Sender Protocol

The Protocol consists out of 8 bytes:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| START | SESSION | TARGET | COMMAND | PAR1 | PAR2 | PAR3 | CHECKSUM |

# START

Hex-Value = 0xAA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |

Signals the start of a transmission.

# SESSION

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| B7 | B6 | B5 | B4 | B3 | B2 | B1 | B0 |

B7..B0 Number of session

The session number is used to differ between new commands and repeated commands. Each command is sent twice with the same session number to produce redundancy.

# TARGET

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| B7 | B6 | B5 | B4 | B3 | B2 | B1 | B0 |
| MODE | |  | | | | | |

B7..B6 00=MODE\_ADRESS

01=MODE\_EXCLUDE

10=MODE\_MODULO

11=RESERVED

MODE\_ADRESS:

B5..B0 Adress of device (Broadcast=0x3F) to receive Command

MODE\_EXCLUDE:

B5..B0 Adress of device (Broadcast=0x3F) to ignore Command

MODE\_MODULO

B2..B1 Modulo value (e.g 3-> every third device reacts on command)

B5..B3 Offset value (e.g. 1 -> device 1,4,7… 2-> device 2,5,8…)

## COMMAND

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| B7 | B6 | B5 | B4 | B3 | B2 | B1 | B0 |
| Background |  |  |  |  |  |  |  |

B7 0=Trigger Foreground Animation

1=Background Animation

B6..B0 Animation identifier

## PAR1..3

Parameters for the Animation

## CHECKSUM

## 

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| B7 | B6 | B5 | B4 | B3 | B2 | B1 | B0 |

Checksum = SESSION+TARGET+COMMAND+PAR1+PAR2+PAR3