

-SDS 200--SoftScope 1.1-

PC

www.softdsp.com

SDS 200			
	가	가	
SDS200/SoftScope			
SoftScope	가		

SDS 200	
() 1	,
3	,
	·
	PC
	SDS 200
	1

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SDS200

- (SDS 200)
- (User's manual)
- SoftScope S/W
- Carrier Bag
- USB



SoftScope

(PC)

Operating System Windows 98/ME/2000

CPU/Mainboard

200MHz, USB

Memory

32MByte

HDD

20MByte

VGA Card

DirectX

- : 800x600
- : 16
 - : 8Mbyte
 - 가 8Mbyte

.

DirectX

가

- 1. DirectX Direct
- 가
 - 가
- 2. DirectX Surface
- DirectX Direct 8M 가 가 . 16

가

. (SoftScope.exe)

DirectX System

가

- (SoftScopeSurface.exe)
- 3. DirectX System Memory
 - 2MByte/4Mbyte
- Memory
 - (SoftScopeSystem.exe)
- 4. DirectX System Memory Surface
- DirectX System Memory
- (SoftScopeSystemSurface.exe)
- 5. GDI
 - SoftScope가
 - 가 가 Windows 가 (SoftScopeGDI.exe)

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4	(Pulse) (Delay) 2. FFT 3. Math . ,

SDS 200				1.	
1.					
1. SDS 200/So	ftScope ?				
SDS 200					
USB	SDS 20	00 /	가		, PC
20	0MHz,	5GS/s,	100	MS/s	
SDS 200 12Mbps	PC USB	USB	가		
				가 .	
가			가	, PC	

РС

가 . 가 SDS 200 .

200

SoftScope

SoftScope	SDS 200	GUI SDS 200	
	GUI		SDS

. 500 x 200 500 x 400

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JPG/BMP Excel/Word 가 .

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Microsoft DirectX 가.

가 .

(Persistence)

2

Input	
Max.	• Realtime sampling: 100MS/s using one channel, 50MS/s
sampling rate	using two channels
	• Equivalent sampling: 5GS/s
Channels	• 2 Channels
Bandwidth	• 200 MHz (-3dB)
	 Single shot bandwidth:50MHz
Vertical	• 9 bits/channel
resolution	
Gain range	 10mV ~ 10V/div @ x1 probe
	(10mV, 20mV, 50mV, 100mV, 200mV, 500mV, 1V, 2V, 5V,
	10V/div-1,2,5 sequence)
	 100mV ~ 100V/div @ x10 probe
	 1V ~ 1000V/div @ x100 probe
Range	• 8 divisions
Offs et level	 +/ -4 divisions
Coupling	• AC, DC
Offset	• 0.02 div
increments	
Impedance	● 1M ohm
DC accuracy	• +/ - 3%
Input protection	 42Vpk (DC + peak AC < 10 kHz, without external
	attenuation)
Timebase	
Timebase range	● 2ns/div ~ 10s/div
	(2ns, 4ns, 10ns, 20ns, 40ns, 100ns, 200ns, 400ns, 1us,
	2us, 4us, 10us, 20us, 40us, 100us, 200us, 400us, 1ms,
	2ms, 4ms, 10ms, 20ms, 40ms, 100ms, 200ms, 400ms, 1s,
	2s, 4s, 10s /div 1-2-4 sequence)
Acquisition	 Equivalent sampling: 2ns/div ~ 4us/div
mode	 Realtime sampling: 10us/div ~ 400ms/div
	• Roll mode: 1s/div ~ 10s/div
Range	• 10 divisions

Pre/Post trigger	• 0% ~ 1000%
Time resolution	• 200ps
Buffer size	• 10K samples
Trigger	
Туре	Edge trigger: Rising edge, falling edge
	 Logic trigger: AND, NAND, OR, NOR, XOR, XNOR
	 Pulse trigger: Less than width, more than width (10ns ~
	167ms)
	 Delay trigger: By event (1~16,777,215), by time (10ns ~
	167ms)
Mode	Auto, Normal and Single
Autoset	• Yes
Range	• 10 divisions
Trigger level	• +/ -4 divisions
Settabillity	• 0.02 div increments
Math	
Measurements	 Vp-p, Vmax, Vmin, Vmean, Vrms, Vamp, Vhigh, Vlow,
	positive overshoot, negative overshoot, cycle mean, cycle
	rms, period, frequency, positive pulse width, negative
	pulse width, rise time (10%~90%), fall time (10%~90%),
	positive duty cycle, negative duty cycle
Cursor	 Time/frequency difference, voltage difference
	Frequency only in FFT mode
Math	Addition, Subtraction, Multiplication, Division
FFT	Rectangular, Hanning, Hamming, Blackman Window
Physical	
Interface	Universal Serial Bus (USB)
Power	No external power source required.
	Bus -powered from USB
Dimensions	• 5.1" x 4.4" x 1.5"

SDS 200			1.
3.			
: 0 °C : < 80 ⁰	~ 40 °C %		
PC USB	SDS 200 USB	PC	DC +5V가 .
!)	: CH	1, CH2, AC 30Vrms, D	C 60V
,	A/S	가	
!)	. A/S 가		
가 가			가
		25 °C, 80%	

4. SoftScope

!) SDS 200 PC SoftScope . SDS 200 SoftScope .

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- 1. CD CD-ROM
- 가 2. CD . CD 'Setup.exe'
- 가 . 'Next' **3**. SoftScope 1.0



'YES'



		'N	Jext '
offScape 1,0 Setup			
Existence Information Please enter your information.			
Please enter your name, the name of the company social number.	for whom you	work, and the p	product
∐ser Name:			
SpRScope 1.0			
SoAScope 1.0 Company Name:			
SeffScope 1.0 Conceny Name antDSP			
SoffScope 1.0 Company Name: JochDSP Serial Number:			_

, 'Next'

1.

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8.





!) 11. 가

5. SDS 200

 !) SDS 200
 PC
 SoftScope

 3
 PC

1.



2. (B-Type Plug) SDS 200 USB



3. PC

PC-based Oscilloscope 사항트웨어가 검색되었습니다. 검색된 하드웨어에 사용할 소프트웨어를 찾고 있습니다. 잠시 기다려 주십시오...

6. sds200.inf

sds200.inf



sds200.inf

1. 'Search for a suitable driver for my device'



2. 'Specify a location'



가



5. Finish



		1.
!		
SoftScope 16	가 24	. 32
Direct Draw Init we recommer DirectX 6,0 or n	t Failed (8876017c) Id you to change graphic card into High Color(16 b nore,	it) mode or reinstall
DirectX 가		
1. Window98	C: \ Program Files \ DIRECTX \	\ SETUP
1. Window98 DXDiag.exe	C: \ Program Files \ DIRECTX \ . (DirectX	SETUP
1. Window98 DXDiag.exe Windows2000	C: \ Program Files \ DIRECTX \ . (DirectX .) C: \ WinNT \ System32	\ SETUP DXDiag.ex
1. Window98 DXDiag.exe Windows2000 Window ME	C: \ Program Files \ DIRECTX \ . (DirectX .) C: \ WinNT \ System32 C: \ Windows \ System	\ SETUP DXDiag.ex DXDiag.exe
1. Window98 DXDiag.exe Windows2000 Window ME 	C:\Program Files \DIRECTX . (DirectX .) C:\WinNT \System32 C:\Windows \System	N SETUP DXDiag.ex DXDiag.exe
1. Window98 DXDiag.exe Windows2000 Window ME 	C:\Program Files \DIRECTX \ . (DirectX .) C: \WinNT \ System32 C: \Windows \ System	N SETUP DXDiag.ex DXDiag.exe

DirectX 가

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(16 bit) 가

1.





스플레이 동록 정보		2
배경 화면 보호)	이 화면 배색 (효과 웹 _ 설정	
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	and the state of the second se	
티스플레이:		
SAMTRON 76E /	77E , NVIDIA RIVA TNT2 Model 64 (Arabic)	
43	해삼도	
BIO SERVICE		높음
	1152 X 864 平 4	
Maintree /	문하며 비명 최근 학양	@
	작인 취소	48(8)

SoftScope CD-ROM Language

SoftScope.exe 가

doc \ help



SDS 200	2.	
2.		
1.		

1. SoftScope.2. SoftScopeSDS 200USBPC

3. SDS 200

1

5. SDS 200

Range가 가

1. 1

2. AUTOSET

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2 가 가 .

1 2 1. 1 2 2. AUTOSET

3.

Autoset

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가 .

Soft	Scope	1.0			100.10						1	#DSP	
le	New	Chan	nel	Display	Mathy	FFT	flun/Sh	op Irigg	er Mg	asure 🗽	11 Hel	P	
	S	5	4	D	5	\sim	A	Percipieno NOme	î —		Fr	\$Ŧ.	
R	1	Ind	10	0	=e]6	. 0	Corr	은 CHI	5	ting 1	•	¢	RETO RET
CHI		CHI		Channel	I Volta	ge Sca	ie (Shin	+F3)		Dec	1004	NIONE	
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IJ													-
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A								+					
V								Ŧ					
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en.													
-		Tine	400	har/Div			D elap.	50%	۲	CHI Anto	Edge	N 1.8	ISV
												3	tigd

-	1	'1'	가
-		Volt/Div	
-		Volt/Div	
_			

- Channel \rightarrow Ch1 Setting \rightarrow Volt Scale

- -
- (F1) .
 - - (Time/Div)

1. Time 1ms/Div

1.

9

-	Time	'Τ'	가	
-	Tim	e/Div		
-	Tin	ne/Div		
-				

.

- 1. Channel \rightarrow Time Scale 2.

(F4) 1. 2.

₽ 1+ 1.

2.

22

가

Horizontal : @=584,00us, ∆=992,00us, f=1,01kHz Vertical : @=490,00mV , ∆=0,00V

SDS 200	2.	
Persistence 200ms Persistence		
256	(Option)	7L
		>T
Intensity		
Track bar		
AC/DC Coupling	· · · ·	
₩ Line Join		
SoftScope .	, Line Join	
₽ FFT		
FFT		
SoftScope		
measurement		
. 10		

가

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 € CH1

C CH2 C Math <u>見</u>む 说 说 ず て 礼 切 切 一 で し 初 切 一 Next

Cycle RMS	RMS	
Positive	() (A) (B - A)	
Overshoot	. (B - A)/(A) * 100	
Negative	() (A) (B - A)	
Overshoot	. (B - A)/(A) * 100	
Period		
Frequency		
→ Rise Time	Rising Time	
Fall Time	Falling Time	
Positive Duty	1	Positive Width
Cycle		
Negative	1	Negative Width
Duty Cycle		
Positive	1 Width	Positive Pulse
Pulse Width		
Negative	1 Width	Negative Pulse
Pulse Width		

2.

€ CH1 C CH2 C Math IJ ſIJ ſΊ **1**]] ĵij Next

	Peak to Peak	Vmax-	Vmin					
JIJ	Maximum	Histog	Iram		가			
	voltage							
<u>[][</u>	Minimum	Histog	Iram		가			
	voltage							
<u> </u>	Amplitude	Base -	Тор					
Γιſ		Histog	ram	50%	, D	가		가
1.51.	Top voltage				가	5%		
			maximu	m voltage				
ſιſ		Histog	ram	50%	, D	가		가
·]L-,]-	Base voltage				가	5%		
			minimur	n voltage				
∫ً[ر	Jpper threshold	Base	Тор	Base	e 9	0%		
∕‡ ⊾	/liddle threshold	Base	Тор	Base	e 5	0%		
4	ower threshold	Base	Тор	Bas	е	10%		
Af	Mean				1			
\sim	RMS	Squar	e		1		Root	Mean
A√ (Cycle Mean							

- Vmin=Voltage of the absolute minimum level
- Vmax=Voltage of the absolute maximum level
- Vp -p : Vmax-Vmin
- Vbase=Voltage of the statistical minimum level
- Vtop=Voltage of the statistical maximum level
- Vamp=Vtop Vbase
- Vavg=average voltage of the first cycle of the signal

1.

Ex) Trigger \rightarrow Trigger Source CH1 or CH2

4. (Ctrl+T)

가

SDS 200			2.		
1. T			7	7}	
2. CH1 Normal Edge 🔪	640.00mV				·
1. 🔽					
2. 🔇 Delay 50%					
가 1. 가 / て					
2. (Trigger \rightarrow Trig	ger Up/Down)	(Shift+	Ctrl+F3)		
Delay 가ON	Time/Div				
1. ON Delay	Delay	ON			
2. Time 1m : 3. Delay 가 ON	s/Div	Time/Div 가			가
Delay 가OFF	Time/Div				
1. OFF Delay	Delay	OFF			
2. Time 1ms	/Div	Time/Div			

3. 가 4.

· · ·

가

Label

가 . Label

1. A

2. Label

3.

4. 가

' ľ

•

.

가

SDS 200 2. ? × 색 기본 색(<u>B</u>): Γ Text Color Back Color 사용자 정의 색(<u>C</u>): 500m/v ſ Г 1E ١F Г Г Г Delete 사용자 정의 색 만들기(D) >> Close 확인 취소

5. Text Color, Back Color

- 6.
- 7. Keyboard 'Enter'

1. A . 2. 3. 가 4. Keyboard 'Enter' 'Edit'

- -
- jpg
- bmp
- excel
- word

SDS 200	2.
Row	. Row
Save As File Option	×
Title SoftDSP	Include
Directory : File Name :	Include Date Include Setup Information
advanced trigger freeware	Option
image	
	Format Color
	Invert Background
All files (*.*)	Save Cancel

.

.

.

1. Menu-> File -> 'Save As/Toolbar'

.

- 2. 'Directory'
- 3. 'File Name'
- 4. 'Option' 'Type' 'DAT' .
- 5. 'Save'

.

BMP, JPG

Save As File Optio	n		×
Title SoftDSP		Include	1
Jourgan		Include Title	
Directory :	File Name :	Include Setup Information	
advanced trig	ger	Option	
image		Туре	
- S			
		✓ Invert Background	
I			
E de D	▼ All files (× ×)	Capad	1
i≡ d: []	✓ All files (*.*) ✓	Save Cancel	
■ d: [] 1. 'Menu' 2. 'Title'	✓ All files (*.*) ✓ • File' 'Save As/To	Save Cancel	
■ d: [] 1. 'Menu' 2. 'Title' 3. 'Include'	All files (*.*) *File' 'Save As/To	Save Cancel	
 'Menu' 'Title' 'Include' 'Directory 	✓ All files (*.*) ✓ • File' 'Save As/To	Save Cancel	
 'Menu' 'Title' 'Include' 'Directory 'File Name 	✓ All files (*.*) ✓ • File' 'Save As/To	Save Cancel	
 'Menu' 'Title' 'Include' 'Directory 'File Name 'Option' 	 All files (*.*) 'File' 'Save As/To 'Type' type 'I 	Save Cancel olbar' BMP/JPG'	
 Menu' 'Title' 'Include' 'Directory 'File Name 'Option' 'Option' 	 All files (*.*) 'File' 'Save As/To 'Type' type 'I 'Format' 	Save Cancel nolbar' BMP/JPG' 'Color/	Black & Wr
 Menu' 'Title' 'Include' 'Directory 'File Name 'Option' 'Option' 	 All files (*.*) 'File' 'Save As/To 'Type' type 'I 'Format' 'Invert Pooleground' 	Save Cancel olbar' BMP/JPG' 'Color/	Black & Wr
 'Menu' 'Title' 'Include' 'Directory 'File Name 'Option' Option' Option' 	 All files (*.*) 'File' 'Save As/To 'Type' type 'l 'Format' 'Invert Background' 	Save Cancel nolbar' SMP/JPG' 'Color/ wave7	Black & Wr
 'Menu' 'Title' 'Include' 'Directory 'File Name 'Option' 'Option' 'Option' 	 All files (*.*) 'File' 'Save As/To 'Type' type 'l 'Format' 'Invert Background' . 	Save Cancel nolbar' BMP/JPG' 'Color/ wave7	Black & Wr

SDS	200					2		
								·
1. 'M	lenu'	'File'	'Copy'					
2.			가					
3.			4	(Ctrl+V)'				
4.		가 가			가	Editor		
(E>	k. MS	Word, M	S Excel,	, PaintSho	p Pro	PhotoShop)	

MS Word

Excel

	Excel	Excel	가
Excel			

1. 'Menu'	'File'	'Save As Excel'	
2. 'Excel'		가	

3.	Row Data	Graph		

4. MS Excel 가

1997	
	- 12

Word

	Word	Word	가
Word			

1. 'Menu'	'File'	'Save As Word'	
2. 'Word'		가	
3.			

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1. 4 'Menu' 'File' 'Print/Toolbar'
 2.

2.

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SDS 200	3.
3.	
1.	
Advanced Trigger Logic, Pulse, Delay	Advanced Trigger
Advanced Trigger	Advanced Trigger X Source Stope C Logic C Pelse C Deley C CHI [JownEdge] C CH2 Logi Save OK
(Edge)	
가	
Source, Slope, Level	
Source : CH1/CH2	
Slope : Up Edge/Down Edge -	
Level : (+, -)4 (- 7)
(Logic)	
	39

SDS 200 3. . AND, NAND, OR, NOR, XOR, XNOR 가 CH1 : High/Low -1 : High/Low CH2 2 -: AND, NAND, OR, NOR, XOR, XNOR . (Pulse) 가 : Less than/More than 가 : 10ns ~ 167ms (Delay) 가 가 , 가 : By Time/By Event : By Time(10n~167ms), By Event(1~16,777,215 event) : CH1/CH2 : Rising/Falling

가

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2. FFT

FFT(Fast Fourier Transform)

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FFT

Channel	CH1/CH2 .
Window Type	
Scale Type	Υ
Vertical Scale	Y Volt/Div
Zero Position	FFT .

.

.

2. FFT

가

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3. Math

MATH

MATH

, , , 기· ·

- 1. 'Menu' 'Math/FFT' 'Math/Toolbar'
- 2. 'Src1'
- 3. 'Operator' 가
- 4. 'Vertical Scale' Volt/Div
- 5. 'Zero Position'

*÷

'Src2'

Src1/Src2				
Operator				
Vertical Scale	Y	Volt/Div		
Zero Position				

4.,

1. Toolbar

1. Save As	bmp, jpg, dat
2. Load State	State .ini
3. Save State	State .ini
4. Print	data
5. Preview	data
6. Option	data
7. Line Join	
8. ETS On/Off	ETS
9. Label	data Label
10. Persistence	
11. Intensity	
12. FFT	FFT
13. Math	
14. Cursor	Cursor On/Off
15. Channel 1 On/Off	1
16. Channel 1 AC/DC	AC/DC
17. Channel 1 Voltage Scale	Volt/Div
18. Channel 2 On/Off	2
19. Channel 2 AC/DC	AC/DC
20. Channel 2 Voltage Scale	Volt/Div
21. Time Scale	Time/Div
22.Delay On/Off	Delay
23. Trigger Source	
24. Trigger Up/Down	/

4.,

25. Auto/Normal Trigger	Auto/Normal
26. Advanced Trigger	Advanced Trigger
27. Run/Stop	
28. Single Shot	-
29. Auto Shot	

DC

2.

SoftScope

CH1 5V/Div DC x10

- Volt/Div
- AC
- 1:1
- .
- -

CH2 10V/Div DC x10 : 2

- 1 .

Time 1ms/Div

- Time/Div
- -

▼ :

- Delay 가 On Off %
- [**_____**] :

가

. 10 :1

.

Delay 가

.

가

SDS 200		4	.,	
I :				
	:			
[
X :				
Left : Time/Div	V	/		
С СН1 С СН2 С СН2 Тл	m 🕂			
C CH1 C CH2				
Norm Trig	가 (Auto)	(Normal)		
£.	가 Up/Down edge	Advanced Trigge	r	
CH1 Normal I	Edge 🔨 640.00mV : e	Edge Up,	Down -edge	
	. (가		

SDS 200			4.	,
auto trig'd				
Auto trig' d	가			
Waiting				
Trig' d	가			

Title Title On	SoftDSP	[
Format © Color	Include Include Date Include Setup Information	Grid View Grid View Gross On
C Black_White	☑ Invert Background	🔽 Grid On
hannel Color Level		ㅋ ┖ 대
.ow Density	High Density	- CH2

Title		/			
Format		/		Color/ Black&Wh	ite
Include :		/			
Include D	ate				
Include Se	etup lı	nformation			•
Invert Bac	ckgrou	ind			
Grid View	v :		/ /		
Boundary	On				
Cross On					
Grid On			Grid		
Channel C	Channel Color Level				
-	Color	Level			
- Checke	d		Color		
- Checke	ed		CH1		, CH2

Up/Down button

Channel Color Level

4. Menu

File

Name	Sub Menu	Operation	ShortCut
Load State		State File(.ini)	F2
Save State		State File(.ini)	F3
Save As		Bmp, Jpg, Dat File	Ctrl +S
Save As Word		Wave Data MS Word	F4
Save As Excel		Wave Data MS Excel	F5
Сору		Wave Data Clipboard	Ctrl + C
Option		Data	F6
Preview		Data	F7
Print		Data	Ctrl + P
Exit			Ctrl + X

View

Name	Sub Menu	Operation	ShortCut
File Toolbar		File Toolbar Show/Hide	Ctrl + F1
Display Toolbar		Display Toolbar Show/Hide	Ctrl + F2
FFT/Math Toolbar		FFT/Math Toolbar Show/Hide	Ctrl + F3
Channel Toolbar		Channel Toolbar Show/Hide	Ctrl + F4
Trigger Toolbar		Trigger Toolbar Show/Hide	Ctrl + F5
Run/Stop Toolbar		Run/Stop Toolbar Show/Hide	Ctrl + F6

Channel

Name	Sub Menu	Operation	ShortCut
CH1 Setting	On/Off	Change ON/OFF	Shift + F1
	AC/DC	Change AC/DC	Shift + F2
	Volt Scale	Increase/Decrease Voltage	Shift + F3

4.,

	Select Volt/Div	Change Volt/Div	Shift + F4
	Probe Attenuation	Change Probe Attenuation	Shift + F5
			Shift + F6
CH2 Setting	On/Off	Change ON/OFF	Shift + F7
	AC/DC	Change AC/DC	Shift + F8
	Volt Scale	Increase/Decrease Voltage	Shift + F9
	Select Volt/Div	Change Volt/Div	Shift + F10
	Probe Attenuation	Change Probe Attenuation	Shift + F11
			Shift + F12
Time Scale		Increase/Decrease Time/Div	Shift + Ins
Select Time		Change Time	Ctrl + T
Delay On/Off		Change Delay ON/OFF	Ctrl + D
Cursor		Change Cursor ON/OFF	Ctrl + U

Display

Name	Sub Menu	Operation	ShortCut
Line Join			Ctrl + J
ETS On/Off		ETS	Ctrl + O
Label		text	Ctrl + L
Persistence			Ctrl + E
Intensity +			Ctrl + Inc
Intensity -			Ctrl + Del

Math/FFT

Name	Sub Menu	Operation	ShortCut
Math			Ctrl + M
FFT		FFT	Ctrl + F

Run/Stop

Name	Sub Menu	Operation	ShortCut
Run/Stop			Ctrl + R

Single Shot	-	Ctrl + H
Auto Set		Ctrl + A

Trigger

Name	Sub Menu	Operation	ShortCut
Trigger Source CH1		Trigger source channel 1	Shift+Ctrl+F1
Trigger Source CH2		Trigger source channel 2	Shift+Ctrl+F2
Trigger Up/Down		Trigger Up/Down	Shift+Ctrl+F3
Auto/Normal		Trigger Auto/Normal	Shift+Ctrl+F4
Advanced Trigger		Advanced Trigger	Shift+Ctrl+F5

Measure

Name	Sub Menu	Operation	ShortCut
Volt	Peak to Peak	Peak to Peak Voltage	Ctrl+Alt + P
	Maximum	Maximum Voltage	Ctrl+Alt + X
	Minimum	Minimum Voltage	Ctrl+Alt + N
	Amplitude	Amplitude Voltage	Ctrl+Alt + A
	Тор	Top Voltage	Ctrl+Alt + T
	Base	Base Voltage	Ctrl+Alt + B
	Upper	Upper Voltage	Ctrl+Alt + U
	Middle	Middle Voltage	Ctrl+Alt + M
	Lower	Lower Voltage	Ctrl+Alt + L
	Mean	Mean Voltage	Ctrl+Alt + E
	Cycle Mean	Cycle Mean Voltage	Ctrl+Alt + C
	RMS	RMS Voltage	Ctrl+Alt + R
	Cycle RMS	Cycle RMS Voltage	Ctrl+Alt + Y
	Positive Overshoot	Positive Overshoot Voltage	Ctrl+Alt + S
	Negative Overshoot	Negative Overshoot Voltage	Ctrl+Alt + G
Time	Period	Period	Ctrl+Alt + I
	Frequency	Frequency	Ctrl+Alt + F
	Rise T ime	Rise Time	Ctrl+Alt + R
	Fall Time	Fall Time	Ctrl+Alt + Z

4.,

Positive Duty Cycle	Positive Duty Cycle	Ctrl+Alt + E
Negative Duty Cycle	Negative Duty Cycle	Ctrl+Alt + D
Positive Pulse Width	Positive Pulse Width	Ctrl+Alt + W
Negative Pulse Width	Negative Pulse Width	Ctrl+Alt + H

Util

Name	Sub Name	Operation	ShortCut
Zero Calibration		Offset	Shift+Ctrl+F6

Help

Name	Sub Name	Operation	ShortCut
Help			F1
About		About	F9

Time/Div	2ns~4us	10us~400ms	1s~10s
Sampling Mode	ETS mode	Realtime Mode	Roll Mode

2.

1. CH1

2. Util>Zero calibration

3.

1. SDS 200 PC

2.

3. ezup.exe

...

4. File Open

5. file _______ 열기(<u>0</u>)

6. F/W Update