

Remote debugging with Lejos v0.8.5

You can use your PC as a remote console to display tracing statements generated by your NXJ program. Of course your NXT has to be connected to your computer (USB or Bluetooth) while remote debugging.

The `lejos.nxt.comm.RConsole` class provides several methods for the remote debugging. Since there are no instances of this class, all methods are static.

To start debugging you use one of these methods:

- `void open()`
Opens a USB connection (without any timeout).
- `void openUSB(int timeout)`
Opens a USB connection with the timeout `timeout`.
- `void openBluetooth(int timeout)`
Opens a Bluetooth connection with the timeout `timeout`.

You can also create NXT output messages on your PC console, using the following methods:

- `void println(String str)`
- `void print(String str)`

However, you have to make sure that the argument `str` is a real `String` as the `toString()` method is not implicitly called. If no successful open statement has been executed, the debug output is discarded.

When debugging is completed, you should call:

- `void close()`
Closes USB or Bluetooth connection.

After uploading your debug program onto the NXT, execute it. The NXT displays either USB Console... or BT Console... (corresponding to you RConsole-open-method) in the first display line and **waits for the PC based monitor to connect**. Then execute the nxjconsole program in a command line on your computer. When the connection is established, both the NXT and the PC display console open.

As an example we have the following source code:

```
import lejos.nxt.comm.RConsole;

public class TestRConsole {

    public static void main(String[] args) {

        RConsole.open();

        int x = 17;

        int y = 3;

        int sum = x + y;

        RConsole.println("Sum: " + sum);

        RConsole.close();

    }

}
```

After executing this file on the NXT, its display says USB Console... Now we open the remote nxjconsole and get the following output:

```
C:\nxjconsole

Found nxt name NXT address 001653048C82

Connected...

Console open

Sum: 20

Console closed
```