|  |  |  |
| --- | --- | --- |
| Byte | Bedeutung | Wertebelegung |
| 1.7-1.6 | Protocol Version | Protokol-Version (aktuell 1) |
| 1.3-1.0 | Length | Anzahl der **folgenden** Bytes |
| 2.7-2.4 | Speed – Value | 0 – 9: Geschwindigkeit in 10% von vmax |
| 2.3 | Speed – Direction | 0: rückwärts  1: vorwärts |
| 3.7-3.4 | Steering – Steps | 0 – 8: 90 + steps\*90/8 |
| 3.3 | Steering – Direction | 1: rechts  0: links |
| 4.7 | Enable LED | 0: aus  1: an |
| 4.6 | Enable Light | 0: aus  1: an |
| 4.5 | Reset-Accumulated Current | 0: -  1: einmaliger Reset |

Protokoll zur Datenübermittlung V1

Android 🡪 Arduino

Byte 1: Protocol Header

MSB LSB

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PV1 | PV2 |  |  | L1 | L2 | L3 | L4 |
| Protokol Version | | Reserved | | Length | | | |

Byte 2: Speed

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SpV1 | SpV2 | SpV3 | SpV4 | SpD |  |  |  |
| Speed-Vale | | | | Speed Direction | Reserved | | |

Byte 3: Steering

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| StS1 | StS2 | StS3 | StS4 | StD |  |  |  |
| Steering Steps | | | | Steering Direction | Reserved | | |

Byte 4: Lights and Battery

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| LED | L1 |  |  | RAC |  |  |  |
| LED Status | Light Status | Reserved | Reserved | Reset Acc Current | Reserved | | |

Arduino 🡪 Android: Jeweils als Antwort auf einen beliebigen Befehl vom Handy

|  |  |  |
| --- | --- | --- |
| Byte | Bedeutung | Wertebelegung |
| 1.7-1.6 | Protocol Version | Protokol-Version (aktuell 1) |
| 1.3-1.0 | Length | Anzahl der **folgenden** Bytes |
| 2 | Momentary Current | Strom in mA/10 |
| 3 | Absolute Residual Battery Capacity | Kapazität in mAh |
| 4.7-4.1 | Procental Residual Battery Capacity | Kapazität in % |
| 5 | Voltage | in 0.1 V |
| 6 | Sensor Temperature | in 0.5 °C |

Byte 1: Protocol Header

MSB LSB

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PV1 | PV2 |  |  | L1 | L2 | L3 | L4 |
| Protokol Version | | Reserved | | Length | | | |

Byte 2: Momentary Current

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| MC1 | MC2 | MC3 | MC4 | MC5 | MC6 | MC7 | MC8 |
| Momentary Current | | | | | | | |

Byte 3: Absolute Residual Battery Capacity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ARC1 | ARC2 | ARC3 | ARC4 | ARC5 | ARC6 | ARC7 | ARC8 |
| Absolute Residual Battery Capacity | | | | | | | |

Byte 4: Procental Residual Battery Capacity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PRC1 | PRC2 | PRC3 | PRC4 | PRC5 | PRC6 | PRC7 |  |
| Procental Residual Battery Capacity | | | | | | | Reserved |

Byte 5: Voltage

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| V1 | V2 | V3 | V4 | V5 | V6 | V7 | V8 |
| Voltage | | | | | | | |

Byte 6: Temperature

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 |
| Temperature | | | | | | | |