

# **Tektronix 1012 Digital Oscilloscope Instruction Manual**

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## 1012 Digital Oscilloscope

Set the following configuration: EOL string to "CR/LF" Baud to 9600 Flow control to None Parity to None Connect to the scope using the serialport function. Write the SCPI commands as ASCII terminated string data to the serialport object. Set the BaudRate to 9600 to match what you set on the scope. Tektronix may make changes to the content of this website or to its products at any time without notice. s = serialport("COM1",9600)s = Serialport with properties: Port: "COM1" BaudRate: 9600 NumBytesAvailable: 0 Show all properties, all methods Configure the TerminatorSet the Terminator property for the serialport object using configureTerminator. Provide feedback on our TekTalk documentation forum. If your scope is connected and Terminator is configured properly, then this returns a string that uniquely identifies the scope.scopeID = writeread(s,"\*IDN?")scopeID = 1×1 string "TEKTRONIX,TDS 1002,0,CF:91.1CT FV:v2.12 TDS2CM:CMV:v1.04" Configure the ChannelConfigure Channel 1 of the scope using writeline. Thus, different versions of a manual may exist for any given product. Manuals for currently supported products may not be reproduced for distribution to others unless specifically authorized in writing by Tektronix, Inc. This example shows how to configure a Tektronix® TDS 1002 scope and read a waveform from the scope using the scope specific SCPI commands.Connect a Tektronix TDS 1002 scope to your computer. Tektronix hereby grants permission and license to owners of Tektronix instruments to download and reproduce the manuals on this website for their own internal or personal use. By downloading, you agree to the terms and conditions of the Manuals Download Agreement. Care should be taken to ensure that one obtains the proper manual version for a specific product serial number. Manuals for Products That Are No Longer Supported: Tektronix cannot provide manuals for measurement products that are no longer eligible for long term support. Tektronix Oscilloscope Digital Oscilloscope Series Programmer Manual TBS1000B, TBS1000, TDS200, TDS1000/2000, TDS1000B/2000B,

TDS1000C-EDU/TDS2000C, TDS2024C, TPS2000/TPS2000B Series This document describes commands that encoding remotely control the product. Confirm the can be used to method using writeread.writeline(s,"DATA:ENCDG RIBINARY"); scopeEncodingMethod writeread(s,"DATA:ENCDG?")scopeEncodingMethod = 1×1 string "RIB" Get Waveform InformationGet the and settings.scopeWaveformPreamble transmission formatting writeread(s,"WFMpre?")scopeWaveformPreamble = 1×1 string "1;8;BIN;RI;MSB;2500;"Ch1, DC coupling, 2.0E0 V/div, 5.0E-4 s/div, 2500 points, Sample mode";Y;2.0E6;0;-2.5E-3;"s";8.0E-2;0.0E0;0.0E0;"Volts"" Get the number of points in the waveform.scopeNumPoints = writeread(s,"WFMpre:NR\_Pt?")scopeNumPoints = 1×1 string "2500" Read and Plot the WaveformGet the waveform data from the scope to MATLAB® using the "CURVE?" command and read the waveform back into MATLAB using readbinblock.writeline(s,"CURVE?") scopeWaveform = readbinblock(s,"int16");Plot the waveform.Clear the ConnectionWhen you are finished working with the scope, clear the serialport object. Then, confirm that Channel 1 is set as the source using writeread.writeline(s,"HEADER OFF") writeline(s,"DATA:SOURCE CH1") scopeSource = writeread(s,"DATA:SOURCE?")scopeSource = 1×1 string "CH1" Set the waveform data encoding method to Most Significant Bit (MSB) transferred first, using writeline. In this example, the port is "COM1". Help us improve our technical documentation. Tektronix hereby grants permission and license for others to reproduce and distribute copies of any Tektronix measurement product manual, including user manuals, operator's manuals, service manuals, and the like, that (a) have a Tektronix Part Number and (b) are for a measurement product that is no longer supported by Tektronix.



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A Tektronix manual may be revised to reflect changes made to the product during its manufacturing life. The Terminator property matches the EOL string of the scope.configureTerminator(s,"CR/LF") terminator = s.Terminatorterminator = 1×1 string "CR/LF" Query the scope with the new Terminator value using the SCPI Command "\*IDN?" in writeread. This permission and license does not apply to any manual or other publication that is still available from Tektronix, or to any manual or other publication for a video production product or a color printer product.

This manual applies to: TDS210, TDS220, TDS224, TDS1002, TDS1012, TDS2002, TDS2012, TDS2014,

TDS2022, TDS2024, TPS2012, TPS2014, TPS2024, TDS1001, TDS2004, TDS1001B, TDS1002B, TDS1012B, TDS2002B, TDS2004B, TDS2012B, TDS2014B, TDS2022B, TDS2024B, TDS2001C, TDS2002C, TDS2004C, TDS2012C, TDS2014C, TDS2012C, TDS1001C EDU, TDS1002C EDU, TDS1012C EDU, TPS2012B, TPS2014B, TPS2024B, TBS1022, TBS1042, TBS1062, TBS1102, TBS1152, TBS1052B EDU, TBS1052B, TBS1072B EDU, TBS1072B, TBS1102B, TBS1102B EDU, TBS1152B, TBS1152B EDU, TBS1202B EDU Related Product Information Please Login/register to save starred items to Your Library. Specify the port that your scope is connected to on your computer.

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#### **Documents / Resources**



<u>Tektronix 1012 Digital Oscilloscope</u> [pdf] Instruction Manual TDS 1002, TDS 1012, 1012 Digital Oscilloscope, 1012, Digital Oscilloscope, Oscilloscope

### References

User Manual

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