

Table of Contents

	Page
Directory	1
Chapter I Safety and precautions	4
1.1 Safety considerations	4
1.2 Safety Terms and Symbols	5
Chapter II Quick Start Guide	6
2.1 Check of Package Contents	7
2.2 Use of folding leg	7
2.3 Back panel & side panel	8
2.4 Front panel	9
2.5 Open and closed oscilloscope	10
2.6 Study of the oscilloscope display	10
2.7 Oscilloscope Basic Operation introduction	12
2.8 Mouse operation	13
2.9 Connecting the probe to the oscilloscope	14
2.10 The use of AUTO button	14
2.11 Factory settings	16
2.12 The use of self-calibration	16
2.13 Passive probe calibration	16
2.14 Modify of language	18
Chapter III Horizontal system	19
3.1 Horizontal movement of the waveform	20
3.2 Adjust the horizontal time base time/div	20
3.3 Pan and zoom a single acquisition or a stopped acquisition	22
3.4 Roll, XY	22
3.5 Zoom mode	25
Chapter IV Vertical system	27
4.1 Turn on/off the waveform-channel, math, reference waveforms	28
4.2 Adjust the vertical sensitivity	30
4.3 Adjusting of the vertical position	30
4.4 Open the channel menu	30
4.4.1 Set channel coupling	31
4.4.2 Set the bandwidth limit	33
4.4.3 Waveform inverting	34
4.4.4 Set the probe type	35
4.4.5 Set the probe attenuation coefficient	35
Chapter V Trigger system	37
5.1 Trigger and trigger adjustment	38
5.2 Edge trigger	43
5.3 Pulse width trigger	44
5.4 Logic trigger	47
5.5 The N-edge trigger	49
5.6 Runt trigger	49
5.7 Slope trigger	51
5.8 Timeout trigger	52
5.9 Video trigger	53
5.10 Serial Bus trigger	54
Chapter VI. Analysis system	56

6.1 Automatic measurement	57
6.2 Frequency measurement	61
6.3 The cursor	61
Chapter VII Screenshots, record length and waveform storage	65
7.1 Screenshot function	66
7.2 Video recording	66
7.3 Waveform storage	67
Chapter VIII. The math and reference	71
8.1 Dual waveform computation	72
8.2 The FFT measurement	73
8.3 Call of Reference waveform	76
Chapter IX Display settings and function buttons	78
9.1 Waveform settings	79
9.2 Grid settings	79
9.3 Afterglow settings	79
9.4 Expand the horizontal center	80
9.5 Time base mode	80
9.6 High-refresh mode	81
9.7 Run/Stop button and Single sequence button	81
9.8 Auto set button	81
9.9 Measuring shortcuts	82
9.10 Trigger shortcuts	82
9.11 Home button	82
Chapter X Sampling system	83
10.1 Summary of Sampling	84
10.2 Run/Stop button and Single sequence button	86
10.3 Sampling mode settings	86
10.4 Record length and sampling rate	89
Chapter XI The home page feature	91
11.1 Oscilloscope (see Chapter 2~Chapter 13)	92
11.2 Micsig official website	92
11.3 File Manager	92
11.4 Set	93
11.5 Quick Guide	98
11.6 Image to view	99
11.7 Video playback	100
11.8 Remote Desktop	101
11.9 Time settings	102
11.10 Shutdown, lock screen and unlock	103
Chapter XII Remote control	105
12.1 PC	106
12.1.1 PC software installation	106
12.1.2 Host computer connection	106
12.1.3 The main interface description	107
12.1.4 Operation interface description	108
12.1.5 Picture, video storage and viewing	108
12.2 Mobile phone remote control	109
12.3 Remote Desktop	110
12.4 FTP	110
12.5 SCPI	112
Chapter XIII The serial bus triggering and decoding	114
13.1 UART (RS232/RS422/RS485 bus trigger and decoding)	115

13.2 The LIN bus trigger and decoding	118
13.3 The CAN bus trigger and decoding	120
13.4 SPI bus trigger and decoding	122
13.5 I2C bus trigger and decoding	124
13.6 ARINC429 bus trigger and decoding	128
13.7 1553B bus trigger and decoding	130
Chapter XIV Reference	133
14.1 Measurement category	133
14.2 Environmental conditions	133
14.3 Software and firmware updates	134
Chapter XV Troubleshooting	134
Chapter XVI Service and support	137
Appendix	138
Appendix A Technical specifications	138
Appendix B: Oscilloscope maintenance	141
Appendix C: Annex	141