



# Agora iOS SDK Reference

[support@agoravoice.io](mailto:support@agoravoice.io)

## Contents

Required Libraries.....	3
Function Reference .....	3
Initialization .....	3
Join Channel.....	4
Leave Channel .....	5
Mute.....	5
Set Speakers .....	5

## Required Libraries

iOS 6.0 SDK or a newer version iOS SDK is required. Main project should link with these libraries in the SDK.

- AudioToolbox.framework
- AVFoundation.framework
- CoreTelephony.framework
- SystemConfiguration.framework
- libc++.dylib

## Function Reference

These are the functions available to the user:

Name	Description
Initialization	Initialize AgoraAudioKit class. Also provide call quality information.
Join Channel	Join a channel, meaning join a call.
Leave Channel	Leave a channel, meaning leave a call.
Mute	Mute the client itself by calling mute (true) to mute the microphone and mute (false) to turn it back on.
Set Speakers	Switch between speaker and earpiece.

## Initialization

**(id)initWithQuality:(void(^)(NSUInteger uid, NSUInteger delay, NSUInteger jitter, NSUInteger lost, NSUInteger lost2))qualityBlock**

**error:(void(^)(AgoraAudioErrorCode errorCode))errorBlock;**

This initializes the AgoraAudioKit class. qualityBlock also acts as a callback function. It is called every three seconds for every caller on the call (channel) providing call quality information.

initWithQuality function	
Argument	Description
<b>qualityblock</b>	
uid	User ID, i.e. the caller. This is created for the user if set to 0.
delay	Voice delay in ms.

jitter	Jitter means variation in the delay of received packets due to network congestion or queuing issues.
lost	Packet loss ratio.
lost2	Number of times 2 packets were lost,
<b>errorBlock</b>	
errorCode	See table below.

<b>AgoraAudioErrorCode</b>	<b>Description</b>
AgoraAudio_NoError = 0	No error, i.e., success.
AgoraAudio_GetAudioAddrFailed	Error code received when requesting voice server list.
AgoraAudio_GetAudioAddrZeroAddr	The Voice Center Server (acts as a gateway, like DNS) responded that there is no voice server available.
AgoraAudio_LoginMediaFailed	Failed to login Voice sever, server ACKed with error code.
AgoraAudio_LoadAudioEngineError	Failed to initialize audio engine.
AgoraAudio_StartCallError	Failed to start audio engine. Typically this is caused because the audio device is in use by another app.
AgoraAudio_LoginMediaTimeout	Login Voice server timeout.
AgoraAudio_RegetAudioAddr	The Voice Center Server (acts as a gateway, like DNS) tried all available voice servers but none is able to handle this call.

## Join Channel

```
- (void)joinChannelByKey:(NSString *)vendorKey
    channelName:(NSString *)channelName
        info:(NSString *)info
        uid:(NSUInteger)uid
    success:(void (^)(NSUInteger sid, NSUInteger uid))successBlock;
```

This method lets users join a channel. Think of that as a chat room, except that it is a multi-party phone call. This method is asynchronous, so it can be called on the main UI thread.

Name	Description
vendorKey	Account credentials issued by Agora Voice to app developer, i.e., a user license.
channelName	Channel name. Any descriptive name like “game1” or “call2”.
info	Optional. Whatever additional information the programmer wants to add.
uid	Optional. User id. If you do not set one the SDK supplies one.
successBlock (NSUInteger sid, NSUInteger uid)	sid is the integer representation of channel name uid is the user ID (i.e. caller). If not supplied the SDK will generate one.

### Leave Channel

Leave channel or hang up.

- **(void)leaveChannel;**

### Mute

Turn off microphone

- **(void)setMute:(BOOL)shouldMute;**

Name	Description
shouldMute	True to mute the call. False to unmute.

### Set Speakers

Turn off microphone

**(void)setEnableSpeaker:(BOOL)enableSpeaker;**

Name	Description
------	-------------

enableSpeaker	False means output audio to earphone. True means output audio to speaker.
---------------	--