



**VIRTUAL NULL MODEM**  
CONNECTING UNCONNECTABLE

**1** **1**

1 ..... 1

**2** , , **2**

1 (COPY) ..... 2

2 ..... 3

3 ..... 4

4 ..... 4

**3** **4**

1 ..... 4

2 ..... 6

**4 Virtual Null Modem** **8**

1 ..... 8

2 - ..... 11

3 " " ..... 16

4 " " ..... 18

5 " " ..... 19

6 ..... 19

7 FAQ ..... 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,

- ;
- ;
- ;
- ;
- Virtual Null Modem;
- ;
- ;
- Virtual Null Modem Management, PNP, . . . ; : WDM, WMI, Power
- Virtual Null Modem
- - ;
- ;

: <http://www.aggsoft.ru/>  
: <http://www.virtual-null-modem.com/>  
RS232: <http://www.aggsoft.ru/rs232-pinout-cable/>

**2**

**2.1**

(COPY)

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1. Virtual Null Modem
- 2.
3. Virtual Null Modem

4.

5.

Virtual Null Modem  
sales@aggsoft.ru

6. Virtual Null Modem

Virtual Null Modem

7. **Virtual Null Modem**

**"AS IS".**

8.

9.

Virtual Null Modem

10.

Virtual Null Modem  
Virtual Null Modem.

## 2.2

shareware-

Internet,

## 2.3

: 21 , 1  
65 .

## 2.4

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

### 3.1

: CPU, Intel® x86 x64

- Windows 2000;
- Windows 2000 Server;
- Windows XP ( ) ( x86, x64);
- Windows 2003 Server ( x86, x64);
- Windows Vista ( x86, x64).
- Windows 7 ( x86, x64).
- Windows Server 2012 ( x86, x64).
- Windows 10 ( x86, x64).
- Windows 2016 ( x86, x64).

**Windows 9x, Me NT!**

CPU: 1 CPU.

: 256 MB.

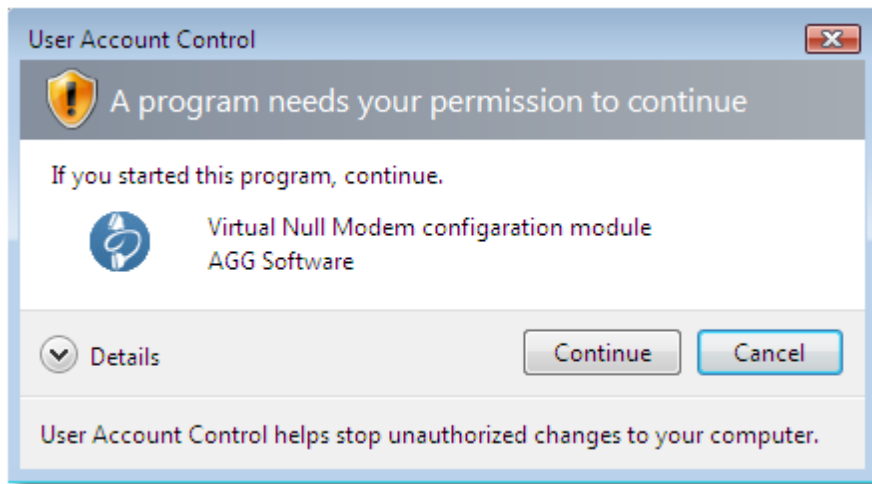
: 5 MB,

**Microsoft Vista:**

- 1.
- 2.
3. Windows Vista ( .2). ( .1);



.1. Windows Vista



.2.

Google.

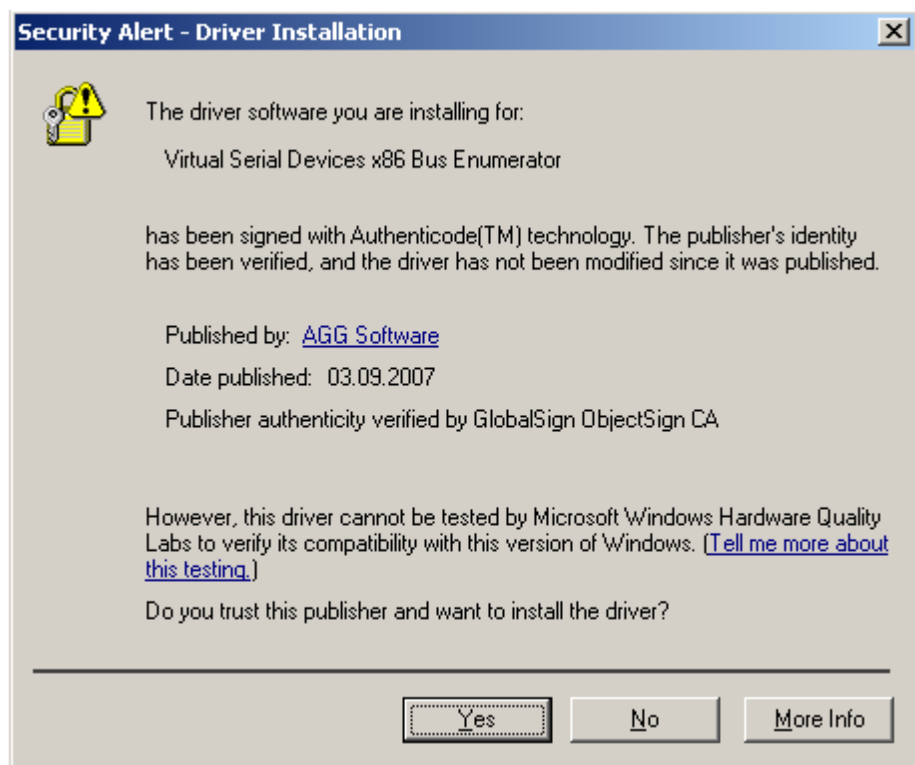
## 3.2

Virtual Null Modem,

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

### Microsoft Windows 2003:

Windows  
( .1). " " ("Yes").



.1

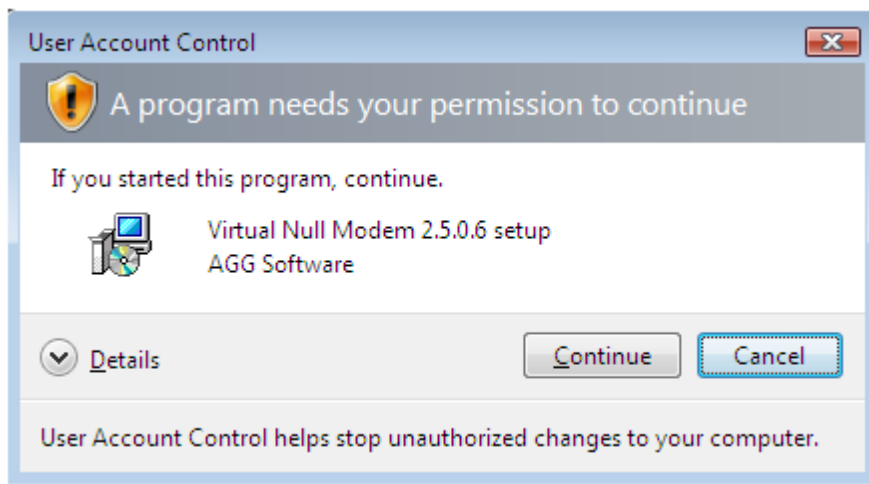
Windows 2003

### Microsoft Vista:

Windows

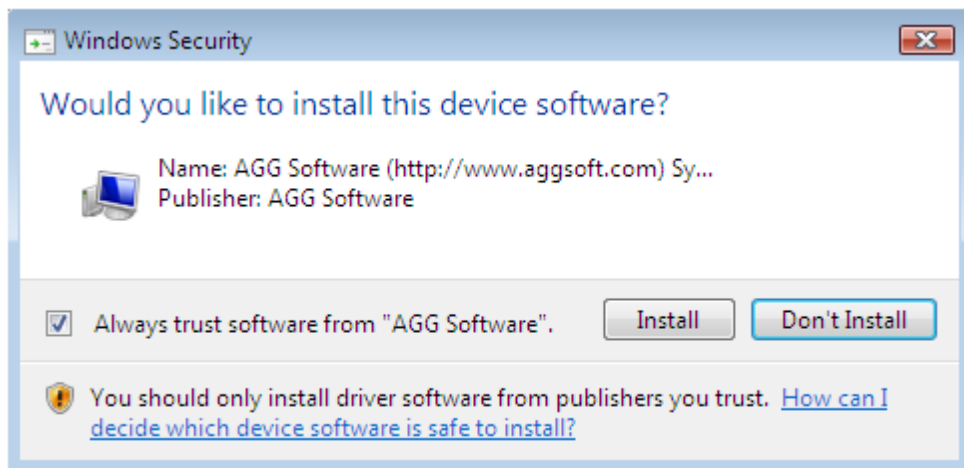


( .2). , " ("Continue").



.2 Vista

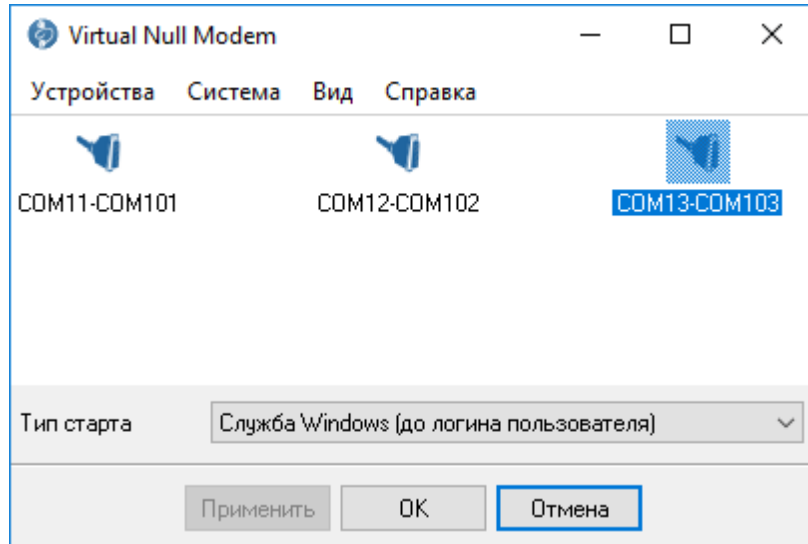
Windows  
( .3). , "Always trust software from AGG Software"  
"Install".



.3 Windows 7

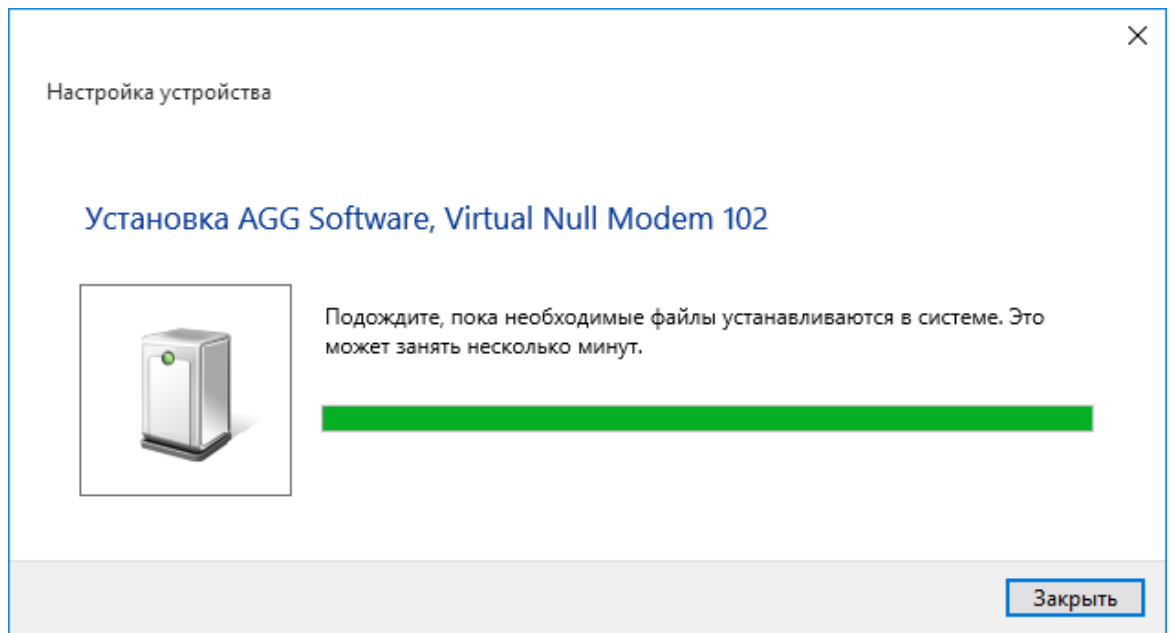


1. ;
2. - -
3. " " - Virtual Null Modem Windows



.1

- ), ("Hotkeys", \_\_\_\_\_)
- « » Hotkeys  
Ctrl, : "Ctrl+N"  
N.
- Virtual Null Modem
- Virtual Null Modem
- Virtual Null Modem
- .2 .3.



.2. Virtual Null Modem



.3. Virtual Null Modem

.4).

( .

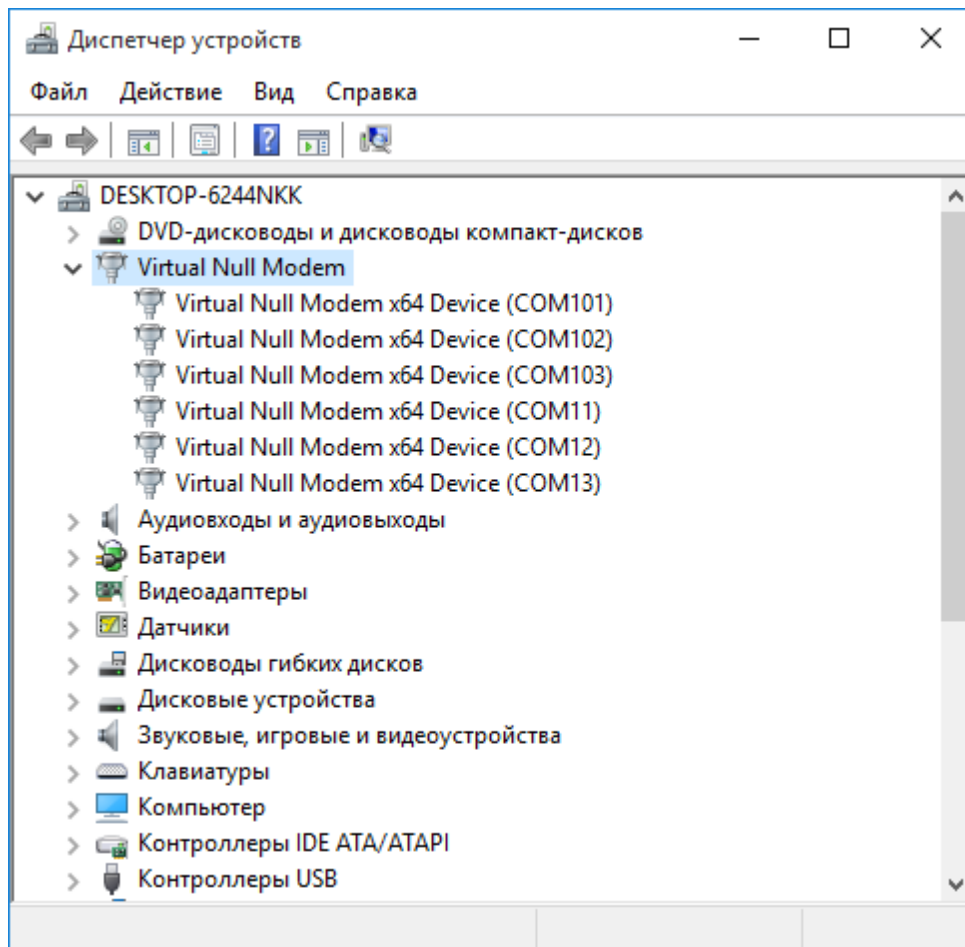
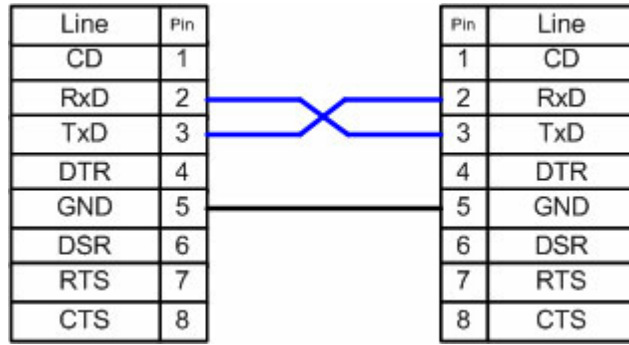


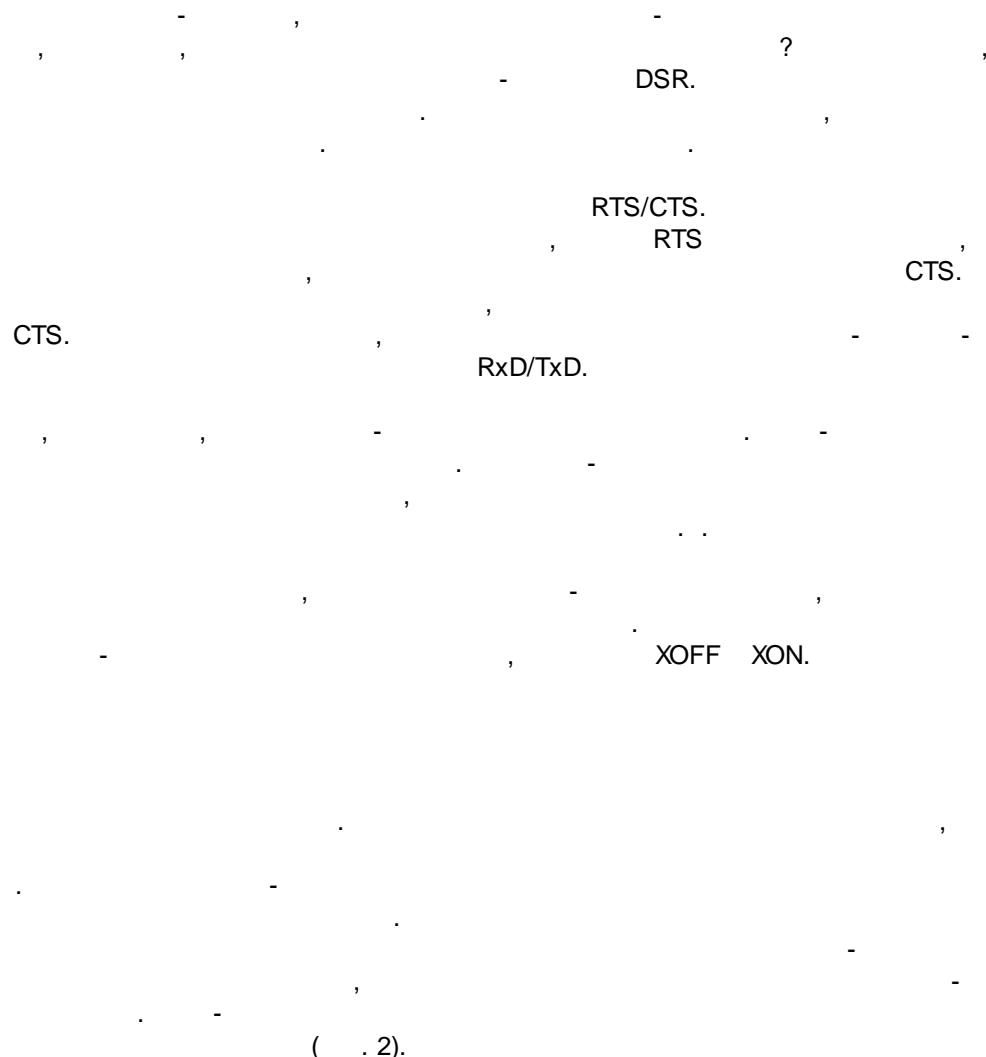
Fig.4. Virtual Null Modems

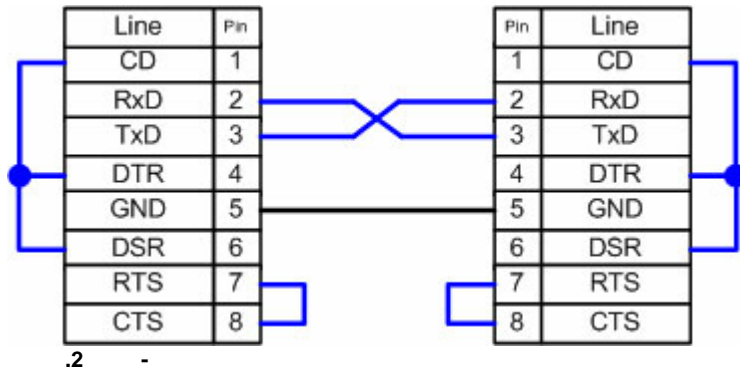
## 4.2

1.



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DSR ( 6).

DTR ( 4).

CD ( 1).

DSR,

DTR

, 99 %

, 99 %

DSR

CTS.

RTS ( 7) RTS, CTS  
RTS.

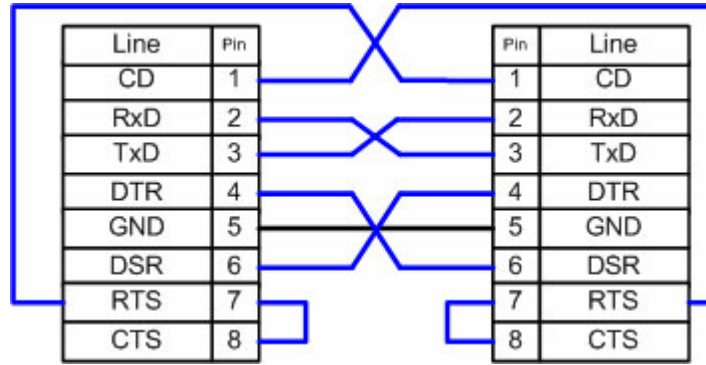
( 8) CTS.

?

XON/XOFF.

Windows 95/98/ME

( . 3).



.3

DTE/DCE.

RTS/CTS

7 8.

RTS/CTS

CD

1,

RTS

CD

DSR (

6)

DTR (

4).

DTR

DSR,

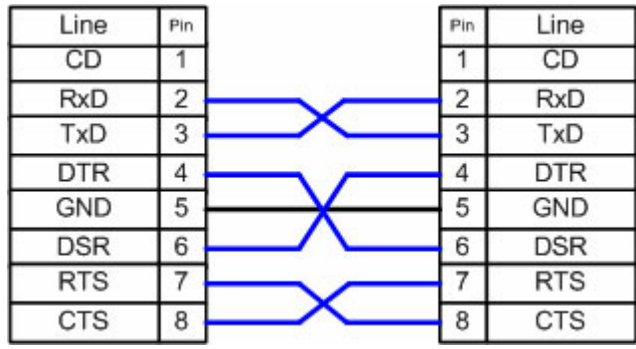
DTR

RTS/CTS

DSR



4. RI CD



CTS RTS.

RTS DTR

Interlink,

PC MS-DOS.

Microsoft  
DB25, DTR CD

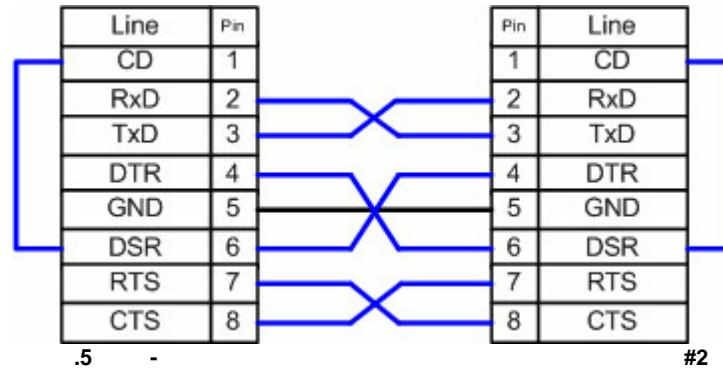
DB9

CD

#2

DSR.

CD



## 4.3

"

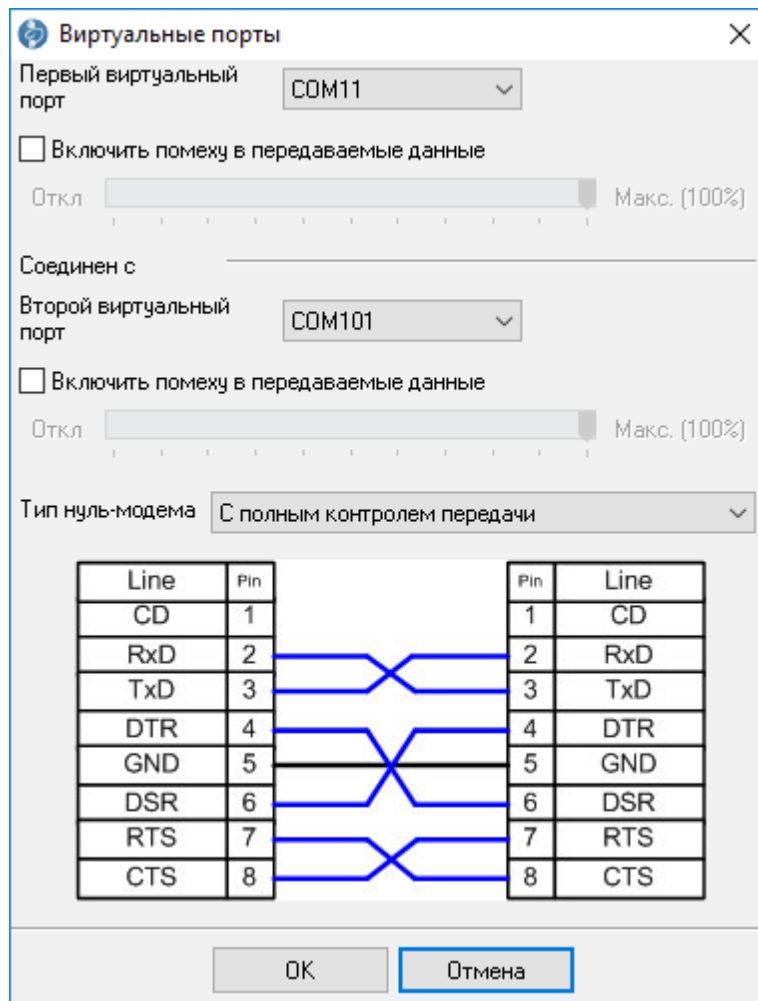
"

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

.1.

Hotkey: Ctrl+N

( . 2).



2.

( )

0 100%.

"OK",

"

DB9

(RTS, CTS . .).

Hotkey: Ctrl+Q

Virtual Null Modem

Hotkey: Ctrl+C

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( . 2)

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Hotkey: Ctrl+X

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## 4.4

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Активировать все виртуальные нуль-модемы

Переключить все виртуальные нуль-модемы

Отсоединить все виртуальные нуль-модемы

Переустановить все драйверы

.1.

"

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## 4.5

Virtual Null Modem -

## 4.6

**-p SerialNo**

SerialNo. SerialNo

2

**-u SerialNo or 0**

SerialNo.

0,

**-e SerialNo or 0**

SerialNo.

0,

**-i <INF\_File> <Hardware\_ID>**

INF\_File

Hardware\_ID.

**-ia**

**-r <Hardware\_ID>**

Hardware\_ID.

**-ra**

**-s0**

( ).

**-s1**

Windows.

**-s2**

( ).

**-pa**

HKEY\_LOCAL\_MACHINE\SOFTWARE\AGG

Software\Virtual Null Modem

"Ports" (REG\_SZ).

: 2,7,

:

..

vnullmod -s0 -ia

## 4.7 FAQ

**Q:**

( )

**A:**

**Q:**

**A:**

"CreateFile"

"COM%d"

COM-COM9.

"\\.\COM%d"

**Q:**

**A:**

SetupAPI

GUID {487ECAF4-213D-4d17-

AA07-2F91078B619D}.