ISDS2062A(B) **User Guide**

InstruStar Electronic Technology

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contents

PC SYSTEM REQUIREMENTS

- Windows XP，Win7，Win8，Win10

- Pentium or higer processor

- USB2.0 High speed port.

- 512MB RAM

- 1GB hard disk space

1.Introduction

ISDS2062A/ISDS2062B dual-channel digital oscilloscope, with "low-cost, high-performance" as the design goals. well-designed bandwidth of 12Bit, 20M, 60M sampling rate, 2 channels, alternating support X-T and X-Y alternating pattern of two-channel virtual oscilloscope, spectrum analyzer. Meanwhile, ISDS2062B has DDS function. DDS support 5 kinds of waveform output, Sine wave can output up to 20M. The device communicate with the PC via high speed USB2.0.

	Oscilloscope	Spectrum Analyzer	DDS	Sweeper
ISDS2062A	√	√		
ISDS2062B	√	√	√	√

2.Feature Description

Digital Oscilloscope	
Channels	2
Impedance	1MΩ 25pF
Coupling	AC/DC
Vertical Resolution	12Bit
Gain Range	-32V ~ 32V（probe X1） -320V ~ 320V（probe X10）
Vertical Accuracy	±3%
Time Base Range	10ns/div-10s/div
Input Protection	Diode，50Vpk
Auto Set	Yes(10Hz to 20MHz)
Trigger Mode	Auto、Normal and Signal
Trigger Type	No、Edge、Pulse
Trigger Level	Yes
Trigger Source	CH1, CH2
Trigger Sense	0.1div-1.0div
Buffer Size	256KB/CH
Bandwidth	20MHz
Max Sample	60MS/s
Vertical Mode	CH1, CH2, ADD, SUB, MUL
Display Mode	X-T 和 X-Y
Measurements	Yes
Wave save	Osc(Private)、Excel and Bmp

Spectrum Analyzer	
Channels	2
Bandwidth	20MHz
Algorithm	FFT(18 windows)、Correlation
FFT Points	8-1048576/CHN
FFT Measure	Harmonic(1-7)、SNR、SINAD、ENOB、THD、SFDR
Filter Process	FIR filter supports arbitrary range of frequency sampling method , and Rectangle, bartlett, triangular, cosine, hanning, bartlett_hanning, hamming, blackman, blackman_Harris, tukey, Nuttall, FlatTop, Bohman, Parzen, Lanczos, kaiser, gaussand dolph_chebyshev, window method design. IIR filter support "Butterworth", "Chebyshev I", "Chebyshev II", "Elliptic" type of filter design

DDS(Only ISDS220B)	
Wave	Sine, Square(Duty circle variable),Triangle,Up Sawtooth,Down Sawtooth
Amplitude	≥9Vp-p(no load)
Impedance	200Ω±10%
Offset	±2.5V
Frequency Range	0.1Hz ~ 20MHz(Sine), 0.1Hz ~ 2MHz(Others)
Frequency Resolution	0.1Hz
Frequency Steadiness	$\pm1\times10^{-3}$
Frequency Precision	$\pm5\times10^{-3}$
Triangular Wave Linearity	≥98% (1Hz~10kHz)
Sine Wave Distortion	≤0.8% (1kHz)
Square Wave Rising/Falling Time	≤100ns
Square Wave Duty Circle	1%~99%
SWEEP	
Sweep Range	Fs 到 Fe
Sweep Time Range	0.1 ~10 s
Amplitude	0.5Vp-p ~ 10Vp-p

Sweeper（Only ISDS2062B)	
Sweep Range	1Hz~5MHz
Sweep Type	Gain, Phase

Note: The oscilloscope factory calibration, if you are not satisfied with the measurements, can manual calibration, the specific reference oscilloscope
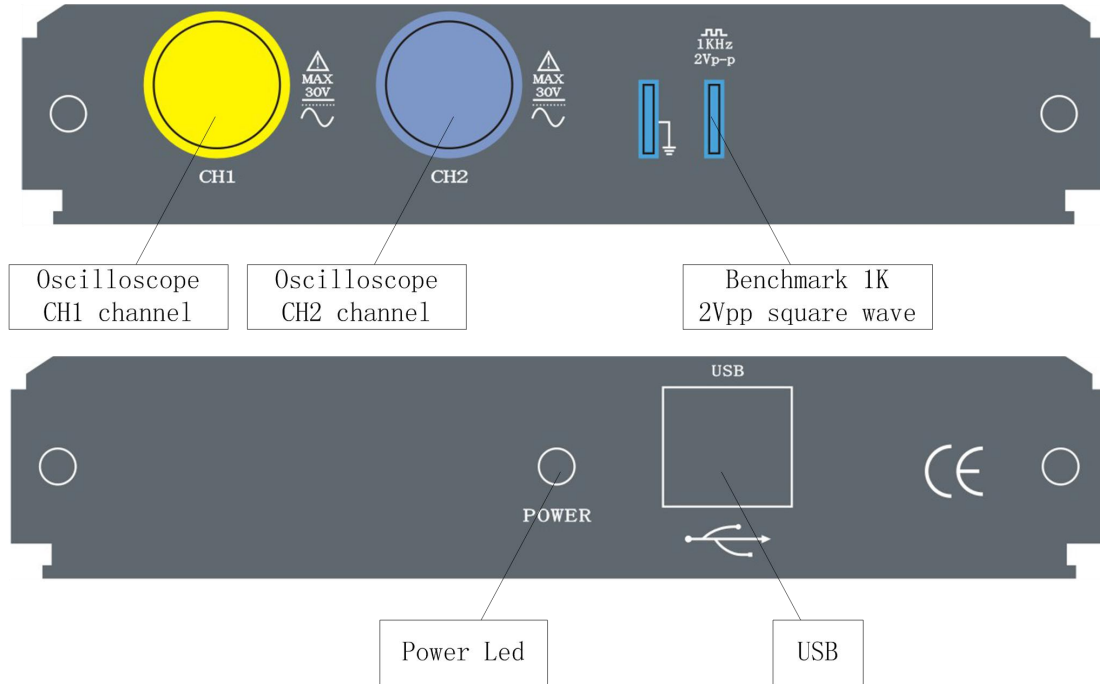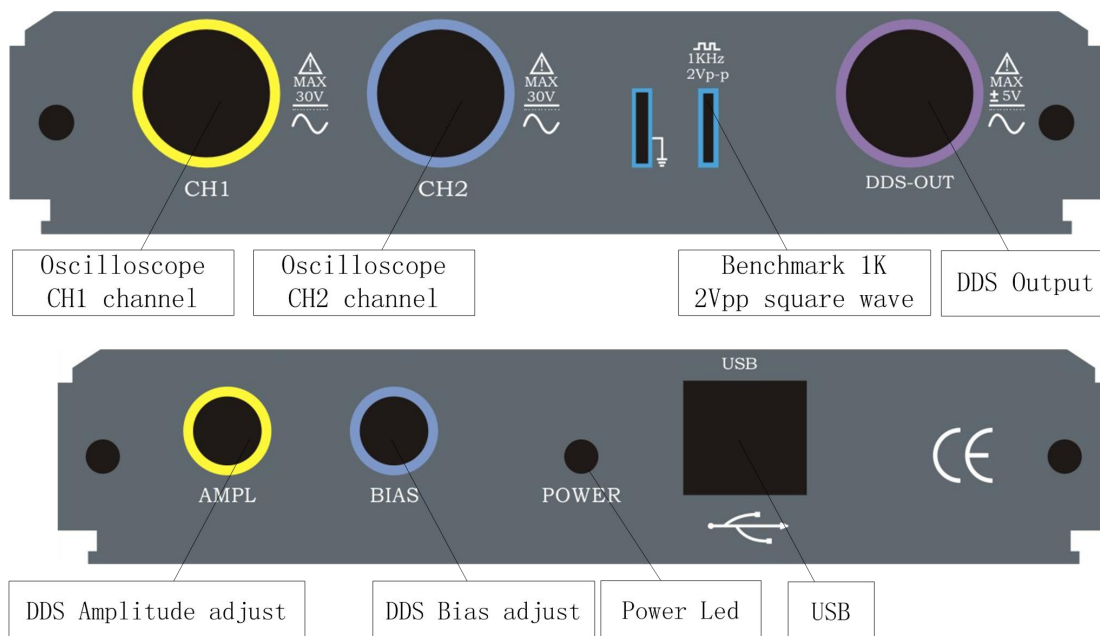
instructions.

3.Software Installation

Please refer to the "Software and Driver Installation.pdf".

4.Interface

4.1 ISDS2062A

Oscilloscope CH1 channel	Oscilloscope CH2 channel	Benchmark 1K 2Vpp square wave

Power Led	USB

4.2 ISDS2062B

Oscilloscope CH1 channel	Oscilloscope CH2 channel	Benchmark 1K 2Vpp square wave	DDS Output

DDS Amplitude adjust	DDS Bias adjust	Power Led	USB

5.Oscilloscope/Spectrum analyzer/DDS

Please refer to the "Multi VirAnalyzer User Guide.pdf", "Digital storage oscilloscope (Professional Version).pdf" and "Digital storage oscilloscope (Simplified Version).pdf".