

# SDK Interface Description

### AirController

This class will bind to air control service to provides control channel. It's the base class for other classes to work correctly.

#### AirController

public AirController(android.content.Context context, [AirControlListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/AirControlListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of AirController

**Parameters:**

context - the context of the application or activity

listener - the listener to receive information

### *Method Detail*

#### getUartCount

public int getUartCount()

This method returns the count of Uart ports in air board.

**Returns:**

the count of Uart ports in air board.

#### getVideoStreamCount

public int getVideoStreamCount()

This method returns the count of video streams in air board.

**Returns:**

the count of video streams in air board.

#### start

public void start()

This method will bind to air control service and then other methods can be called to get information or start request.

#### stop

public void stop()

This method will unbind to air control service to free the connection. It should be called when the AirController is no more needed.

### DataStream

This class is responsible to send and receive data from Uart on air board. It provides methods to send/receive data, get/set Uart baudrate etc.

#### DataStream

public DataStream([AirController](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/AirController.html" \o "class in com.fishsemi.sdk.aircontrol) airController, int uartId, [DataStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/DataStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of DataStream. Use this constructor if get/set Uart baudrate is needed.

**Parameters:**

airController - the air controller to communicate with air board

uartId - the Uart ID of air board for this Data stream to send/receive data. From 1 to the count of Uart on air board

listener - the listener to receive data and information

#### DataStream

public DataStream([DataStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/DataStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of DataStream. There is no Uart ID specified, so will use the default

**Parameters:**

listener - the listener to receive data and information

#### DataStream

public DataStream(int uartId, [DataStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/DataStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of DataStream

**Parameters:**

uartId - the Uart ID of air board for this Data stream to send/receive data. From 1 to the count of Uart on air board

listener - the listener to receive data and information

### *Method Detail*

#### getUartBaudrate

public int getUartBaudrate()

This method returns the baudrate of the request Uart ID in air board.

**Returns:**

the baudrate of the Uart ID.

#### getUartId

public int getUartId()

This method returns the Uart ID.

**Returns:**

the Uart ID.

#### sendData

public int sendData(byte[] data, int length)

This method send data to the Uart on air board.

**Returns:**

the length of sent data.

#### setAirController

public void setAirController([AirController](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/AirController.html" \o "class in com.fishsemi.sdk.aircontrol) airController)

This method sets air controller to enable control channel

**Parameters:**

airController - the air controller to communicate with air board

#### setUartBaudrate

public [Types.RetValue](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/Types.RetValue.html" \o "enum in com.fishsemi.sdk.aircontrol) setUartBaudrate(int baudrate)

This method is async request method, to start a request to set the baudrate of the requested Uart ID.

**Parameters:**

baudrate - the baudrate to be set

**Returns:**

whether the async request is accepted or not, and the failure reason

#### setUartId

public void setUartId(int id)

This method sets the Uart ID. If the original Uart is connected, it will disconnect old Uart and connect to the new one.

#### start

public void start()

This method will connect to Uart on air board, and then sending/receiving data will work.

#### stop

public void stop()

This method will disconnect with Uart on air board, and stop sending/receiving data.

### VideoStream

This class is responsible to connect and display video stream of camera system on air board. It provides methods to set video steam id, video stream url and play/stop the video stream etc. Currently only RTSP video stream can work normally.

#### VideoStream

public VideoStream([AirController](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/AirController.html" \o "class in com.fishsemi.sdk.aircontrol) airController, int streamId, [VideoStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/VideoStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of VideoStream

**Parameters:**

airController - the air controller

streamId - the video stream id to connect, from 1 to the count of video streams

listener - the listener to receive information and result of async request

#### VideoStream

public VideoStream([AirController](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/AirController.html" \o "class in com.fishsemi.sdk.aircontrol) airController, [VideoStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/VideoStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of VideoStream

**Parameters:**

airController - the air controller

listener - the listener to receive information and result of async request

#### VideoStream

public VideoStream(android.content.Context context, String streamUrl, [VideoStreamListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/aircontrol/../../../../com/fishsemi/sdk/aircontrol/VideoStreamListener.html" \o "interface in com.fishsemi.sdk.aircontrol) listener)

The constructor of VideoStream

**Parameters:**

context - the context of application

streamUrl - the video stream url

listener - the listener to receive information and result of async request

### *Method Detail*

#### getStreamId

public int getStreamId()

This method returns the video stream id.

**Returns:**

the video stream id.

#### getStreamUrl

public java.lang.String getStreamUrl()

This method returns the url of the video stream.

**Returns:**

the url of the video stream.

#### isPlaying

public boolean isPlaying()

This method returns whether the video stream is playing.

**Returns:**

whether the video stream is playing.

#### play

public void play()

This method will start to play the video stream.

#### setStreamId

public void setStreamId(int id)

This method will set the video stream id. Notice, if there is video stream url set, the old video stream url will be ignored.

**Parameters:**

id - the video stream id.

#### setStreamUrl

public void setStreamUrl(java.lang.String url)

This method will set the url of the video stream. Notice, if there is video stream id set, the old video stream id will be ignored.

**Parameters:**

url - the url of the video stream.

#### setSurface

public void setSurface(android.view.Surface surface)

This method will set the surface to display the video stream.

**Parameters:**

surface - the surface to display the video stream.

#### stop

public void stop()

This method will stop to play the video stream.

## RcService

This class will bind to rc service to provides interfaces to communicate with rc service, including configuring and getting rc channel values

#### RcService

public RcService(android.content.Context context, [RcListener](H:/WXWork/1688852581542726/Cache/File/2020-11/sdk-release-v1.1/sdk-release-v1.1/Docs/Docs/com/fishsemi/sdk/rcservice/../../../../com/fishsemi/sdk/rcservice/RcListener.html" \o "interface in com.fishsemi.sdk.rcservice) listener)

The constructor of AirController

**Parameters:**

context - the context of the application or activity

listener - the listener to receive information

### *Method Detail*

#### getJoystickMode

public int getJoystickMode()

This method returns the current operation mode of joysticks.

**Returns:**

the current operation mode of joysticks. i.e. Japanese hand or American hand.

#### setJoystickMode

public boolean setJoystickMode(int mode)

This method will set the operation mode of joysticks.

**Parameters:**

mode - the operation mode of joysticks. Japanese hand or American hand.

#### start

public void start()

This method will bind to rc service and then other methods can be called.

#### stop

public void stop()

This method will unbind to rc service to free the connection. It should be called when the RcService is no more needed.