

MYC - Communication

Preliminary Version

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This paper is published in <https://github.com/dk1ri> as well

Introduction

The MYC protocol is a semantic protocol without header and end. For transmission of data some additional data are necessary,

There are some rules, which should be observed for the different protocols.

Definitions and formats

see <https://dk1ri.de/myc/Definitions.txt> or <https://dk1ri.de/myc/Definitions.pdf>

I2C

The MYC data can be directly transmitted over I2C. Error correction, handshake, encryption usually is not necessary.

A transmission should not exceed 254 Byte. The Rxbuffer cannot hold more bytes. If necessary, use multiline. The commandrouter, Logicdevice and human Interface must support this.

Because the slave needs time for commandhandling, the master must be able to wait. Either the master send the read request not directly after a write or it waits during the read process. Slave is isolated from the bus at that time.

RS232 / USB

As I2C the MYC data can be directly transmitted over I2C. Error correction, handshake, encryption usually is not necessary.

Ethernet

Up to now telnet is used only, which may have a security problem, when sent via internet.

Telnet requires a defined packet length. The devices can calculate this, so pure MYC data could be sent to the devices. The device will send answers as hex numbers (2 byte per byte) and end the transmission with chr(10). So the telnet client find the end of a transmission.

For consistency the devices input will accept hex data as well. A chr(10) can be sent but is ignored as all other characters.

This is used for the communication between CR and SK and the communication between devices and CR.

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Reference

- [1] <https://dk1ri.de/myc/MYC.pdf> (german)
- [2] <https://dk1ri.de/myc/MYC.en.pdf>
- [3] <https://dk1ri.de/myc/Description.txt> or <https://dk1ri.de/myc/Description.pdf>
- [4] <https://dk1ri.de/myc/commands.txt> or <https://dk1ri.de/myc/commands.pdf>
- [5] https://dk1ri.de/myc/Reserved_tokens.txt or https://dk1ri.de/myc/Reserved_tokens.pdf
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