



## **DS1000D Series: How to save Logic Analyzer (LA) Data**

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*Solution:* The Rigol DS1000D series of oscilloscopes can store data in a variety of formats. This solution discusses saving digital data captured using the Logic Analyzer (LA).

### **Configure the scope for digital triggering:**

- 1) Connect scope to power cord and power on
- 2) Connect Active Logic Head and Cable to scope. The Power indicator on the logic head should light green.
- 3) Connect probe leads to Logic Head as well as to circuit-under-test
- 4) Configure trigger for the digital channel of interest
  - In the trigger area of the front panel, press MENU
  - Select Trigger mode
  - Select Trigger Source as one of the digital lines
  - **OPTIONAL:** You can select Single Trigger mode to selectively freeze the displayed data. Pressing Run/Stop will reset the trigger.
- 5) Activate LA channels on the scope display by pressing the LA key on the front panel
- 6) Select digital channels of interest and set trigger threshold in the LA menu



- 7) Once you have captured a waveform of interest, press the Storage button in the Menu area of the front panel
- 8) Insert a USB memory stick into the front panel of the instrument.
- 9) Select Storage Type on the display menu.
  - You can select Waveform (file format used between Rigol Scopes and Arbitrary waveform generators), Setups (configuration files for the scope), Bitmaps (screen captures of the display), or CSV (Comma separated variables for use with spreadsheet programs)

NOTE: If you have selected CSV, you can set the data depth, data type, and scope parameters.

- 10) Select External
- 11) Press New File and enter a new file name. You can use the menu knob to move between letters and the 'X' to delete characters from the file name text box.
- 12) After you have entered a name, press Save key.

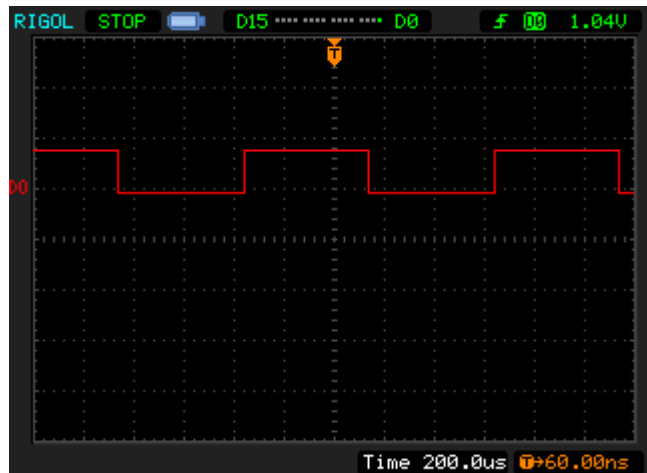


Figure 1: Example of Bitmap image saved with DS1052D.



X	D15	D14	D13	D12	D11	D10	D9	D8	D7	D6	D5	D4	D3	D2	D1	D0
Second																
-1.20E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.20E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.19E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.19E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.18E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.18E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.18E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.17E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.17E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.16E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.16E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.16E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.15E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.15E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.14E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.14E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.14E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.13E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.13E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.12E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.12E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.12E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.11E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.11E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.10E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
-1.10E-003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Figure 2: Example of digital data returned under Binary Format as a CSV.