

# **COM Port Stress Test**

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# 1 Introduction

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COM Port Stress Test is a tool for testing a COM or RS232 port (device), that generates a serial stream of data with random communication settings. Stress test put a greater emphasis on robustness and error handling under a heavy load, than on what would be considered correct behavior under normal circumstances in your application. The goals of such tests may be to ensure the application doesn't crash in conditions of random data flow.

COM Port Stress Test may help developers or experts test their hardware, software and applications with extreme conditions. This program can generate a very fast data flow, randomly change baudrate, flow control or RTS and DTR state.

Our software creates a load on a serial port by simulating the activity of a serial port software and tests two ports at the same time, so you may test null-modem cables.

Key features:

- supports COM, RS232, RS485 (with converter) ports;
- supports virtual serial port, usb serial ports;
- can test two ports at the same time;
- can read/write a data stream from/to a COM port;
- can change communication parameters randomly;
- can change RTS or DTR randomly;
- configurable a write buffer size;
- configurable a load value;
- displays in/out speed and byes count.

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If you do not agree to these conditions you should not install this software.

### 3 System requirements

To run the program one of the following operation systems is needed:

- Windows 95;
- Windows 95 OSR2;
- Windows 98;
- Windows Me;
- Windows NT4;
- Windows 2000;
- Windows XP (all editions) (both x86 and x64);
- Windows 2003 Server (both x86 and x64);
- Windows Vista (both x86 and x64).

Free disk space: Recommended at least 5 MB of extra disk space.

**Special login requirements**: You must be logged on as a user with Administrator privileges to run our software. It is necessary for access certain registry keys and write special filter driver registry entries.

#### Vista notes:

- 1. You need administrator privileges to run our software;
- 2. The desktop icon of our setup will contain a shield;
- 3. Windows Vista will ask your permission to continue.

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Note: You may disable **User Account Control** manager and you'll never see the dialog above. Please, search Google for an solution.

# 4 Installation

- 1. Download the latest version at: http://www.aggsoft.com/download/
- 2. Double click it using any file manager or Windows Explorer in order to start installation process.
- 3. Follow the prompts given: select the destination path, choose shortcuts you wish to be created and finish the installation.
- 4. Navigate either to the Start Menu and locate COM Port Stress Test in Programs submenu or double-click the icon created on the desktop.

# 5 Usage

### Device

When you launch the application, you will see the following:

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🔯 COM Por	t Stress	Test	_	_	_	×			
Port #1:	10	*	Start #1	Stop #1	Start both				
Port #2:	11	×	Start #2	Stop #2	Stop both				
	Stat	e	Out	In	Speed				
	_								
Default values - Baudrate/Data bits/Parity/Stop bits									
9600	~	1	<b>v</b>	None	▶ 1	~			
Use polling Receive data									
Randomly change									
<ul> <li>✓ Baudrate</li> <li>✓ Data bits</li> <li>✓ Software flow control</li> </ul>			Stop bits		□ RTS □ DTR				
Write size min/max: 700 🐑 1000 🐑									
Speed:	0								
Max Speed index: 4						Min			
AGG Software - a wide range of serial port software									

The program interface is very simple:

- 1. Select a communication port: serial port;
- 2. Configure default parameters for the serial port;
- 3. Click the "Start" button.

If you want to test two port at the same time, then repeat steps 1,3 for second serial port.

The serial port requires following communication parameters:

- 1. Port number;
- 2. Communication parameters: baudrate, data bits, parity, stop bits;
- 3. Use polling if you'll activate this option, then the program will poll the serial port periodically, otherwise the program will use a serial port event word;
- 4. Receive data the program will receive data from the serial port.

### **Test conditions**

The "Randomly change" group allows to specify test conditions. If you'll activate one or more options in this group, then program will randomly change the corresponding communication parameter while testing a serial port.

Write size - this fields allows to define a size of the write buffer. The program will allocate a buffer with this size and write to a serial port in one write operation.

Speed - you can configure a data transfer speed with help of this track bar.

🔯 COM Port Stress Test 🛛 🔀									
Port #1: 10	Start #1 Start #2	Stop #1 Stop #2	Start both Stop both						
State	Out	In	Speed						
COM10 9600,8,N,1	940	1726	46,41 KB/s						
COM11 9600,8,N,1	781	1656	44,91 KB/s						
Default values - Baudrate/Data bits/Parity/Stop bits         9600 <ul> <li>8</li> <li>None</li> <li>1</li> <li>Use polling</li> <li>Receive data</li> </ul>									
Randomly change Baudrate Data bits Software flow control Write size min/max: 70	Stop bi	ts 000 💽	□ RTS □ DTR						
Speed: Max Speed index: 4 Min AGG Software - a wide range of serial port software									