

# LORRIS TOOLBOX

Software development kit  
for microprocessors

<http://tassadar.github.com/Lorris>  
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## About project

Lorris is extensive set of tools designed to help with development, debugging and controlling of various electronic devices, for example robots. Lorris currently contains four different tools: analyzer, programmer, terminal and proxy server.

## Analyzer

Analyzer can parse and display any binary data stream. It uses "widgets": little windows with specific piece of data - number, angle, bar, color, graph and so on. Analyzer can also send data back to the device, which can be used to for example control robots. The Analyzer's environment is fully scriptable.

## Unique tool

Value of Lorris as tool for developers equals that of 3D CAD programs for engineers. It significantly simplifies and speeds up the whole process of development of microprocessors, it even enables new methods of development which were not possible because of lack of proper tools.

## How does analyzer work?

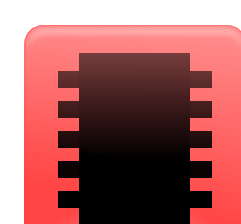
Microchip

Binary data stream

Processing



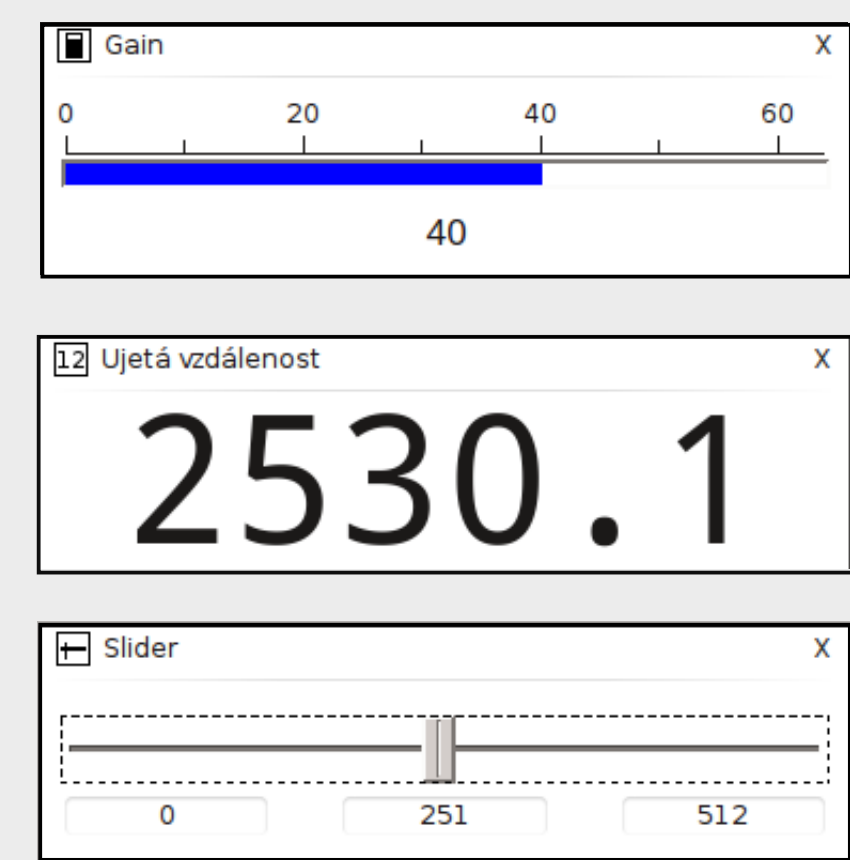
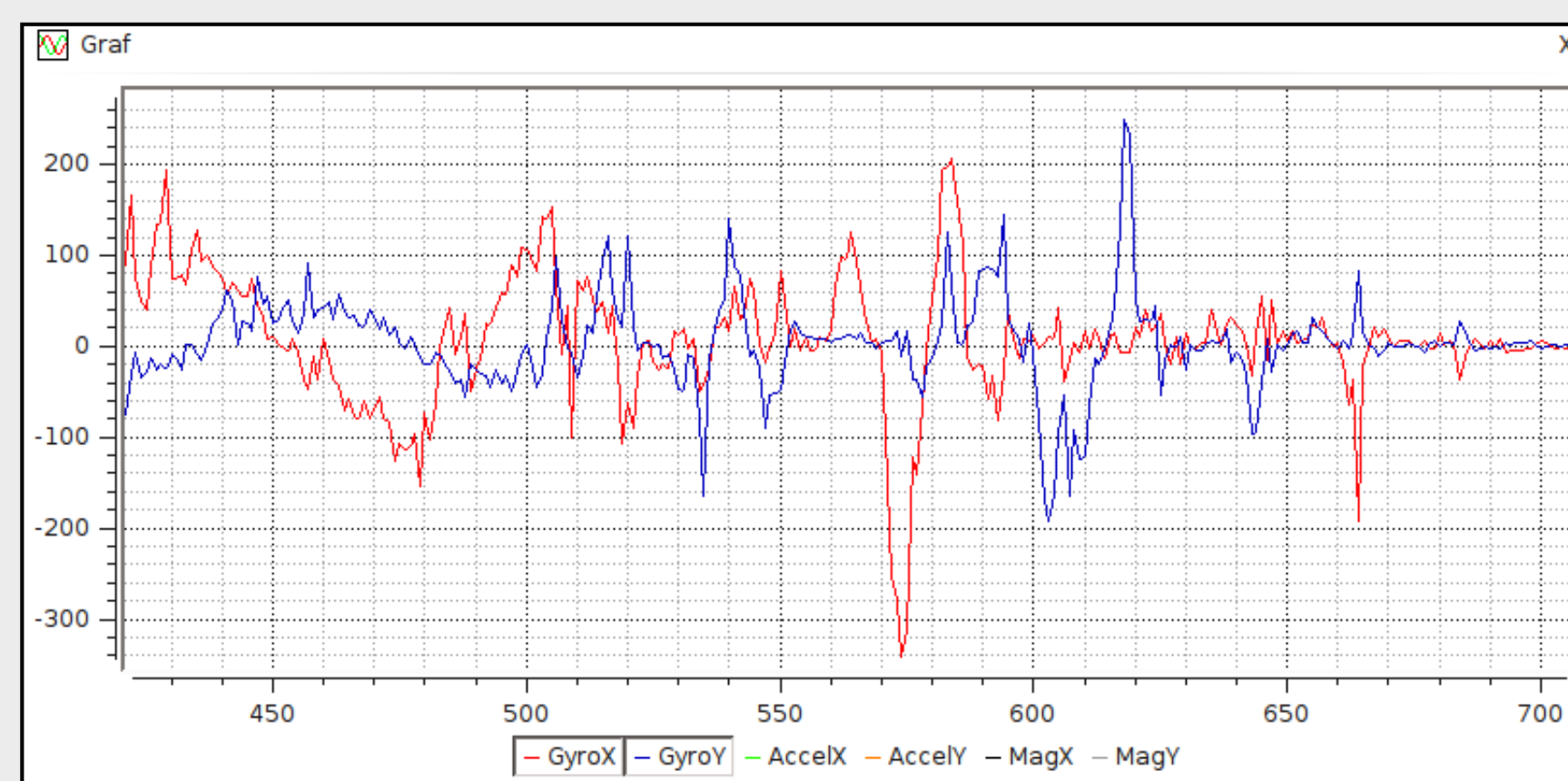
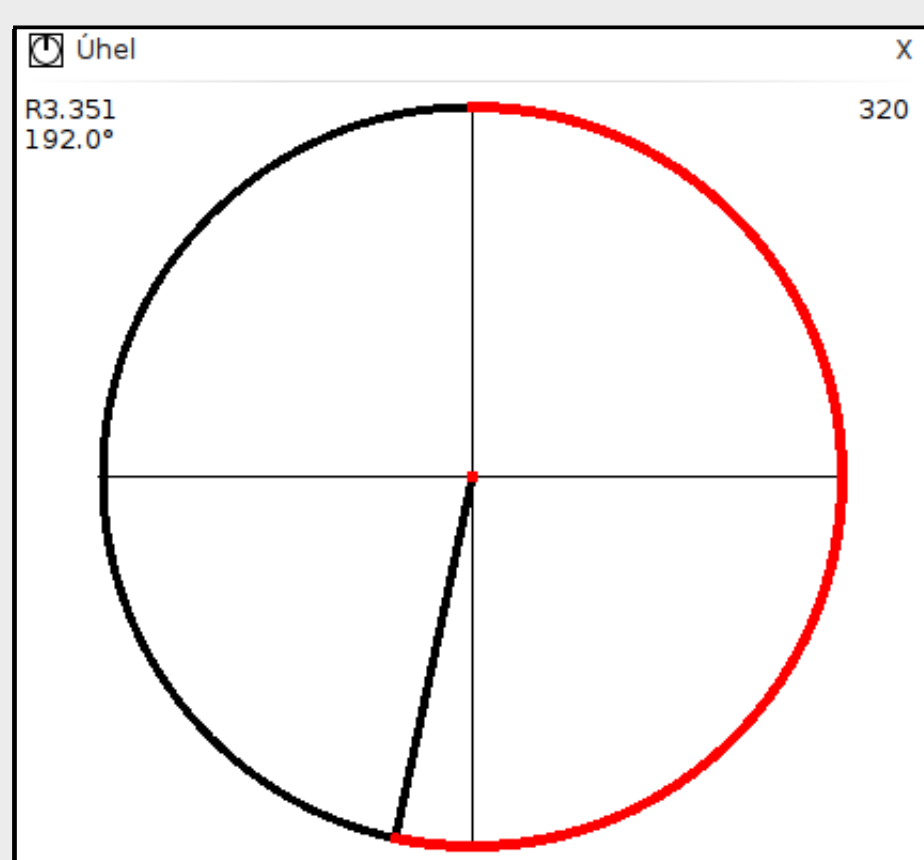
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00000020 70 C8 56 00 14 FF C8 00 11 00 00 04 5B 73 6E 70 p.V.....[snp
00000030 C8 5A 00 15 00 C5 01 07 00 00 03 55 73 6E 70 C8 .Z.....Usnp
00000040 5C 00 1E 00 15 FF DA 00 00 04 81 73 6E 70 C8 5E \.....snp.^
00000050 FD B2 F7 88 EC 13 00 00 06 A4 73 6E 70 C8 60 00 .....snp.
00000060 BA 06 D5 09 1F 00 00 04 36 73 6E 70 C8 62 08 B7 .....6snp.b.
00000070 FC 41 E7 B9 00 00 06 17 73 6E 70 C8 58 F9 50 E7 .A....snp.X.P
00000080 00 C5 C0 00 00 06 26 73 6E 70 C8 56 00 0A FF C2 ....&snp.V....
00000090 00 00 00 04 47 73 6E 70 C8 5A 00 17 00 CA 01 03 ....Gsnp.Z.....
```



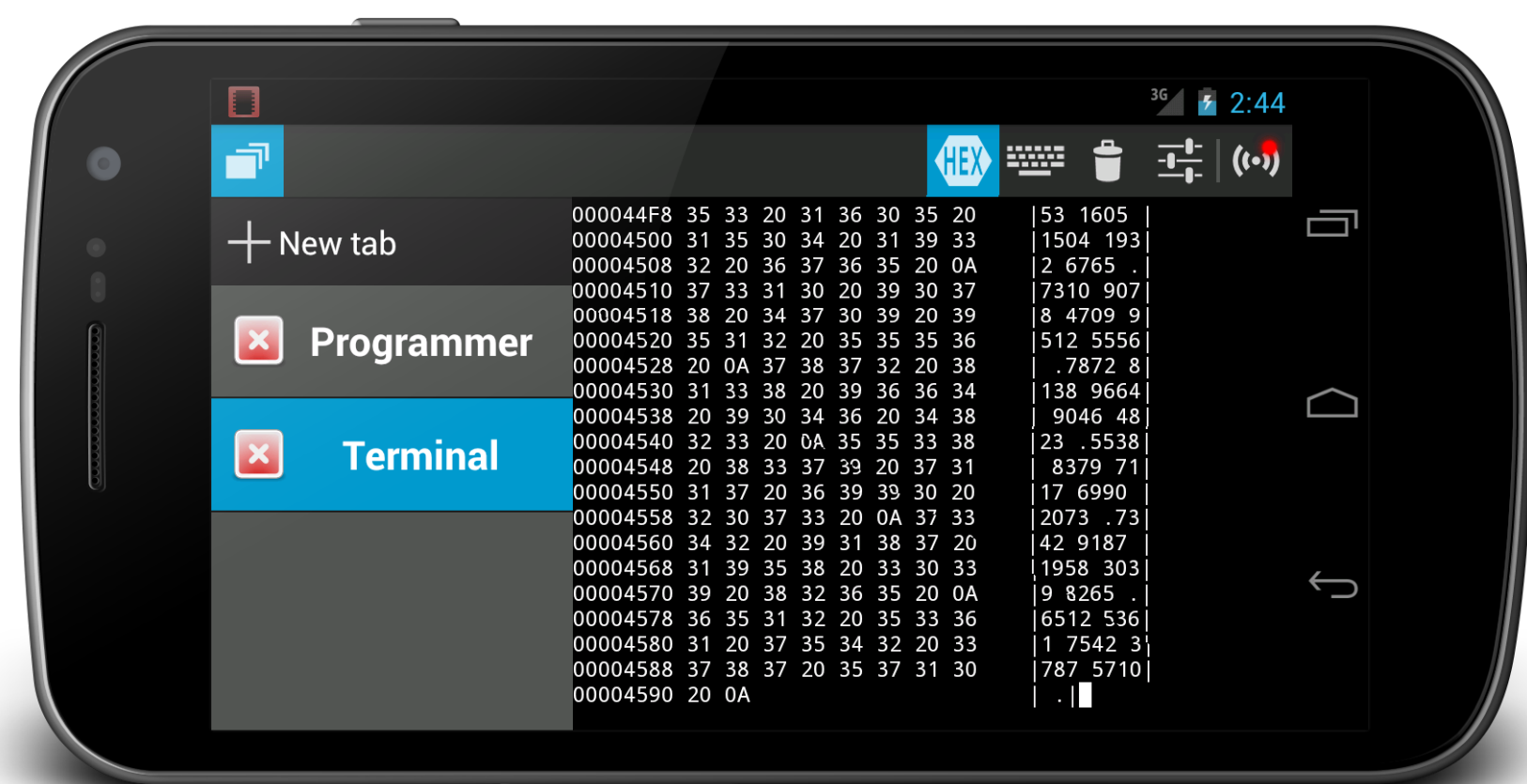
Lorris



Displaying and control



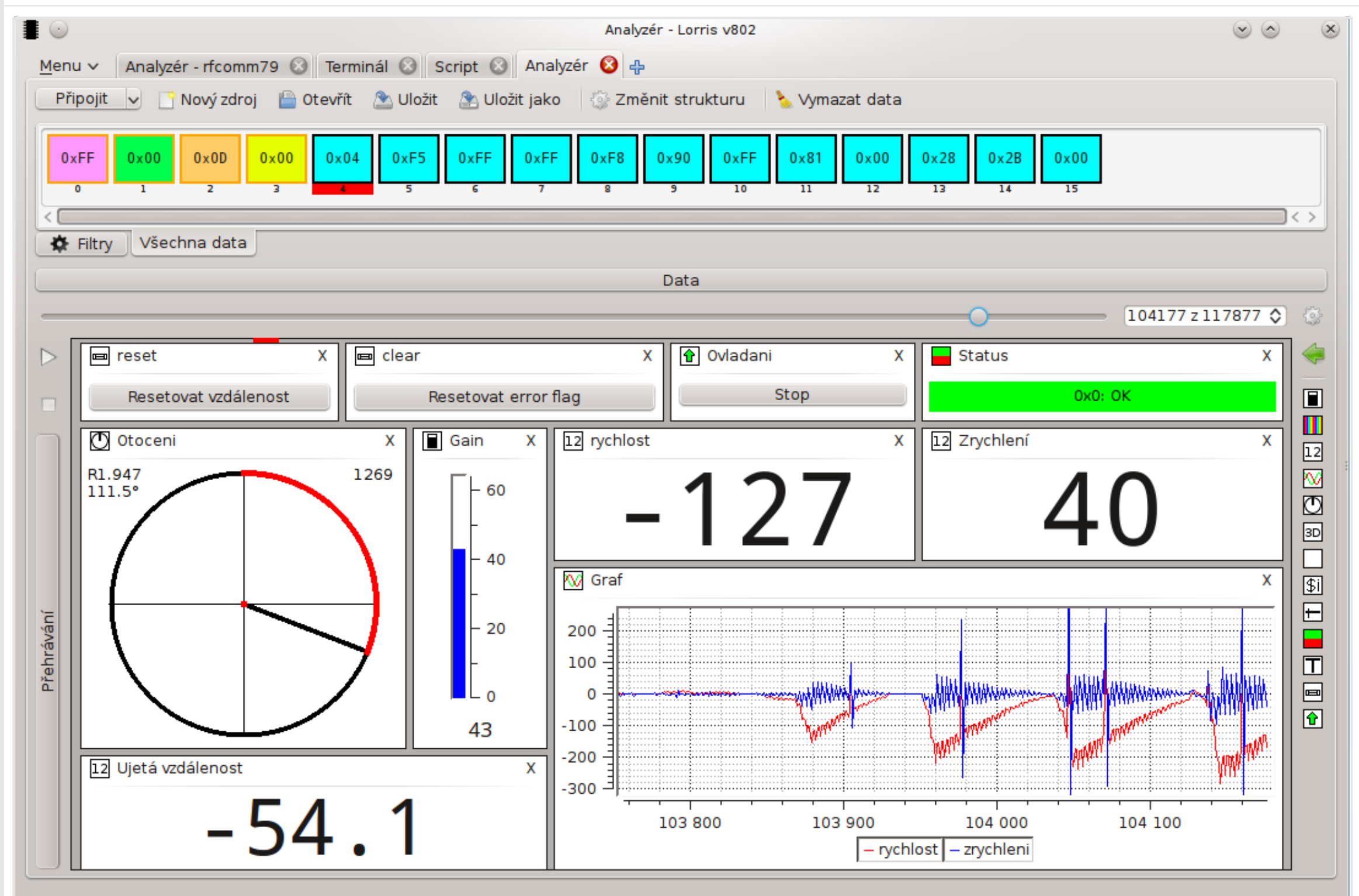
## Lorris mobile



Lorris mobile is portable addition to desktop program. It is application for Google Android, which contains the most important tools - programmer and terminal, others are currently in development. Bluetooth and TCP socket (Wi-Fi) can both be used to connect to the device.



## Lorris' main window



## Real-world use

Several companies have already been using Lorris for more than a year, among them is DDM Junior in Brno with its technical-oriented classes. Many robots for competitions (like Robotic day in Prague) are made there and Lorris significantly helps with their development. This gives me live feedback from several dozen real users, for which Lorris became irreplaceable development tool.

STŘEDNÍ PRŮMYŠLOVÁ ŠKOLA A VYŠŠÍ ODBORNÁ ŠKOLA TECHNICKÁ  
**SPS VOŠT**

**SE-ON**  
SPECIAL ELECTRONICS

**JUNIOR**  
kamarád ve volném čase



Jihomoravský kraj



**jcm**

This work was financially supported by JMK and JCM.