1. **前端发送图片内嵌信息（内嵌信息从图片的第五个字节开始）**

**FF D8 FF FE 00 7c xxxx。。。00 7c为图片解释长度，从x开始的字节即为内嵌信息**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **序号** | **项目** | **类型** | **例子** | **注释** | **个飞** |
| 1 | MAC地址 | unsigned char | 0800280245C5 | 08-00-28-02-45-C5，中间“-”不传 | 12 |
| 2 | GRAB\_TIME（RTC） | unsigned char | 2013041012125900 | 2013.04.10.12:12:59:00 | 16 |
| 3 | Gps x 坐标 | unsigned char | 3118.69556 | 3118.69556 | 10 |
| 4 | Gps y 坐标 | unsigned char | 12037.05619 | 12037.05619 | 11 |
| 5 | GPS车速 | unsigned char | 123.4 | 123.4KM/H | 5 |
| 6 | GPS方向 | Unsigned char | NE | N:南向北  E:西向东 | 2 |
| 7 | 车牌 | Unsigned char | 苏A12345 | 苏A-12345 | 16 |
| 8 | 车牌颜色 | unsigned char | 红 | 红 | 8 |
| 9 | 车距 | Unsigned char | 12 | 12M | 2 |
| 10 | 抓拍流水号 | Unsigned char | 0050 | 当天第50组 | 4 |
| 11 | 抓拍序号 | Unsigned char | 1 | 1/2/3/4.. | 1 |
| 总计 |  |  |  |  | 87 |

**二、心跳包协议**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **序号** | **项目** | **类型** | **例子** | **注释** | **字节数** |
| 1 | 帧头 | unsigned char | 0xAA55 | 表示帧的开始 | 2 |
| 2 | MAC地址 | unsigned char | 0800280245C5 | 08-00-28-02-45-C5，中间“-”不传 | 12 |
| 3 | GPS状态 | unsigned char | A/V | A：有效  V：无效 | 1 |
| 4 | GPS日期 | unsigned char | 20130410 | 2013.04.10 | 8 |
| 5 | GPS时间 | unsigned char | 121259 | 12:12:59 | 6 |
| 6 | Gps x 坐标 | unsigned char | 3118.69556 | 3118.69556 | 10 |
| 7 | Gps y 坐标 | unsigned char | 12037.05619 | 12037.05619 | 11 |
| 8 | GPS车速 | unsigned char | 123.4 | 123.4KM/H | 5 |
| 9 | GPS方向 | Unsigned char | NE | N:南向北  E:西向东 | 2 |
| 10 | 工作模式 | unsigned char | 0 | 0:自动  1:手动  2:远程 | 1 |
| 11 | 服务器IP |  | 192.168.020.196 |  | 15 |
| 12 | 设备IP |  | 010.009.123.040 |  | 15 |
| 13 | 心跳包间隔 |  | 05 | 间隔5秒 | 2 |
| 14 | 上传张数 |  | 4 | 上传4张 | 1 |
| 15 | 车辆跟踪张数 |  | 4 | 连续跟踪4张 | 1 |
| 16 | 车距预设范围 |  | 0815 | 08:最小间距  15:最大间距 | 4 |
| 17 | 图像压缩因子 |  | 70 | 压缩因子70% | 2 |
| 18 | 帧尾 | unsigned char | 0xEE55 | 表示帧的结束 | 2 |
| 总计 |  |  |  |  | 100 |

typedefstruct HEARTBEATSENDPACKET

{

Uint8 Frame\_Head[2];

Uint8 MAC\_ID[24];

Uint8 real\_time[24];

Uint8 Coordinate[30];

Uint8 camera\_status;

Uint8 gps\_status;

Uint8 Frame\_end;

}HEARTBEATSENDPACKET;

**三、返回帧协议**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **序号** | **项目** | **类型** | **例子** | **注释** | **字节数** |
| 1 | 帧头 | unsigned char | 0xAA55 | 表示帧的开始 | 2 |
| 2 | Cmd | unsigned char |  | 0: 抓拍控制  1：参数 | 1 |
| 3 | 工作模式 | unsigned char | 0 | 0:自动  1:手动  2:远程 | 1 |
| 4 | 服务器IP | unsigned char | 192.168.020.196 |  | 15 |
| 5 | 设备IP | unsigned char | 010.009.123.040 |  | 15 |
| 6 | 心跳包间隔 | unsigned char | 05 | 间隔5秒 | 2 |
| 7 | 上传张数、 | unsigned char | 4 | 上传4张 | 1 |
| 8 | 车辆跟踪张数 | unsigned char | 4 | 连续跟踪4张 | 1 |
| 9 | 车距预设范围 | unsigned char | 0815 | 08:最小间距  15:最大间距 | 4 |
| 10 | 图像压缩因子 | unsigned char | 70 | 压缩因子70% | 2 |
| 11 | 是否在专用道、 | unsigned char |  | 0：不在  1：在 | 1 |
| 12 | 是否在有效时段内 | unsigned char |  | 0：不在  1：在 | 1 |
| 13 | 帧尾 | unsigned char | 0xEE55 | 表示帧的结束 | 2 |
| 总计 |  |  |  |  | 48 |