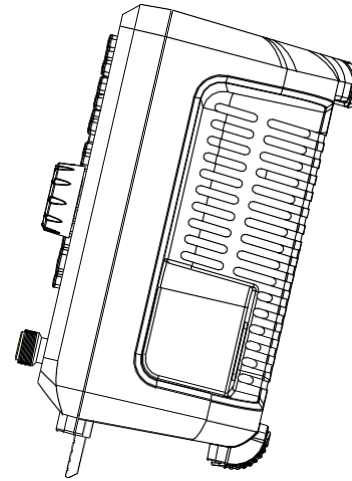
Figure 2 Top View

Adjust the Supporting Legs

Adjust the supporting legs properly to use them as stands to tilt the Spectrum Analyzer upwards for stable placement as well as easier operation and observation of the instrument.



Before adjusting

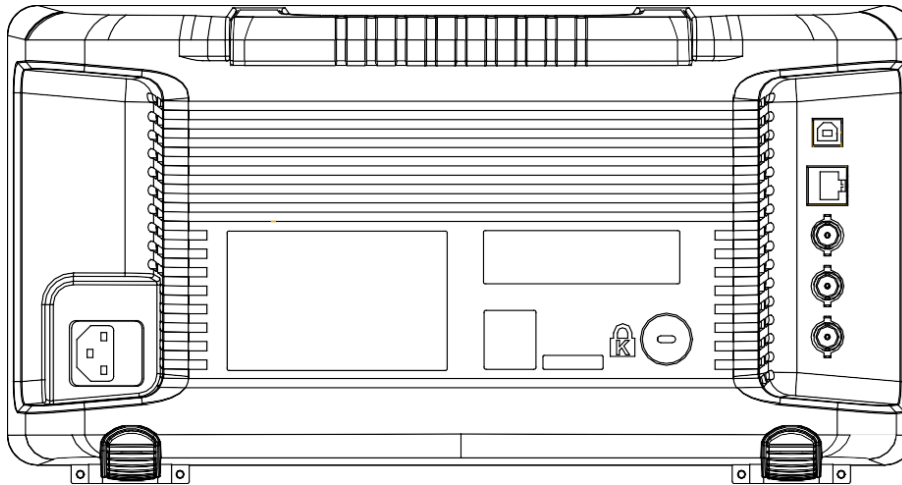


After adjusting



Connect to AC Power Supply

The Spectrum Analyzer accept 100-240V, 50/60/440Hz AC power supply. Please use the power cord provided as accessories to connect the instrument to the power source as shown in the figure below.



General Description

This model of spectrum analyzer has a frequency range from 9 kHz up to 2.1 GHz/3.2 GHz. It is lightweight, small and precise, offering a user friendly interface, clear display with plenty of RF measurement functions. The product can be used for research and development, education, production, maintenance and other relevant applications.

The Front Panel



- | | | |
|-----------------------------|---------------|-----------------------|
| 1、 User Graphical Interface | 5、 Knob | 9、 Earphone interface |
| 2、 Menu Control Keys | 6、 Arrow Keys | 10、 USB Host |
| 3、 Function Keys | 7、 RF Input | 11、 Power Switch |
| 4、 Numeric Keyboard | 8、 TG Output | |



Details of the Various Functions:

Frequency: Sets the Center Freq\Start Freq\Stop Freq\Freq Step

Span: Sets the Span\Full Span\Zero Span\Zoom In\Zoom Out\Last Span

Amplitude: Used to Set the REF Level\Attenuator\Preamp\Amplitude

Auto Tune: Automatically sets the optimal parameters according to the characteristics of the signal

BW: Used to adjust the RBW,VBW,VBW/RBW Rate, Average Type (Logpower\Power\Voltage)

Trace: Selects Trace\Trace setup\Trace math

Sweep: Selects the Sweep time\Sweep Rule\Sweep Mode

Detect: Selects the Detector type

Trigger: Used in Selecting the Free Trigger\Video Trigger\External Trigger

Limit: Sets the Pass\Fail Limit

TG: Sets the TG Level\TG Level offset\Normalize

Demod: Used to set the Parameters of the AM and FM

Marker: Used to Select the Mark Trace and Marker math



Marker→: Sets all types of Markers to Freq

Marker Fn: Selects the Noise Marker\N dB BW\Freq Counter\Read out of Freq

Peak: Searches for the Peak Signal and Counts the Peak Frequency

Meas: Selects the Channel Power\ACPR\Occupied BW\T-Power

Meas Setup: Used to Choose the Parameters Details of Channel Power\ACPR\Occupied BW\T-Power

System: Selects the Language\Power on/Preset\Interface\Calibration\system information\Data&Time\Self Test

Mode: Selects the Spec Analyzer\EMI\Reflection Meas

Display: Used to Adjust the Grid Brightness\Display Line

File: Use to Select the File system

Preset: Sets the system to default status

Couple: Used to Select the RBW\VBW\Attenuator\Freq Step\Sweep time mode

Help: Help Information Switch

Save: Save Shortcut Ke



The Rear Panel



- 1、 Handle
- 2、 USB Device
- 3、 LANInterface
- 4、 10MHz REFInput
- 5、 10MHz REF Output
- 6、 TriggerIn
- 7、 SafetyLockHole
- 8、 AC PowerSocket

Operation Notices

1. RF INPUT



WARNING



To avoid damage to the instrument, make certain that the input signal to the RF input port does not contain more than 50 Volts DC. The AC (radio frequency) input signal component should not exceed a maximum continuous power level of +30dBm.

2. TG OUTPUT



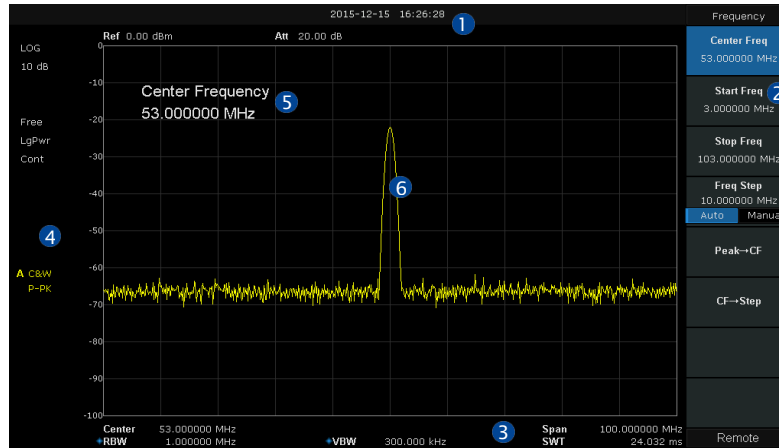
WARNING



To avoid damage to the tracking generator, the reverse DC voltage must not exceed 50V



User Graphical Interface



1、3、4: Parameters
setting area
2、 Menu setting area

5、 Active parameter
6、 Display area



More Product Information

You can obtain the instrument information including model, serial number as well as hardware and software version numbers through **System ->Information.**

For more information of this product, please refer to the following manuals (provided in the "CD" in the accessories):

Spectrum Analyzer User Manual:
provides detailed introductions of the functions of this product;

Spectrum Analyzer Datasheet:
provides the main characteristics and specifications of this product;