**Protocol v1.0.0-Alpha**

CHANNELS\_INFO\_ID:0x01

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x01 | Channel | Input | Reverse | Weight | Offset |  |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  | CheckSum | |

Channel : uint8\_t 0~7

Input : uint8\_t 0~7

Reverse : uint8\_t 0-不翻转 / 1-翻转

Weight : uint8\_t 0~100

Offset : uint8\_t 0~200 映射(0,200；-100~100)

Lite\_CONFIGER\_INFO\_ID:0x05

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x05 | Version | Protocol | Mode | Power |  |  |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  | CheckSum | |

Version : uint8\_t 0-CC2500 / 1-SX1280 / 2-SX1276

Protocol:

Protocol\_0 : uint8\_t 0~4 0-D16\_FCC / 1-D16\_BJT / 2-D8 / 3-SFHSS

/ 4-CRSF

Protocol\_1 : uint8\_t 0~1 0-ELRS2400 / 1-CRSF

Protocol\_2 : uint8\_t 0~1 0-ELRS900 / 2-CRSF

Mode : uint8\_t 0x00-左手 / 0x01-右手

Power : uint8\_t 0~4 0-25mW / 1-50mW / 2- 100mW

REQUEST\_INFO\_ID:0x11

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x11 | Type1 | Type2 |  |  |  |  |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  | CheckSum | |

Type1:

Type1\_0 : uint8\_t 0x00-command

Type2 : 0x01-停止发送 / 0x02-保存和重启

Type1\_1 : uint8\_t 0x01-channel\_info

Type2 : uint8 0x01-CH1 / 0x02-CH2 / 0x03-CH3 / 0x04-CH4

/ 0x05-CH5 / 0x06-CH6 / 0x07-CH7 / 0x8-CH8

Type1\_2 : uint8\_t 0x02-configer\_info

Type2 : uint8 0x00-lite\_info 0x01-internal\_info

/ 0x02-external\_info

INTERNAL\_CONFIGER\_INFO\_ID:0x06

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x06 | Switch | Power | Rate | TLM |  |  |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  | CheckSum | |

Switch : uint8\_t 0-关闭 / 1-打开 / 2-连接 / 4-失联

Power : uint8\_t 0~2 0-25mW / 1-50mW / 2- 100mW

Pkt.Rate : uint8\_t 0~7

TLM Radio : uint8\_t 0~7

RF Freq : uint8\_t 1~6

EXTERNAL\_CONFIGER\_INFO\_ID:0x07

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x07 | Switch | Power | Rate | TLM | Freq | Bind | WifiUpdate |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  | CheckSum | |

Switch : uint8\_t 0-关闭 / 1-打开 / 2-连接 / 4-失联

Power : uint8\_t 0~5

Pkt.Rate : uint8\_t 0~7

TLM Radio : uint8\_t 0~7

RF Freq : uint8\_t 1~6

Bind : uint8\_t 0-无触发 / 1-触发

WifiUpdate : uint8\_t 0-无触发 / 1-触发

DEVICE\_INFO\_ID:0x5A

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0x5a | 预留 | 遥控器型号 | 内置射频模块型号 | 外壳左右手油门杆 | 硬件版本（x.x.x） | | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 软件版本（x.x.x） | | |  |  |  | CheckSum | |

遥控器型号：

|  |  |
| --- | --- |
| 编号 | 遥控器型号 |
| 0x00 | Unknown |
| 0x01 | LiteRadio 2 SE |
| 0x02 | LiteRadio 2 SE V2 (SX1280) |
| 0x03 | LiteRadio 2 SE V2 (CC2500) |
| 0x04 | LiteRadio 3 (SX1280) |
| 0x05 | LiteRadio 3 (CC2500) |
| 其他 | 预留（未知） |

内置射频模块型号：

|  |  |
| --- | --- |
| 编号 | 内置射频模块型号 |
| 0x00 | Unknown |
| 0x00 | CC2500 |
| 0x00 | SX1280 |
| 其他 | 预留（未知） |

左右手油门杆：

|  |  |
| --- | --- |
| 编号 | 左右手油门杆位置 |
| 0x00 | 左手油门 |
| 0x01 | 右手油门 |

/\*频道混控信息区\*/

#define MIX\_CHANNEL\_1\_INFO\_ADDR 0x8007000

#define MIX\_CHANNEL\_2\_INFO\_ADDR 0x8007008

#define MIX\_CHANNEL\_3\_INFO\_ADDR 0x8007010

#define MIX\_CHANNEL\_4\_INFO\_ADDR 0x8007018

#define MIX\_CHANNEL\_5\_INFO\_ADDR 0x8007020

#define MIX\_CHANNEL\_6\_INFO\_ADDR 0x8007028

#define MIX\_CHANNEL\_7\_INFO\_ADDR 0x8007030

#define MIX\_CHANNEL\_8\_INFO\_ADDR 0x8007038

/\*频道混控信息缓存区\*/

#define CACHE\_MIX\_CHANNEL\_INFO\_ADDR 0x8007100

/\*遥控器配置信息区\*/

#define CONFIGER\_INFO\_ADDR 0x08007060

#define CONFIGER\_INFO\_PROTOCOL\_ADDR 0x08007060

#define CONFIGER\_INFO\_MODE\_ADDR 0x08007062

/\*内置高频头信息区\*/

#define INTERNAL\_CONFIGER\_INFO\_POWER\_ADDR 0x08007064

/\*SX1280内置高频头信息区\*/ /\*SX1276内置高频头信息区\*/

#define INTERNAL\_ELRS\_CONFIGER\_INFO\_ADDR 0x08007068

#define INTERNAL\_ELRS\_CONFIGER\_INFO\_POWER\_ADDR 0x08007068

#define INTERNAL\_ELRS\_CONFIGER\_INFO\_Rate\_ADDR 0x0800706A

#define INTERNAL\_ELRS\_CONFIGER\_INFO\_TLM\_ADDR 0x0800706C

/\*遥控器型号、版本信息区\*/

#define FIRST\_FLASH\_MARK\_ADDR 0x8007A00

#define LITE\_RADIO\_HARDWARE\_TYPE\_ADDR 0x8007A02

#define INTERNAL\_RADIO\_TYPE\_ADDR 0x8007A04

#define THROTTLE\_ROCKER\_POSITION\_ADDR 0x8007A06

#define HARDWARE\_MAJOR\_VERSION\_ADDR 0x8007A08

#define HARDWARE\_MINOR\_VERSION\_ADDR 0x8007A10

#define HARDWARE\_PATCH\_VERSION\_ADDR 0x8007A12

uint8\_t luaParams[] =

{0xFF,

(uint8\_t)(InBindingMode | (webUpdateMode << 1)),

(uint8\_t)ExpressLRS\_currAirRate\_Modparams->enum\_rate,

(uint8\_t)(ExpressLRS\_currAirRate\_Modparams->TLMinterval),

(uint8\_t)(POWERMGNT.currPower()),

(uint8\_t)Regulatory\_Domain\_Index,

(uint8\_t)crsf.BadPktsCountResult,

(uint8\_t)((crsf.GoodPktsCountResult & 0xFF00) >> 8),

(uint8\_t)(crsf.GoodPktsCountResult & 0xFF),

(uint8\_t)LUA\_VERSION};

RATE\_500HZ = 0,

RATE\_250HZ = 1,

RATE\_200HZ = 2,

RATE\_150HZ = 3,

RATE\_100HZ = 4,

RATE\_50HZ = 5,

RATE\_25HZ = 6,

RATE\_4HZ = 7,

RATE\_ENUM\_MAX = 8

TLM\_RATIO\_NO\_TLM = 0,

TLM\_RATIO\_1\_128 = 1,

TLM\_RATIO\_1\_64 = 2,

TLM\_RATIO\_1\_32 = 3,

TLM\_RATIO\_1\_16 = 4,

TLM\_RATIO\_1\_8 = 5,

TLM\_RATIO\_1\_4 = 6,

TLM\_RATIO\_1\_2 = 7

PWR\_10mW = 0,

PWR\_25mW = 1,

PWR\_50mW = 2,

PWR\_100mW = 3,

PWR\_250mW = 4,

PWR\_500mW = 5,

PWR\_1000mW = 6,

PWR\_2000mW = 7,

PWR\_COUNT = 8

Regulatory\_Domain\_AU\_915 1

Regulatory\_Domain\_FCC\_915 2

Regulatory\_Domain\_EU\_868 3

defined Regulatory\_Domain\_AU\_433 4

defined Regulatory\_Domain\_EU\_433 5

Regulatory\_Domain\_ISM\_2400 6