SSA5000A

Spectrum Analyzer

Quick Guide

EN_01C

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Contents

Important Safety Information

This manual contains information and warnings that must be followed by the user for safe operation and to keep the product in a safe condition.

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.

To Avoid Fire or Personal Injury.

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.

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.

Equipment Maintenance and Service

When the equipment fails, please do not dismantle the machine for maintenance. The equipment contains capacitors, power supply, transformers, and other energy storage devices, which may cause high voltage damage. The internal devices of the equipment are sensitive to static electricity, and direct contact is easy to cause irreparable damage to the equipment. It is necessary to return to the factory or the company's designated maintenance organization for maintenance.

Be sure to pull out the power supply when repairing the equipment. Live line operation is strictly prohibited. The equipment can only be powered on when the maintenance is completed and the maintenance is confirmed to be successful.

Identification of Normal State of Equipment

After the equipment is started, there will be no alarm information and error information at the interface under normal conditions. The curve of the interface will scan from left to right freely; if there is a button in the scanning process or there is an alarm or error prompt, the device may be in an abnormal state. You need to view the specific prompt information. You can try to restart the setting. If the fault information is still in place, do not use it for testing. Contact the manufacturer or the maintenance department designated by the manufacturer to carry out maintenance to avoid the wrong test data caused by the use of the fault or endanger the personal safety.

Not Operate with Suspected Failures

If you suspect that there is damage to the instrument, please let qualified service personnel check it.

Avoid Circuit or Wire Exposed Components Exposed

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

Do not operate in wet/damp conditions

Do not operate in an explosive atmosphere

Keep the surface of the instrument clean and dry

Not to use the equipment for measurements on mains circuits, not to use the equipment for measurements on voltage exceed the voltage range describe in the manual. The maximum additional transient voltage cannot exceed 1300V.

The responsible body or operator should refer to the instruction manual to preserve the protection afforded by the equipment. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Any parts of the device and its accessories are not allowed to be changed or replaced, other than authorized by the manufacturer or agent.

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Safety Terms and Symbols

When the following symbols or terms appear on the front or rear panel of the instrument or in this manual, they indicate special care in terms of safety.

⚠	This symbol is used where caution is required. Refer to the accompanying information or documents to protect against personal injury or damage to the instrument.
⚡	This symbol warns of a potential risk of shock hazard.
⏚	This symbol is used to denote the measurement ground connection.
⏚	This symbol is used to denote a safety ground connection.
⏻	This symbol shows that the switch is an On/Standby switch. When it is pressed, the analyzer's state switches between Operation and Standby. This switch does not disconnect the device's power supply. To completely power off the analyzer, the power cord must be unplugged from the AC socket after the instrument is in the standby state.
∼	This symbol is used to represent alternating current, or "AC".
CAUTION	The "CAUTION" symbol indicates a potential hazard. It calls attention to a procedure, practice, or condition which may be dangerous if not followed. Do not proceed until its conditions are fully understood and met.
WARNING	The "WARNING" symbol indicates a potential hazard. It calls attention to a procedure, practice, or condition which, if not followed, could cause bodily injury or death. If a WARNING is indicated, do not proceed until the safety conditions are fully understood and met.

Working Environment

The design of the instrument has been verified to conform to EN 61010-1 safety standard per the following limits:

Environment

The instrument is used indoors and should be operated in a clean and dry environment with an ambient temperature range.

Note: Direct sunlight, electric heaters, and other heat sources should be considered when evaluating the ambient temperature.

⚠	**Warning:** Do not operate the instrument in explosive, dusty, or humid environments.

Ambient Temperature

Operating: 0 ℃ to +50 ℃

Non-operation: -30 ℃ to +70 ℃

Note: Direct sunlight, radiators, and other heat sources should be taken into account when assessing the ambient temperature.

Humidity

Operating: 5% ~ 90 %RH, 30 ℃, derate to 50 %RH at 40 ℃

Non-operating: 5% ~ 95% RH

Altitude

Operating: ≤ 3,048 m, 25 ℃

Non-operating: ≤ 12,191 m

Installation (overvoltage) Category

This product is powered by mains conforming to installation (overvoltage) Category II.

Note: Installation (overvoltage) category I refers to situations where equipment measurement terminals are connected to the source circuit. In these terminals, precautions are done to limit the transient voltage to a correspondingly low level.

Installation (overvoltage) category II refers to the local power distribution level which applies to equipment connected to the AC line (AC power).

Degree of Pollution

The analyzers may be operated in environments of Pollution Degree II.

Note: Degree of Pollution II refers to a working environment that is dry and non-conductive pollution occurs. Occasional temporary conductivity caused by condensation is expected.

IP Rating

IP20 (as defined in IEC 60529).

Cooling Requirements

This instrument relies on the forced air cooling with internal fans and ventilation openings. Care must be taken to avoid restricting the airflow around the apertures (fan holes) at each side of the analyzer. To ensure adequate ventilation it is required to leave a 15 cm (6 inch) minimum gap around the sides of the instrument.

⚠	**CAUTION:** Do not block the ventilation holes located on both sides of the analyzer.

⚠	**CAUTION:** Do not allow any foreign matter to enter the analyzer through the ventilation holes, etc.

Power and Grounding Requirements

The instrument operates with a single-phase, 100 to 240 Vrms (+/-10%) AC power at 50/60 Hz (+/-5%), or single-phase 100 to 120 Vrms (+/-10%) AC power at 400 Hz (+/-5%).

No manual voltage selection is required because the instrument automatically adapts to line voltage.

Depending on the type and number of options and accessories (probes, PC port plug-in, etc.), the instrument can consume up to 193 W of power.

Note: The instrument automatically adapts to the AC line input within the

following ranges:

Voltage Range:	90 - 264 Vrms	90 - 132 Vrms
Frequency Range:	47 - 63 Hz	380 - 420 Hz

The instrument includes a grounded cord set containing a molded three-terminal polarized plug and a standard IEC320 (Type C13) connector for making line voltage and safety ground connection. The AC inlet ground terminal is connected directly to the frame of the instrument. For adequate protection against electrical shock hazards, the power cord plug must be inserted into a mating AC outlet containing a safety ground contact. Use only the power cord specified for this instrument and certified for the country of use.

⚠	**Warning:** Electrical Shock Hazard! Any interruption of the protective conductor inside or outside of the analyzer, or disconnection of the safety ground terminal creates a hazardous situation. Intentional interruption is prohibited.

The position of the instrument should allow easy access to the socket. To make the instrument completely power off, unplug the instrument power cord from the AC socket.

The power cord should be unplugged from the AC outlet if the analyzer is not to be used for an extended period.

⚠	**CAUTION:** The outer shells of the front panel terminals are connected to the instrument's chassis and therefore to the safety ground.

Cleaning

Clean only the exterior of the instrument, using a damp, soft cloth. Do not use chemicals or abrasive elements. Under no circumstances allow moisture to penetrate the instrument. To avoid electrical shock, unplug the power cord from the AC outlet before cleaning.

⚠	**Warning:** Electrical Shock Hazard! No operator serviceable parts inside. Do not remove covers. Refer servicing to qualified personnel

Abnormal Conditions

Do not operate the analyzer if there is any visible sign of damage or has been subjected to severe transport stresses.

If you suspect the analyzer's protection has been impaired, disconnect the power cord and secure the instrument against any unintended operation.

Proper use of the instrument depends on careful reading of all instructions and labels.

⚠	**Warning:** Any use of the analyzer in a manner not specified by the manufacturer may impair the instrument's safety protection. This instrument should not be directly connected to human subjects or used for patient monitoring.

Safety Compliance

U.S. nationally recognized testing laboratory listing

1. UL 61010-1:2012/R: 2018-11. Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements.

2. UL 61010-2-030:2018. Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part2-030: Particular requirements for testing and measuring circuits.

Canadian certification

1. CAN/CSA-C22.2 No. 61010-1:2012/A1:2018-11. Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements.

2. CAN/CSA-C22.2 No. 61010-2-030:2018. Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 2-030: Particular requirements for testing and measuring circuits.

General Inspection

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.

The consigner or carrier will be responsible for damages to the instrument resulting from shipment. **SIGLENT** will not provide free maintenance or replacement.

Inspect the instrument

If the instrument is found to be damaged, defective or fails in electrical or mechanical tests, please contact **SIGLENT.**

Check the accessories

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

Preparing for Use

Appearance and Dimension

Adjust the supporting legs properly to use them as stands to tilt the analyzer upwards for stable placement as well as easier operation and observation of the instrument display.
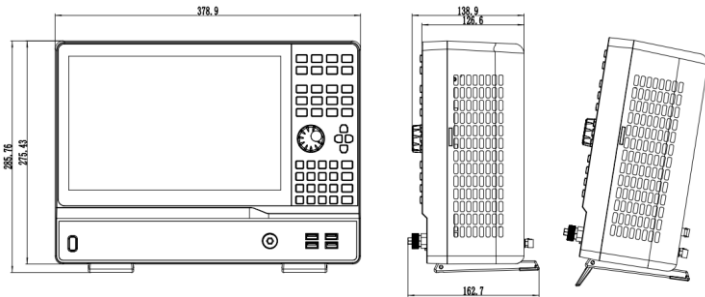
Connect to AC Power Supply

The analyzer accepts 100-240V, 50/60Hz or 100-120V 400Hz AC power supply. Please use the provided power cord to connect the instrument to the power source as shown in the figure below. Before powering on, make sure the analyzer is protected by a fuse.

The Plug

Fuse holder
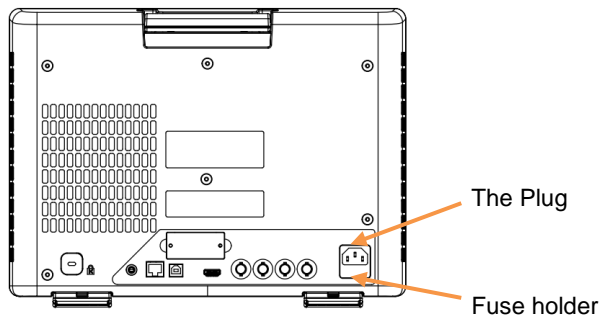
Front Panel

Table 1 Front Panel Description

NO.	Name	Description
1	LCD Screen	12.1 inch multi-touch screen, resolution 1280*800
2	Power Switch	Stand by status: Orange Power on status: White Short press: To Stand by status with current state saved Long press: To Stand by status without current state saved

3	Function Keys	Function and control input panel. Most of the input functions can be performed by the touch screen operations.
4	USB Host	The analyzer can serve as a "host" device to connect USB memory, USB mouse and keyboard, SIGLENT USB-GPIB adaptor, etc.
5	RF Input	2.92 mm male connector, compatable with 2.92mm/3.5mm/SMA connector mechanically. Use torque wrench to the male part shell wihle keep the female part static.

⚠	**CAUTION:** To avoid damage to the RF input of analyzer, the DC voltage component cannot exceed 50 V.

⚠	**CAUTION:** To avoid damage to the RF input of analyzer, the maximum continuous power of the AC(RF) signal cannot exceed +27 dBm with frequency larger than 10 MHz, and cannot exceed +20 dBm with frequency less than 10 MHz.

⚠	**CAUTION:** Short the center pin and outer shield of cables to neutralize any potential differences before connecting the cable to any sensitive input Use proper ESD protection when working with input connectors or sensitive boards. Basic protection includes using a 1 MOhm resistor-isolated ESD wrist strap and ESD minimized work surfaces. Always use properly grounded power outlets and power cords

![SIGLENT logo]

Front Panel Function Keys

Table 2 Function keys description (For Spectrum Analyzer Mode)

Name	Description
FREQ	Set frequency and span on the X axis
AMPTD	Set amplitude on the Y axis
Sweep	Set sweep and time
BW	Set RBW filter and VBW filter
Marker	Set the Markers and Peaks
Trace	Select Trace type, Detector and Trace operations.
Peak Search	Search for the peak signal, peak search configuration and peak table.
Trigger	Select triggers in Free Trigger, Video Trigger and External Trigger.

![SIGLENT logo]

Single/Cont	Shortcut for sweep control
Restart	Shortcut for sweep control
User Menu	Long press a menu and add it to the User Menu as a quick access
Input/Output	Set the ref clock ,correction and trigger ou, etc
Mode/Meas	Selects the modes and measurement
Meas Setup	Set the modes and measurement parameters.
System	Set the system parameters and configrations.
Preset	Sets the system to certain status.
File	Use the file browser.
Help	Turn on the built-in help.
Quick Save	Save function shortcut.
Touch	Turn on/off the touch screen.

Rear Panel
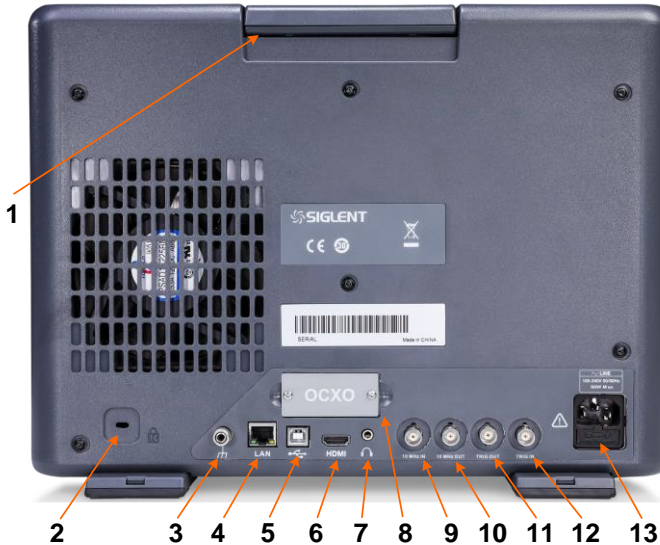
Table 3 Rear Panel Description

NO.	Name	Description
1	Handle	Pull up the handle vertically for easy carrying
2	Safety Lock Hole	If needed, you can use a security lock(purchased separately) to lock the analyzer to a desired location.
3	GND Terminal	Ensure the GND terminal is well connected with the earth at work and before power on.
4	LAN	Through this interface, the analyzer can be connected to your local network (LAN) for remote control. Set the parameter in System menu.
5	USB Device	Through this interface, the analyzer can be connected to PC for remote control.

NO.	Name	Description
6	HDMI	Output the LCD screen display to the external monitor through HDMI cable for synchronous display.
7	Audio	Audio jack, which can be externally connected with headphones or speakers to monitor the audio demodulation output . Set the parameter in Meas Setup menu.
8	OCXO	The OCXO reference clock source with better temperature coefficient and clock accuracy can be selected to obtain a more stable reference clock. This module is a factory installed option.
9	REF IN 10 MHz	Input a 10 MHz reference clock to the analyzer. Set the parameter in Input/Output menu.
10	REF OUT 10 MHz	Output the 10 MHz reference clock of the analyzer. The [REF IN] and [REF OUT] are usually used to build synchronization among multiple instruments. Set the parameter in Input/Output menu.
11	TRIG OUT	Trigger output to indicate various working states inside the analyzer, which is used to establish event synchronization among multiple instruments. Set the parameter in Input/Output menu.
12	TRIG IN	In external trigger mode, the analyzer will update the trace scan after the Trigger In connector receives an external trigger signal that meets the trigger input specifications. Set the parameter in Trigger menu.
13	AC Power Supply	Before power on, please ensure that the ground wire of AC power supply is well connected with the earth, and the fuse works normally before power on.

User Interface
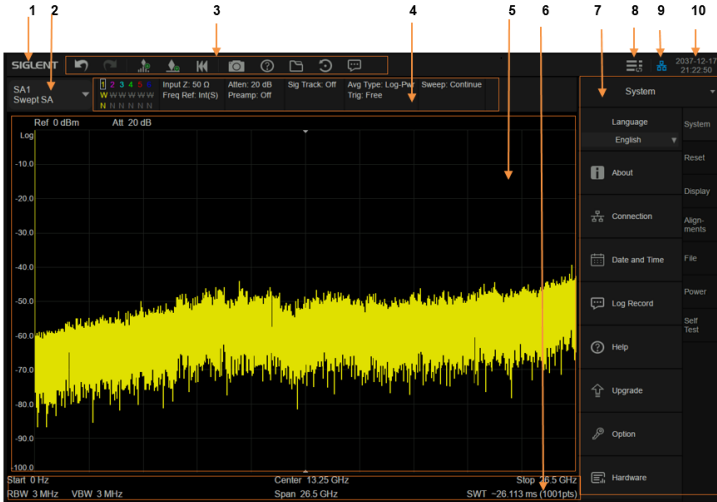
Table 4   Spectrum Analyzer Mode User Interface

No	Name	Description
1	SIGLENT	SIGLENT logo
2	Mode/Measure	Indicate the current working mode and measurement function of the analyzer, and click to switch as spectrum analysis mode, real-time spectrum mode, etc.
3	Shortcut Menu	Shortcuts to common used measurement functions and log bar, such as peak search, screen capture, file browser, preset, and operation messages.

4	Instrument Configuration	Indicate the main working states of trace, interface, sweep, trigger, etc.
5	Measurement Result	Display the signal measurement results of the analyzer in various forms such as waveform, spectral line, cursor, table, statistics, constellation diagram, etc
6	Sweep Parameters	Indicate and control the main sweep parameters, such as frequency, resolution, scanning time, etc.
7	Menu	Access to all menus. Set and show all the parameters and configrations of the analyzer.
8	Menu Switch	Control the opening and closing of the menu area. After closing, a larger measurement result area can be displayed.
9	Interface Status	Indicates and controls the connection status of LAN, USB memory and other devices.
10	Date and Time	Indicates and controls the time and date.

Basic Control Operation

Keyboard operation

The analyzer can be fully controlled by touch screen or mouse, while some pop-up menus cannot be accessed by keyboard buttons. Use keyboard buttons and their combinations for full control of menu area switching.

Touch screen and mouse operation

The analyzer provides a 12.1 inch multi-touch screen and supports various gesture operations including:

◆ Press or click on the upper-right-corner of the screen to enter the main menu

◆ Swipe up and down or left and right in the waveform area to change the X-axis center coordinate or Y-axis reference level

◆ Perform two-points scaling in the waveform area to change the X-axis span

◆ Click on a screen parameter or menu for parameter selection or editing;

◆ Open and drag the marker;

◆ Use auxiliary shortcuts to perform common operations.

You can turn the touch screen function on and off via ⬚ **Touch** .

Using Built-in Help

The built-in help system provides information about every function key at the front panel and every menu soft key.

◆ Press **Help** and the embedded help would show up.

◆ Click on the items in the contents tree on the left to navigate to any topics interested.

◆ Click the back or forward arrow to go to the contents just read.

◆ Click the close sign button in the top right corner or press the Esc front-panel key to quit the help system.

Firmware Operation

Check System Information

Users can get the system information by press $\boxed{\textbf{System}}$ > "**System**" > "**About**", including:

◆ Product Model, Serial and Host ID

◆ Software Version and hardware Version

◆ Option Information

Load Option

Refer to the procedures below to activate the options you have purchased.

1. Press $\boxed{\textbf{System}}$ > **"System"** > **"Load Option"**

2. Enter the license key in the onscreen window. Press $\boxed{\textbf{Enter}}$ to confirm your input and terminate the license key input. Or

3. Load the .lic file provided by pressing $\boxed{\textbf{File}}$ > **"Load"** from internal memory or USB stick.

The option will be enabled after rebooting.

Firmware Upgrade

Follow this procedure to update the instrument firmware:

1. Download the firmware package from an official SIGLENT website.

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2. Extract and copy the .ADS file into the root directory of an USB storage device.

3. Plug the USB stick into the USB Host connector. Press $\boxed{\textbf{System}}$ > **"System"** > **"Update"** ; find the .ADS file in USB storage device.

4. Press the **'Load'**, the analyzer will perform the update process automatically.

⚠	**CAUTION:** The upgrade process will take several minutes. When the upgrade is completed, the machine will reboot. Any interruption during the update process will result in update failure and system data loss. This is **not covered under the warranty** and the user will bear repair costs and shipping. Do not remove the USB storage device until the update is finished.

Remote Control

The analyzer supports communication with computers via USB, LAN, and GPIB-USB interfaces. By using these interfaces, in combination with programming languages and/or NI-VISA software, users can remotely control the analyzer based on a SCPI (Standard Commands for Programmable Instruments) compliant command set, Labview and IVI (Interchangeable Virtual Instrument), to interoperate with other programmable instruments.

You can also remote monitor and control the analyzer in Web Browser.

For more details, refer to the "User Manual" or contact your nearest SIGLENT office.

Service and Support

SIGLENT warrants that the products that it manufactures and sells will be free from defects in materials and workmanship for a period of three years (accessories for a period of one year) from the date of shipment from an authorized Siglent distributor.

If the product proves defective within the respective period, SIGLENT will provide repair or replacement as described in the complete warranty statement. To arrange for service or obtain a copy of the complete warranty statement, please contact your nearest Siglent sales and service office. Except as provided in this summary or the applicable warranty statement, SIGLENT makes no warranty of any kind, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose. In no event shall SIGLENT be liable for indirect, special or consequential damages.

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Troubleshooting

Before calling **SIGLENT**, or returning an analyzer for service, perform the quick checks listed below. This check may eliminate the problem.

If the problem remains still, please contact **SIGLENT** and provide your device information in the back of the analyzer.

1.   The Power Switch 🔘 is still dark after power on:

    (1)   Check that the power is correct / working.

    (2)   Check the power cord has been connected correctly

    (3)   Check the power fuse. If a new fuse needs to be installed, please use a specified fuse.

2.   The analyzer's screen is still dark (no display) after power on:

    (1)   Check whether the fan is running while the screen is dark, maybe the LCD cable is loose?

    (2)   Check whether the fan is not running while screen is dark, maybe it has failed to start up?

    Do not disassemble the instrument by yourself and contact **SIGLENT**.

3.   **The control panel is unresponsive or gives a wrong response:**

    (1)   Press all the keys at the front panel to check if all of them are normal after power on.

    (2)   Press **System** > **Self Test** >**Key Test** to check if all the keys are working properly.

    (3)   If all the keys are not working, the numeric keyboard connection might be loose or the numeric keyboard is broken.

(4) If the touch screen is not working, check if the Touch is ON in
    | **Display** | > Touch Settings menu.

(5) Check whether the analyzer is locked in a remote control; if so,
    press | **Esc** | to unlock it.

Do not disassemble the instrument by yourself and contact **SIGLENT**.

4. **The traces on the screen do not update for a long period of time:**

   (1) Check whether the traces are in View or other status; if so, change
       to Clear&Write to activiate it.

   (2) Verify whether all the trigger conditions have been met and whether
       there is a valid trigger signal inputting.

   (3) Check whether the analyzer is in a Limit test.

   (4) Check whether the analyzer is in a single sweep.

   (5) Check whether the current sweep time is too long.

   (6) Check whether the analyzer is in a Demod listening and the Demod
       time is too long.

   (7) Check whether the analyzer is in a EMI measurement mode, and
       the Sequence is not in a Scan status.

5. **Wrong measurement results or poor precision:**

   To calculate the system errors and check the measurement results and
   precision, refer to the introductions in "**Specifications**". To reach these
   specifications, please:

   (1) Check whether all the external devices are successfully connected
       and are working normally.

   (2) Get some knowledge of the signal under measurement and set

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appropriate instrument parameters.

(3)   Make measurements under proper conditions, for example:

◆   Warm-up the instrument appropriately

◆   Operate the instrument under the specified environment temperature;

◆   Check if the   **AMPTD**   > "Correction" is ON in SA or VNA mode.

(4)   Calibrate the instrument regularly to reduce or avoid errors that might occur over time.

If you need a specific calibration after the stated calibration period, contact **SIGLENT** or get paid service from authorized measurement agencies.

6.   **System Message:**

The instrument may display prompt messages, error messages or state messages according to the current working status. These messages are displayed to help you to use the instrument correctly and are not instrument failures.

Table 5 Operation Messages

User system message	Message on screen
System message description (1~199)	
SWT_OOR (1)	Sweep time out of range
RBW_OOR(2)	RBW out of range
SWT_CCOFM(3)	Can't change the sweep time in FFT mode
MRKT_UNDEF(4)	Undefined marker type

MRKFT_UNDEF (5)	Undefined marker function type
MRKDT_UNDEF (6)	Undefined marker delta pair type
MRKRT_UNDEF (7)	Undefined marker read out type
TRCT_UNDEF (8)	Undefined trace type
DETT_UNDEF (9)	Undefined detect type
SCA_CSWL (10)	Can't set the Scale/Div with linear
MRKT_IOFF (11)	The marker type is OFF, please open the current marker
MRK_NDELT (12)	The marker type is not Delta
MRKRT_MBST (13)	The marker read out type must be set time
MATHT_UNDEF (14)	Undefined math type
XML_ANIE (15)	Xml attribute node import error
XSCA_MBSLIZS (16)	X Scale must be set liner in zero span
TG_AXIS_XSCA (17)	The Scale type must be logarithm when normalize
SCALE_TG_AXIS (18)	Scale type cannot be changed to linear while nomalize on
PEAK_UNFOUND (19)	No peak found. Please change the search setting
IMD_FREQ_OOR (20)	Frequency of intermodulation products out of range
AUTO_FAIL (21)	Auto tune process failed
EXT_REF_PLUG_IN (22)	EXT ref plug in
EXT_REF_PLUG_OUT (23)	EXT ref plug out
REF_PLL_UNLOCK (24)	Ref pll unlock
SIG_NOT_STB (25)	Signal is not stable enough to track
QP_RBW_OOR (26)	RBW out of range when do quasi peak scan
LAN_PLUG_IN (150)	Ethernet cable plug in

LAN_PLUG_OUT (151)	Ethernet cable plug out
IP_CONFLICT (152)	IP address conflict
IP_INVALID (153)	IP address invalid
NETM_INVALID (154)	Netmask address invalid
GWAY_INVALID (155)	Gateway address invalid
S21_NORMALIZE_DONE (183)	Normalization of S21 done
VNA_AUTO_CAL_DONE (184)	Auto calibration of VNA done
Execution error (400~599)	
LCF_DTFERR (400)	Load configurations failed, due to file error
Device error (600~799)	
FUF_DTVERR (600)	Firmware upgrade failed, due to the version error
FUF_DTRERR (601)	Firmware upgrade failed, due to the ram error
FUF_DTFERR (602)	Firmware upgrade failed, due to the file error
FUF_DTFVERR (603)	Firmware upgrade failed, due to verify the file error
FUF_DTUZFERR (604)	Firmware upgrade failed, due to unzip the file error
LIC_INVALID (605)	License is invalid!
ADC_ERROR (606)	Warning, ADC Overload!

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About SIGLENT

SIGLENT is an international high-tech company, concentrating on R&D, sales, production and services of electronic test & measurement instruments.

SIGLENT first began developing digital oscilloscopes independently in 2002. After more than a decade of continuous development, SIGLENT has extended its product line to include digital oscilloscopes, isolated handheld oscilloscopes, function/arbitrary waveform generators, RF/MW signal generators, spectrum analyzers, vector network analyzers, digital multimeters, DC power supplies, electronic loads and other general purpose test instrumentation. Since its first oscilloscope was launched in 2005, SIGLENT has become the fastest growing manufacturer of digital oscilloscopes. We firmly believe that today SIGLENT is the best value in electronic test & measurement.

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