



**VIRTUAL NULL MODEM**  
CONNECTING UNCONNECTABLE

**1** **1**

1 ..... 1

**2** **2**

1 ..... 2

2 ..... 3

3 ..... 4

**3** **4**

**4** **4**

1 ..... 4

2 ..... 5

**5** **8**

1 ..... 8

2 ..... 11

3 " " ..... 16

4 " " ..... 18

5 " " ..... 19

6 ..... 19

7 FAQ ..... 20

8 ..... 20

# 1

## 1.1

### Virtual Null Modem.

"DCE"). RS-232 "DTE" ( ,  
 RD ( , TD , DTE "  
 "). RS-232 ( , )  
 : DTE (PC) - RTS  
 RTS , DCE ( ) - CTS DTE,  
 DTR , DSR DTE DTR, DCE  
 DTR DSR CD, DTE, DSR DTE ( ),  
 DTE, DCE.

Virtual Null Modem RS232 -  
 (COM10, COM11, COM255 . . ),  
 Virtual Null Modem. Virtual Null Modem  
 Virtual Null  
 Modem,

:  
 #2 COM12, #1 : COM10 COM12  
 #1 COM10, #2 COM10,  
 COM12,



3. Virtual Null Modem

Virtual Null Modem

4. **Virtual Null Modem**

**"AS IS".**

5.

6.

Virtual Null Modem

7.

Virtual Null Modem  
Null Modem.

Virtual

## 2.2

## 2.3

Virtual Null Modem	<a href="mailto:support@aggsoft.ru">support@aggsoft.ru</a>
	<a href="mailto:support@aggsoft.ru">support@aggsoft.ru</a>
	<a href="mailto:sales@aggsoft.ru">sales@aggsoft.ru</a>

## 3

: 21 , 1  
65 .

## 4

### 4.1

: CPU, Intel® x86 x64

: Windows 2000 ( x86, x64).

**Windows 9x, Me NT!**

**CPU:**

: 1 .  
1.5 .

CPU 4 .

:

: 512 MB.  
1024 MB .

5 MB,

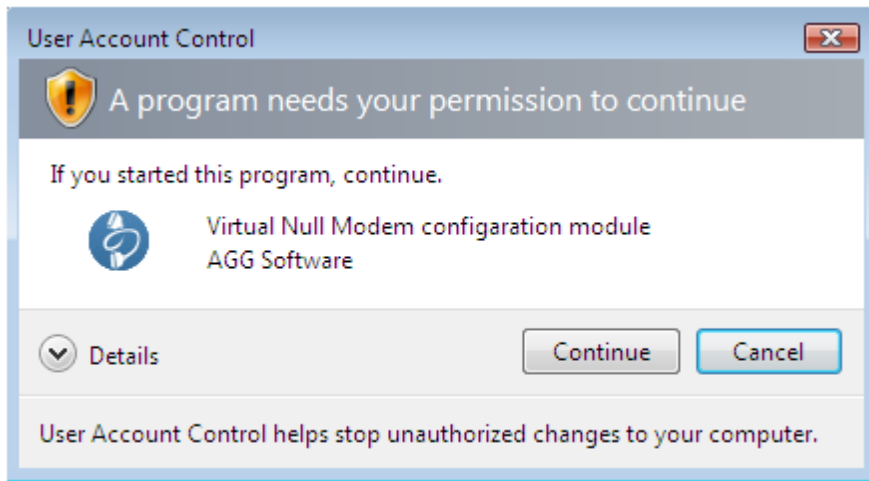
**Microsoft Vista**

- 1.
- 2.
3. Windows Vista



. 1.

Windows Vista.



. 2.

Google.

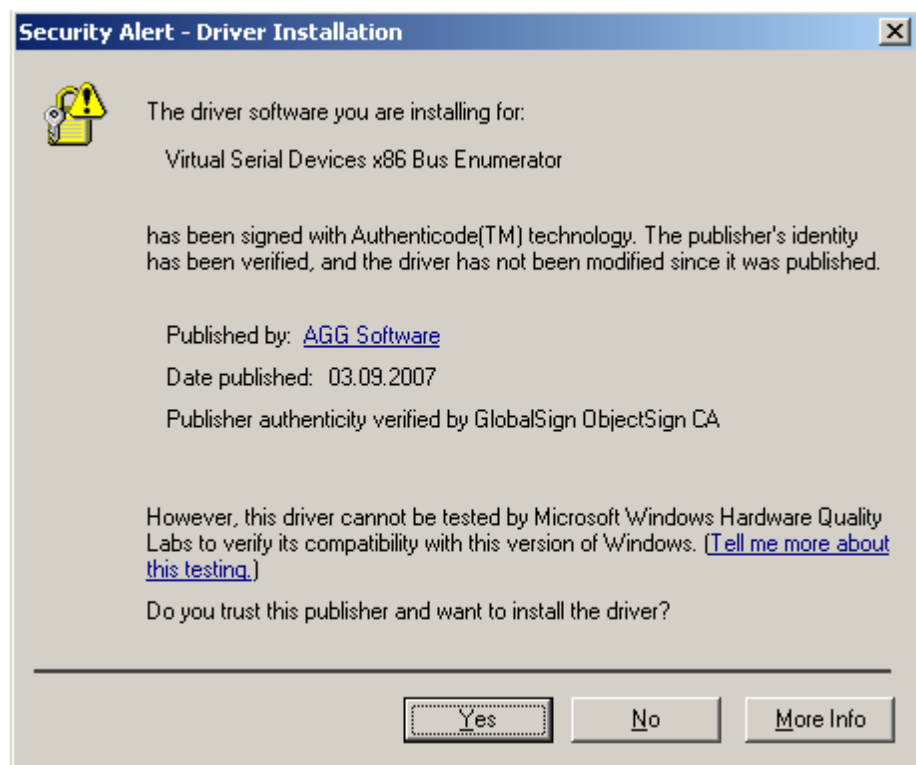
## 4.2

- Virtual Null Modem,

, Virtual Null Modem "/Programs Files/Virtual Null Modem"

### Microsoft Windows 2003:

Windows  
( . 3). " " ("Yes").

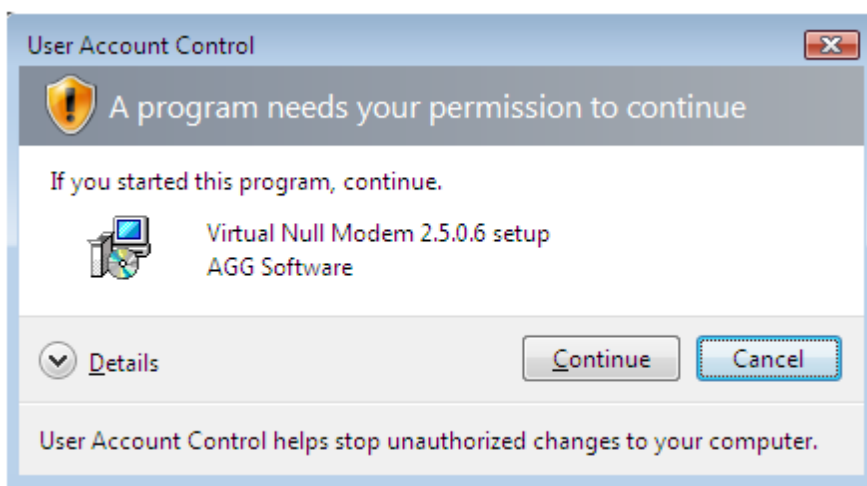


. 3. Windows 2003.

### Microsoft Vista:

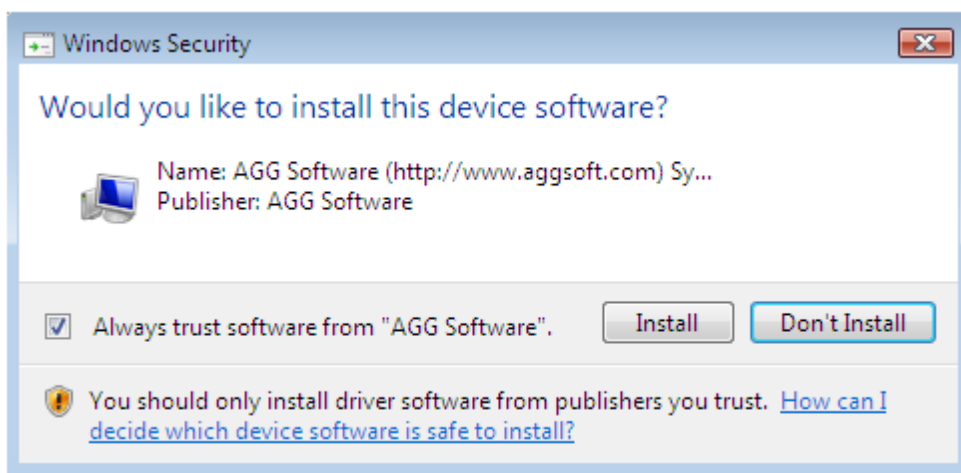
Windows  
( . 4). " " ("Continue").



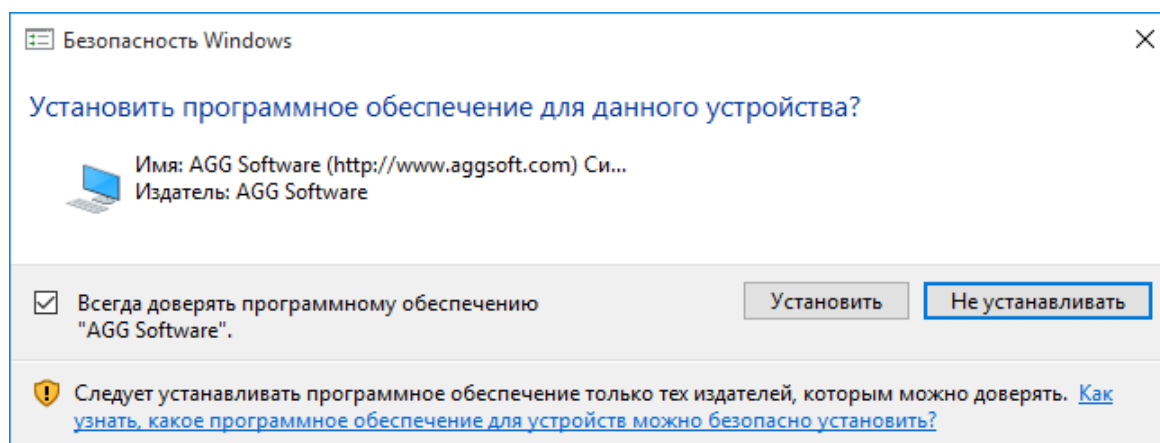


. 4. Windows Vista.

- ( . 5). Windows , "Always trust software from AGG Software" "Install".



. 5. Windows 7

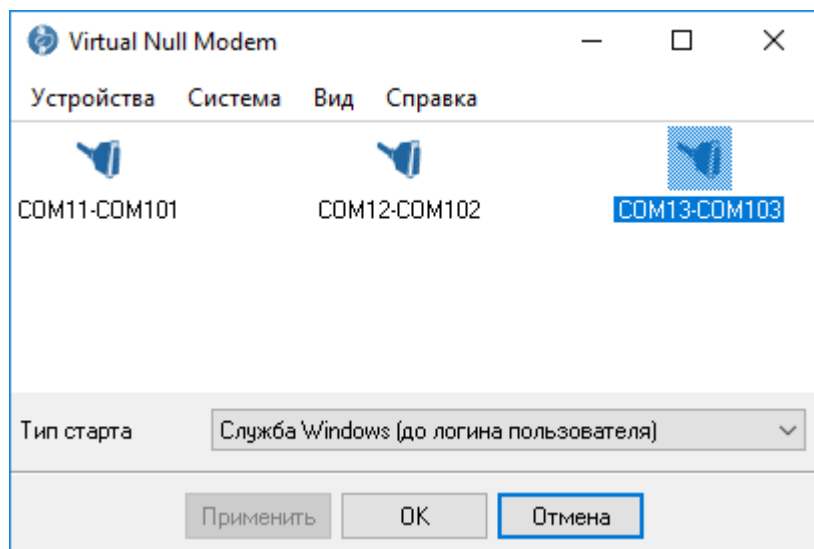


. 6. Windows 10.

5

5.1

- - 
  - 
  - 
  - 
  - Virtual Null Modem;
  - 
  - Virtual Null Modem Management, PNP, . . . ;
  - Virtual Null Modem
  - 
  - 
  - Virtual Null Modem ( . 7). -
1. - ;
  2. - - - ;
  3. " " - Virtual Null Modem Windows



.7.

), ("Hotkeys", \_\_\_\_\_

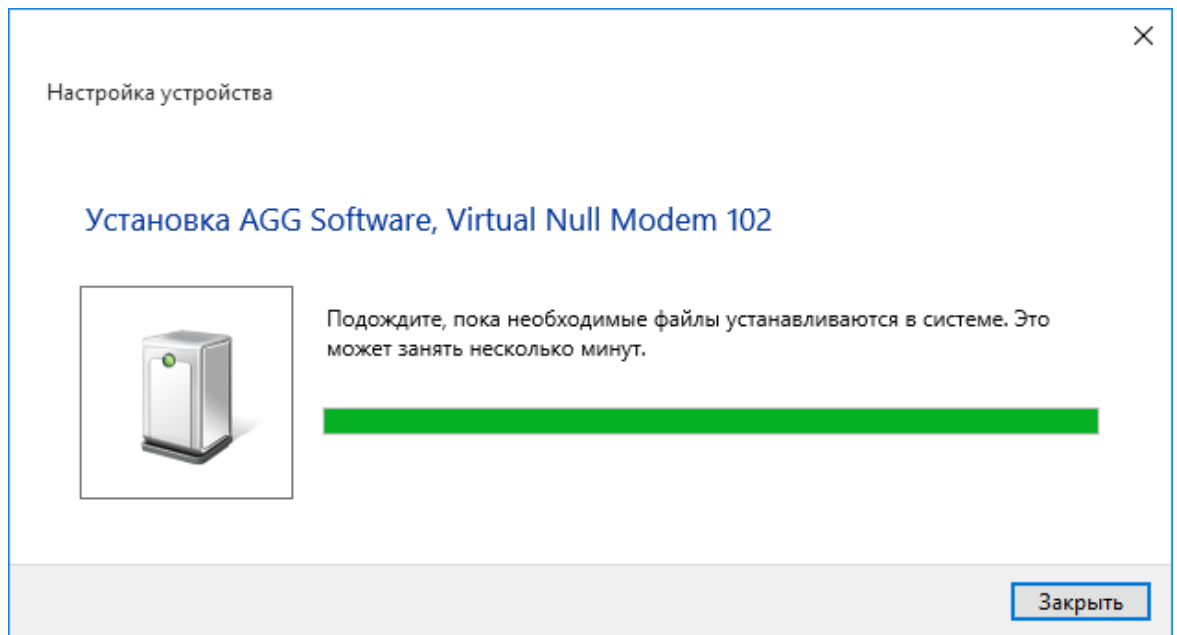
« » Hotkeys : "Ctrl+N" N.

Virtual Null Modem

Virtual Null Modem

Virtual Null Modem

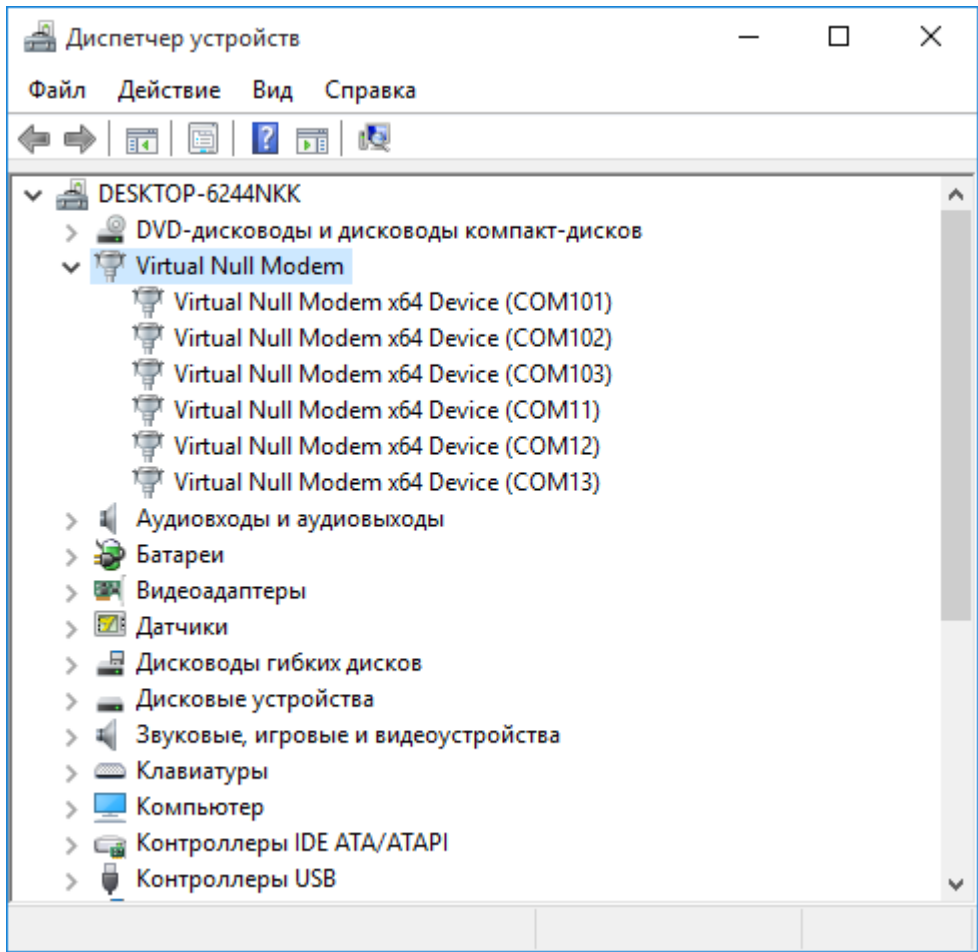
.8 9.



. 8. Virtual Null Modem

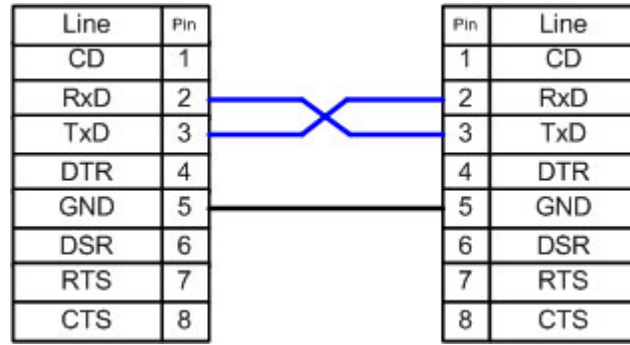


10).

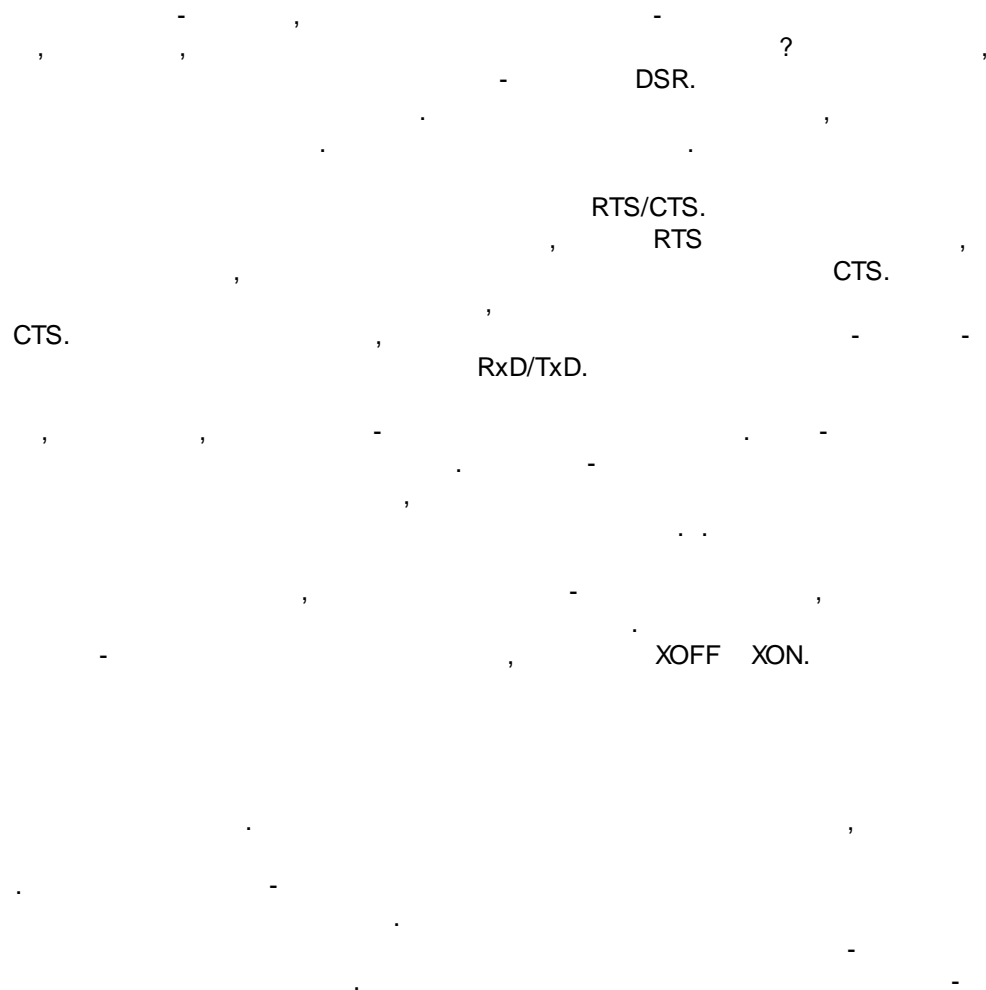


10. Virtual Null Modems

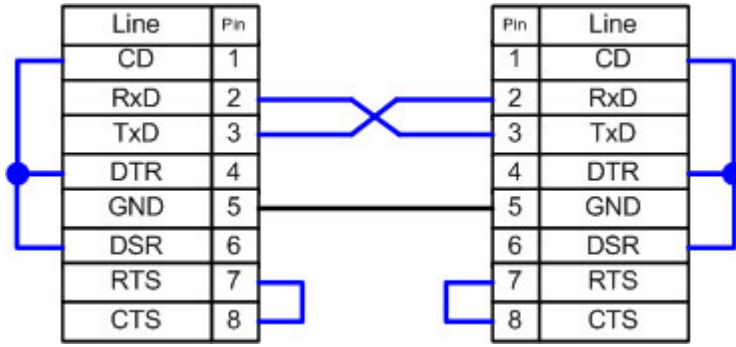
5.2



.11.



( .12).



.12.

DSR ( 6).

DTR ( 4).

CD ( 1).

DSR,

DTR

, 99 %

, 99 %

DSR

CTS.

RTS ( 7) RTS, CTS  
RTS.

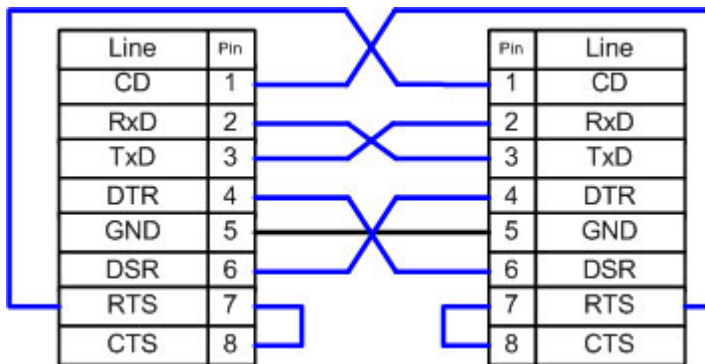
( 8) CTS.

?

XON/XOFF.

Windows 95/98/ME

( . 13).



. 13.

DTE/DCE.  
RTS/CTS

7 8.

RTS/CTS

CD

1,

RTS

CD

DSR ( 6) DTR ( 4).

DTR

DSR,

DTR

RTS/CTS

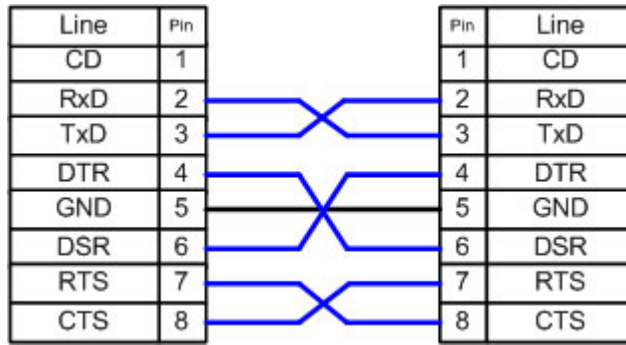
DSR



14.

RI

CD



14.

CTS RTS.

RTS DTR

Interlink,

PC MS-DOS.

Microsoft

DB9

DTR CD

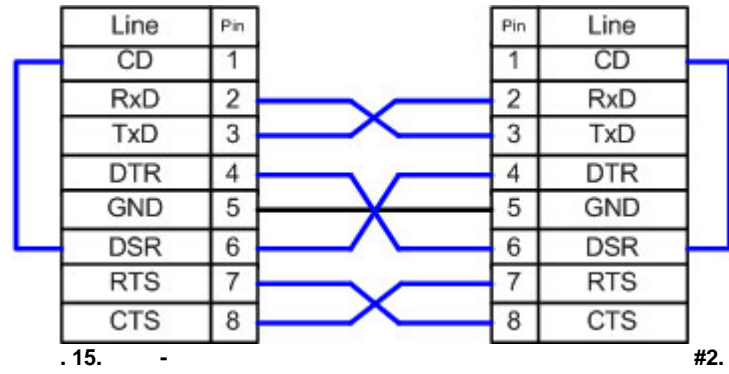
DB25,

CD

#2

CD

DSR.



## 5.3

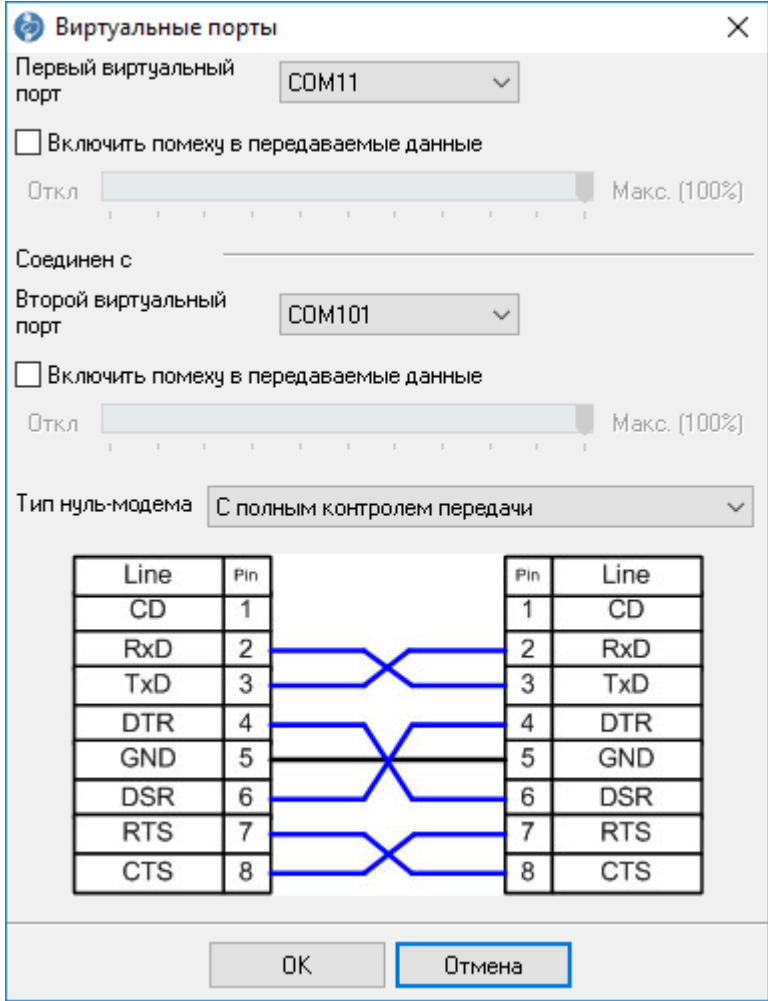
"      "

Добавить виртуальный нуль-модем	Ctrl+N
Добавить быстро	Ctrl+Q
Конфигурация	Ctrl+C
Удалить	Ctrl+X
Удалить все	

. 16.

Hotkey: Ctrl+N

( . 17).



. 17.

"OK", " " 0 100%.

DB9

(RTS, CTS . .).

Hotkey: Ctrl+Q

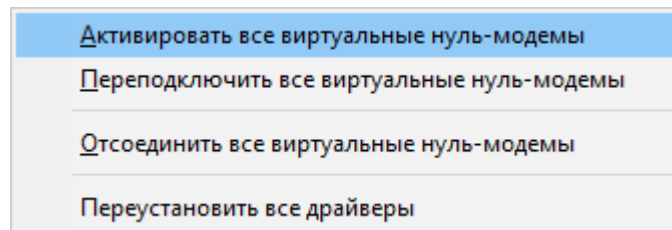
Virtual Null Modem

Hotkey: Ctrl+C

( . 17)

Hotkey: Ctrl+X

## 5.4



. 18.



**-s0**

( ).

**-s1**

Windows.

**-s2**

( ).

**-pa**

HKEY\_LOCAL\_MACHINE\SOFTWARE\AGG

Software\Virtual Null Modem

"Ports" (REG\_SZ).

: 2,7,

:

..

vnullmod -s0 -ia

## 5.7 FAQ

**Q:**

( )

**A:**

**Q:**

**A:**

"CreateFile"

"COM%d"

COM-COM9.

"\\.\COM%d"

**Q:**

**A:**

SetupAPI

GUID {487ECAF4-213D-4d17-AA07-

2F91078B619D}.

## 5.8

' COM ' .

1

" (COM LPT)".

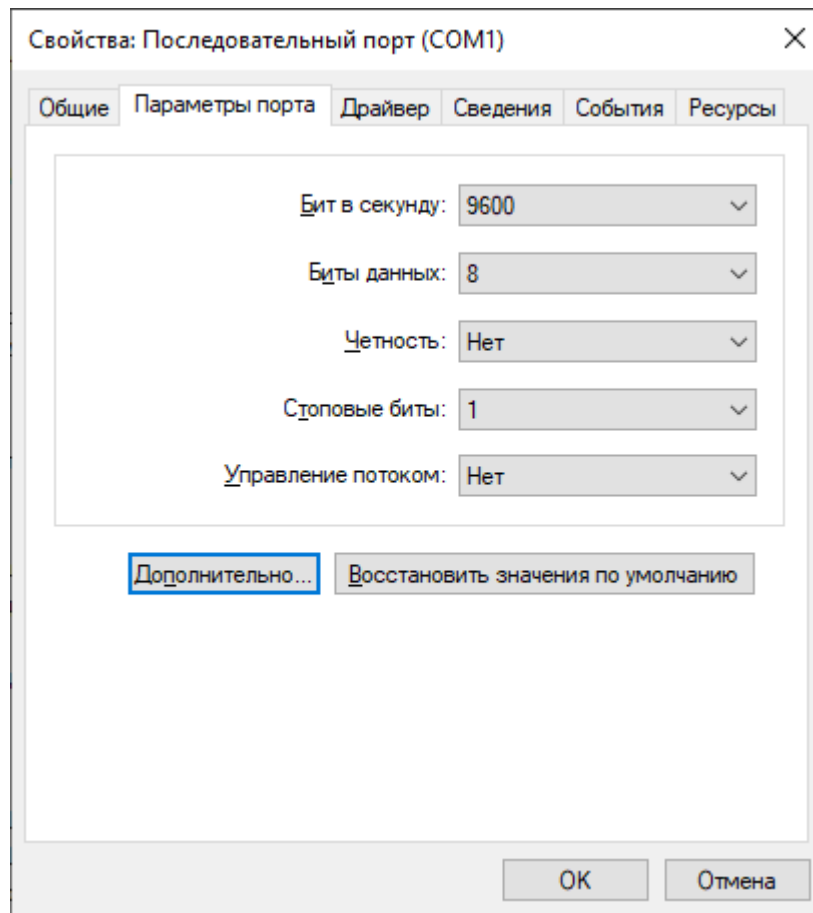
"Virtual Serial Port".

**2**

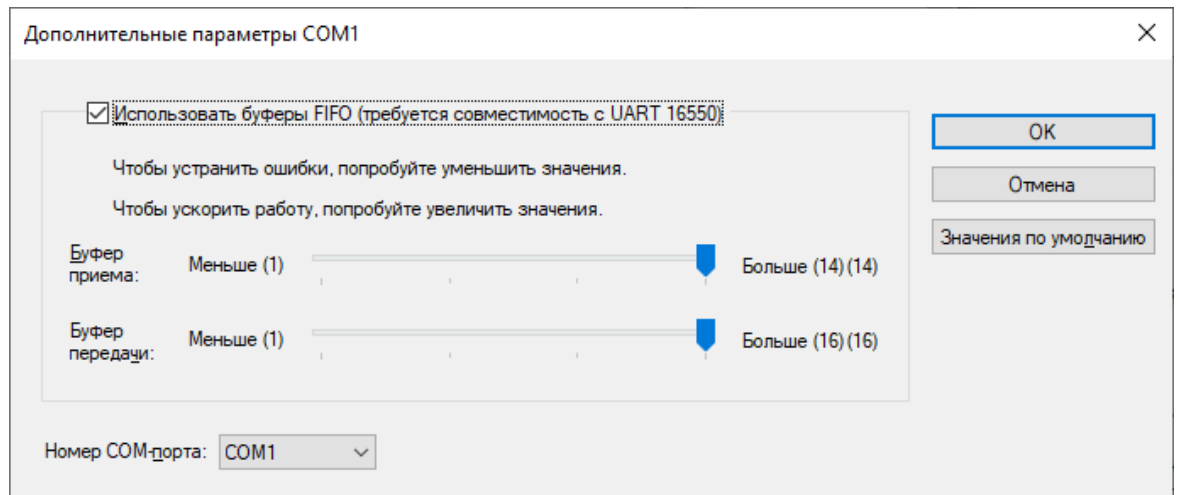
COM20.

( , COM1),

1. COM1.
2. COM1
- 3.
4. " " " " "
5. " " " " "
6. " " " COM- "
7. " " "



.1. COM



.2. COM

## 3



Windows, 64-

1

2

"rootsupd.exe"

64- Windows: c:\Program Files (x86)\Virtual Null Modem\inf  
32- Windows: c:\Program Files\Virtual Null Modem\inf

3

Windows Vista Windows Server 2012

"rsop.msc":

- 1. Windows + R.
- 2. rsop.msc
- 3.
- 4.

- 
- 

"gpedit.msc".

: Starter, Home Home Premium. (gpedit.msc)

```

1.                                Windows + R.
2.                                gpedit.msc
3.                                "
4.                                " " "
5.                                Virtual Null Modem
6.                                "
7.                                .
8.                                :

```

```

1.                                " ", regedit.
2.                                " "
3.                                "
4.                                HKLM\Software\Policies\Microsoft\Windows\DeviceInstall\Restrictions.
5.                                DenyRemovableDevices (REG_DWORD) 0 ( ).
6.                                DenyUnspecified (REG_DWORD) 0 ( ).
7.                                Virtual Null Modem
8.                                "
9.                                .
10.                               .

```

**4**

```

1.                                - - - -
2.                                " ( )".
3.                                " "

```

**5**

```

1.                                , , Windows
2.                                :
3.                                " ", cmd.
4.                                " "
5.                                " : sfc /scannow

```

5.

6

1.

1 2

5.

2.

: Dism /Online /Cleanup-Image /ScanHealth

3.

: Dism /Online /Cleanup-Image /RestoreHealth