Foream Wireless Remote Control API

Version 1.0.1

March 9, 2016
1. System Command:

1.1  AMBA_GET_DEVICEINFO

Message ID:  msg_id: 0x0000000b(11)

API Overview:

Description:  This API is used to retrieve information related to the camera device itself, such as the model name, serial number and firmware version.
Direction:  From the APP to the camera.

Example:

Arguments:
{"token": TokenNumber, "msg_id":11}
Successful return:
{"rval":0,"msg_id":11,"param":{"model":"Compass","fw_ver":"Ver3.0.2.5","serial_number":"86DIGLLJONK4HP86"}}

1.2  AMBA_GET_DEVICE_STATUS

Message ID:  msg_id: 0x00000011(17)

API Overview:

Description:  This API is used to retrieve current status related to the camera device itself, such as the recording status, capture mode etc..
Direction:  From the APP to the camera.

Example:

Arguments:
{"token": TokenNumber, "msg_id":17}
Successful return:
{"rval":0,"msg_id":17,"param":{"vres":0,"pres":0,"adapter":1,"battery":0,"available":4528352,"capacity":7753728,"rec_timelapse":0,"rec_status":0,"capture_mode":0}}
1.3 AMBA_GET_ALL_CURRENT_SETTINGS

Message ID: msg_id: 0x00000003(3)

API Overview:

Description: This API is used to retrieve all settings related to the camera device itself, such as the video resolution, photo size etc.
Direction: From the APP to the camera.

Example:

Arguments:
{"token": TokenNumber, "msg_id":3}

Successful return:
{ "rval":0, "msg_id": 3, "param": [ { "stream_out_type": "tcp" }, { "video_resolution": "1" }, { "photo_size": "0" }, { "timelapse_interval": "0" }, { "timelapse_mode": "6" }, { "key_sensitivity": "1" }, { "led": "0" }, { "ap_auto_start": "0" }, { "camera_auto_off": "1" }, { "ap_password": "0987654321" } ] }

1.4 AMBA_SET_SETTING

Message ID: msg_id: 0x00000002(2)

API Overview:

Description: This API is used to set the single setting related to the camera device itself, such as the video resolution, photo size etc.
Direction: From the APP to the camera.

Example:

Arguments:
{"msg_id": 2, "param": "1","token": TokenNumber,"type": "video_resolution"}
{"msg_id": 2, "param": "1234567890","token": 1,"type": "ap_password"}

Successful return:
{ "rval":0, "msg_id": 2 , "param": "1"}
{ "rval":0, "msg_id": 2 , "param": "1234567890"}
1.5 AMBA_FORMAT

Message ID: msg_id: 0x00000004(4)

API Overview:

Description: This API is used to format the camera SD card.
Direction: From the APP to the camera.

Example:

Arguments:
{"msg_id":4,"param": "D:","token":1}

Successful return:
{"rval":0,"msg_id":4}

1.6 AMBA_NOTIFICATION

Message ID: msg_id: 0x00000007(7)

API Overview:

Description: Notifications are send from the camera to the APP to notify it of events, such as manual button presses and task completions.
Direction: From the camera to APP

Notification List:

- **start_video_record**: start record button pressed
- **stop_video_record**: stop record button pressed
- **start_photo_capture**: photo capture button pressed
- **start_photo_timelapse**: start photo timelapse button pressed
- **start_video_timelapse**: start video timelapse button pressed

Example:

```
{ "msg_id": 7, "type": "start_photo_capture" }
```

- **switch_to_rec_mode**: mode button pressed and switch to record mode
- **switch_to_cap_mode**: mode button pressed and switch to capture mode
- **switch_to_video_timelapse_mode**: mode button pressed and switch to video timelapse mode
- **switch_to_photo_timelapse_mode**: mode button pressed and switch to photo timelapse mode

Example:

```
{ "msg_id": 7, "type": "switch_to_cap_mode" }
```
**photo_taken:** complete photo taken and return the photo path and the free space
Example: {
    "msg_id": 7, "type": "photo_taken", "param": {
        "path": "/tmp/fuse_d/DCIM/100MEDIA/IMGN0033.jpg", "available": 4526816
    }
}

**video_record_complete:** complete recording and return the video path and the free space
Example: {
    "msg_id": 7, "type": "video_record_complete", "param": {
        "path": "/tmp/fuse_d/DCIM/100MEDIA/IMGN0033.jpg", "available": 4526816
    }
}

**battery:** battery changed, and return the battery value
Example: {
    "msg_id": 7, "type": "battery", "param": 40
}

**adapter:** USB cable connected
Example: {
    "msg_id": 7, "type": "adapter", "param": 0
}

**sd card status:** card inserted or removed
Example: {
    "msg_id": 7, "type": "sd_card_status", "param": "remove"
}
    {
        "msg_id": 7, "type": "sd_card_status", "param": "insert"
    }

**Error notification:**
STORAGE_RUNOUT
STORAGE_IO_ERROR
LOW_SPEED_CARD
CARD_REMOVED

### 1.7 AMBA_SWITCH_RECORD_MODE

**Message ID:** msg_id: 0x0000012(18)

**API Overview:**

**Description:** This API is used to switch the capture mode to record mode.

**Direction:** From the APP to the camera.

**Example:**

**Arguments:**
{"msg_id": 18,"token" : 1}

**Successful return:**
{"rval":0,"msg_id": 18}
1.8 AMBA_SWITCH_SINGLE_PHOTO_MODE

Message ID:  msg_id: 0x0000013(19)

API Overview:

Description: This API is used to switch the capture mode to single photo mode.
Direction: From the APP to the camera.

Example:

Arguments:
{"msg_id":19,"token":1} 

Successful return:
{"rval":0,"msg_id":19} 

1.9 AMBA_SWITCH_PHOTO_TIMELAPSE_MODE

Message ID:  msg_id: 0x0000014(20)

API Overview:

Description: This API is used to switch the capture mode to photo timelapse mode.
Direction: From the APP to the camera.

Example:

Arguments:
{"msg_id":20,"token":1} 

Successful return:
{"rval":0,"msg_id":20} 

2.0 AMBA_SWITCH_VIDEO_TIMELAPSE_MODE

Message ID:  msg_id: 0x0000015(21)

API Overview:
Description:  This API is used to switch the capture mode to photo timelapse mode.
Direction:  From the APP to the camera.

Example:

Arguments:
{"msg_id": 21,"token": 1}

Successful return:
{"rval":0,"msg_id":21}

2.1  AMBA_RECORD_START

Message ID:  msg_id: 0x00000201(513)

API Overview:

Description:  This API is used to initiate camera video recording.
Direction:  From the APP to the camera.

Example:

Arguments:
{"msg_id": 513,"token": 1}

Successful return:
{"rval":0,"msg_id":518}

2.2  AMBA_RECORD_STOP

Message ID:  msg_id: 0x00000202(514)

API Overview:

Description:  This API is used to terminate camera video recording on the camera.
Direction:  From the APP to the camera.

Example:

Arguments:
2.3 AMBA_TAKE_PHOTO

Message ID: msg_id: 0x000000301(769)

API Overview:

Description: This API is used to capture a still image.
Direction: From the APP to the camera.

Example:

Arguments: 
{"msg_id": 769,"token": 1}

Successful return: 
{"rval":0,"msg_id":769}

2.4 AMBA_RTSP_START

Message ID: msg_id: 0x00000016(22)

API Overview:

Description: This API is used to start the rtsp streaming.
Direction: From the APP to the camera.

Example:

Arguments: 
{"msg_id": 22,"token": 1}

Successful return: 
{"rval":0,"msg_id":22}
2.5 AMBA_RTSP_STOP

Message ID:  msg_id: 0x00000017(23)

API Overview:

Description:  This API is used to stop streaming.
Direction:  From the APP to the camera.

Example:

Arguments:
{"msg_id": 23,"token": 1}

Successful return:
{"rval": 0,"msg_id": 23}

2.6 AMBA_NAS_START

Message ID:  msg_id: 0x00000018(24)

API Overview:

Description:  This API is used to start nas uploading.
Direction:  From the APP to the camera.

Example:

Arguments:
{"msg_id": 23,"token": 1}

Successful return:
{"rval": 0,"msg_id": 23}

2.7 AMBA_NAS_STOP

Message ID:  msg_id: 0x00000019(25)

API Overview:

Description:  This API is used to stop nas uploading.
Direction:  From the APP to the camera.

Example:

Arguments:
{"msg_id": 24,"token": 1}

Successful return:
{"rval":0,"msg_id":24}