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Subject: RS232 class

Posted by [Mindtraveller](#) on Tue, 21 Jul 2009 15:02:43 GMT

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I'm presenting second part from the latest software. It's RS232 and RS232Protocol classes. Currently they are Windows-only, but it should be simple to add POSIX support for those who has any experience with it.

RS232Protocol class proved itself convenient way organizing any real-life exchange with external devices. It uses U++ style of definitions.

So, let's look how to use it. Let's imagine situation where you have external device with protocol like:

(request) 00AACCCDD##

(answer) AA00\*\*\*\*##

where

AA = device address (1 byte)

CC = command number (1 BYTE)

DD = some command data

00 = 0x00

\*\* = 1 byte of answer data

## = CRC, simple 8-bit bytes composition

The address of device is addr, command is cmd.

```
//byte addr;  
//byte cmd;  
//byte dataR;  
//dword ANSWER_TIMEOUT = 500;
```

```
RS232 rs232;  
RS232Protocol proto1R, proto1A;
```

```
proto1R(0x00)(addr)(cmd)(dataR).CRC();  
proto1A(addr)(0x00).Word().CRC();
```

```
if (!rs232.Open(1)) //COM1  
    return;
```

```
proto1R.Send(rs232);  
if (proto1A.Receive(rs232, ANSWER_TIMEOUT))  
{  
    word answerData = proto1A[2];  
    //...  
}
```

```
rs232.Close();
```

Of course it's the simplest example, just to understand the idea.

### File Attachments

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1) [RS232.h](#), downloaded 443 times

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