Video Player Library Reference

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PlayStation®Vita Programmer Tool Runtime Library Release 3.50

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Datatypes

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SceAvPlayerAudio

Contains the details of an audio stream.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerAudio {
   uint16_t channelCount;
   uint8_t reserved1[2];
   uint32_t sampleRate;
   uint32_t size;
   uint8_t languageCode[4];
} SceAvPlayerAudio;
```

Members

channelCount	The number of audio channels.
reserved1	A reserved value.
sampleRate	The audio sampling rate in Hz.
size	The size of the audio payload.
languageCode	The audio language code.

Description

Contains the details of an audio stream.

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SceAvPlayerAudioEx

Contains the details of an audio stream.

Definition

```
#include <sceavplayer_ex.h>
typedef struct SceAvPlayerAudioEx {
   uint16_t channelCount;
   uint8_t reserved[2];
   uint32_t sampleRate;
   uint32_t size;
   uint8_t languageCode[4];
   uint8_t reserved1[64];
} SceAvPlayerAudioEx;
```

Members

channelCount	The number of audio channels.
reserved	A reserved value.
sampleRate	The audio sampling rate in Hz.
size	The size of the audio payload.
languageCode	The audio language code.
reserved1	A reserved value.

Description

Contains the details of an audio stream.

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SceAvPlayerDebuglevels

Represents debug levels.

Definition

```
#include <sceavplayer.h>
typedef enum SceAvPlayerDebuglevels {
    SCE_AVPLAYER_DBG_NONE,
    SCE_AVPLAYER_DBG_INFO,
    SCE_AVPLAYER_DBG_WARNINGS,
    SCE_AVPLAYER_DBG_ALL
} SceAvPlayerDebuglevels;
```

Enumeration Values

Macro	Description
SCE_AVPLAYER_DBG_NONE	No debug information output to the console.
SCE_AVPLAYER_DBG_INFO	Stream information output to the console. This is useful for discovering why streams are behaving differently.
SCE_AVPLAYER_DBG_WARNINGS	Warnings output to the console.
SCE_AVPLAYER_DBG_ALL	All available information output to the console.

Description

Represents debug levels. Note that debug information is output to the console as text and that error checking is always available through the return values of all video player library calls.

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SceAvPlayerErrorCodes

Contains AV Player synchronous and asynchronous errors as well as warning codes.

Definition

```
#include <sceavplayer.h>
typedef enum SceAvPlayerErrorCodes {
    SCE_AVPLAYER_NO_ERR = 0x00,
    SCE_AVPLAYER_ERR_INVALID_PARAMS = 0x806A0001,
    SCE_AVPLAYER_ERR_OPERATION_FAILED = 0x806A0002,
    SCE_AVPLAYER_ERR_NO_MEMORY = 0x806A0003,
    SCE_AVPLAYER_ERR_NOT_SUPPORTED = 0x806A0004,
    SCE_AVPLAYER_WAR_FILE_NONINTERLEAVED = 0x806A00A0,
    SCE_AVPLAYER_WAR_LOOPING_BACK = 0x806A00A1,
    SCE_AVPLAYER_WAR_JUMP_COMPLETE = 0x806A00A3,
    SCE_AVPLAYER_INFO_MARLIN_ENCRY = 0x806A00B0,
    SCE_AVPLAYER_INFO_PLAYREADY_ENCRY = 0x806A00B4,
    SCE_AVPLAYER_INFO_AES_ENCRY = 0x806A00B5,
    SCE_AVPLAYER_INFO_OTHER_ENCRY = 0x806A00BF
} SceAvPlayerErrorCodes;
```

Enumeration Values

Macro	Value	Description
SCE_AVPLAYER_NO_ERR	0x00	No error occurred.
SCE_AVPLAYER_ERR_INVALID_PARAMS	0x806A0001	An error occurred because invalid parameters were passed via the API.
SCE_AVPLAYER_ERR_OPERATION_FAILED	0x806A0002	An error occurred because the desired operation failed.
SCE_AVPLAYER_ERR_NO_MEMORY	0x806A0003	An error occurred because there was not enough memory to continue.
SCE_AVPLAYER_ERR_NOT_SUPPORTED	0x806A0004	An error occurred because the content was unsupported.
SCE_AVPLAYER_WAR_FILE_NONINTERLEAVED	0x806A00A0	Warning: The file is non-interleaved.
SCE_AVPLAYER_WAR_LOOPING_BACK	0x806A00A1	Warning: The file got looped back.
SCE_AVPLAYER_WAR_JUMP_COMPLETE	0x806A00A3	Warning: The jump operation was completed.
SCE_AVPLAYER_INFO_MARLIN_ENCRY	0x806A00B0	Marlin Drm is required for this content.
SCE_AVPLAYER_INFO_PLAYREADY_ENCRY	0x806A00B4	Playready Drm is required for this content.
SCE_AVPLAYER_INFO_AES_ENCRY	0x806A00B5	AES-128 bit encryption is used for this content.
SCE_AVPLAYER_INFO_OTHER_ENCRY	0x806A00BF	Other encryptions are used for this content.

Description

Contains AV Player synchronous and asynchronous errors as well as warning codes.

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SceAvPlayerEventReplacement

Contains the event callback function pointer for the `libsceAvPlayer` API.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerEventReplacement {
    void *objectPointer;
    SceAvPlayerEventCallback eventCallback;
} SceAvPlayerEventReplacement;
```

Members

objectPointer	Optional pointer to a calling object. This pointer is returned with *eventCallback* calls as `p`. This helps with C++ integration.
eventCallback	The event callback.

Description

Contains the event callback function pointer for the `libsceAvPlayer` API.

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SceAvPlayerEvents

Contains representations of the player events, warnings and info.

Definition

```
#include <sceavplayer.h>
typedef enum SceAvPlayerEvents {
    SCE_AVPLAYER_STATE_STOP = 0x01,
    SCE_AVPLAYER_STATE_READY = 0x02,
    SCE_AVPLAYER_STATE_PLAY = 0x03,
    SCE_AVPLAYER_STATE_PAUSE = 0x04,
    SCE_AVPLAYER_STATE_BUFFERING = 0x05,
    SCE_AVPLAYER_TIMED_TEXT_DELIVERY = 0x10,
    SCE_AVPLAYER_WARNING_ID = 0x20,
    SCE_AVPLAYER_ENCRYPTION = 0x30
} SceAvPlayerEvents;
```

Enumeration Values

Macro	Value	Description
SCE_AVPLAYER_STATE_STOP	0x01	Stop state.
SCE_AVPLAYER_STATE_READY	0x02	Ready state.
SCE_AVPLAYER_STATE_PLAY	0x03	Play state.
SCE_AVPLAYER_STATE_PAUSE	0x04	Pause State.
SCE_AVPLAYER_STATE_BUFFERING	0x05	Buffering state.
SCE_AVPLAYER_TIMED_TEXT_DELIVERY	0x10	Timed text delivery event.
SCE_AVPLAYER_WARNING_ID	0x20	Warning ID returned.
SCE_AVPLAYER_ENCRYPTION	0x30	Encryption information returned.

Description

Contains representations of the player events, warnings and info.

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SceAvPlayerFileReplacement

Contains the file access function pointers for the `libsceAvPlayer` API.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerFileReplacement {
    void *objectPointer;
    SceAvPlayerOpenFile open;
    SceAvPlayerCloseFile close;
    SceAvPlayerReadOffsetFile readOffset;
    SceAvPlayerSizeFile size;
} SceAvPlayerFileReplacement;
```

Members

objectPointer	Optional pointer to a calling object. This pointer is returned with all of the below callback calls as *argP*. This helps with C++ integration.
open	The replacement file open function.
close	The replacement file close function.
readOffset	The replacement file read with offset function.
size	The replacement file size retrieval function.

Description

Contains the file access function pointers for the `libsceAvPlayer` API.

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SceAvPlayerFrameInfo

Contains frame information.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerFrameInfo {
   uint8_t *pData;
   uint8_t reserved[4];
   uint64_t timeStamp;
   SceAvPlayerStreamDetails details;
} SceAvPlayerFrameInfo;
```

Members

pData	A pointer to the payload data for the frame.
reserved	A reserved value.
timeStamp	The timestamp in ms.
details	The frame details.

Description

Contains frame information.

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SceAvPlayerFrameInfoEx

Contains extended frame information.

Definition

```
#include <sceavplayer_ex.h>
typedef struct SceAvPlayerFrameInfoEx {
    void *pData;
    uint8_t reserved[4];
    uint64_t timeStamp;
    SceAvPlayerStreamDetailsEx details;
} SceAvPlayerFrameInfoEx;
```

Members

pData	A pointer to the payload data for the frame.
reserved	A reserved value.
timeStamp	The timestamp in ms.
details	The frame details.

Description

Contains extended frame information.

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SceAvPlayerHandle

The player handle definition.

Definition

```
#include <sceavplayer.h>
typedef void *SceAvPlayerHandle;
```

Description

The player handle definition.

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SceAvPlayerInitData

The initialization parameters.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerInitData {
    SceAvPlayerMemAllocator memoryReplacement;
    SceAvPlayerFileReplacement fileReplacement;
    SceAvPlayerEventReplacement eventReplacement;
    SceAvPlayerDebuglevels debugLevel;
    uint32_t basePriority;
    int32_t numOutputVideoFrameBuffers;
    bool autoStart;
    uint8_t reserved[3];
    const char *defaultLanguage;
} SceAvPlayerInitData;
```

Members

memoryReplacement The allocator instance for general allocations and, if they are not provided, backup for video and codec allocators.

fileReplacement The replacement file access calls. These are useful if your file is packed or encrypted and you want to handle the file IO yourself.

eventReplacement The event callback for state changes, warnings and errors.

debugLevel The debug level.

basePriority The base priority of the video player. Adjust this if the video player thread conflicts with a game thread. A default value of 160 is used if 0 is supplied.

numOutputVideoFrameBuffers Enables AV sync latency to be fine tuned to match complicated display lists. Values from 2 to 6 are valid; values outside of this range default to 2.

autoStart A flag that specifies whether to rely on the callback to start playback or not.

reserved A reserved value.

defaultLanguage The default language. If a default language is supplied, this will start automatically when `autostart` is set to true.

Description

The initialization parameters. Note that additional parameters may be added in future releases of this library.

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SceAvPlayerMemAllocator

Contains the memory allocator function pointers for the `libsceAvPlayer` API.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerMemAllocator {
    void *objectPointer;
    SceAvPlayerAllocate allocate;
    SceAvPlayerDeallocate deallocate;
    SceAvPlayerAllocateTexture allocateTexture;
    SceAvPlayerDeallocateTexture deallocateTexture;
} SceAvPlayerMemAllocator;
```

Members

objectPointer	Optional pointer to a calling object. This pointer is returned with all of the below callback calls as *argP*. This helps with C++ integration.
allocate	The replacement general memory allocator.
deallocate	The replacement general memory deallocator.
allocateTexture	The replacement graphics memory allocator and map.
deallocateTexture	The replacement graphics memory deallocator and unmap.

Description

Contains the memory allocator function pointers for the `libsceAvPlayer` API.

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SceAvPlayerPostInitData

The advanced initialization parameters.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerPostInitData {
   uint32_t demuxVideoBufferSize;
   uint8_t reserved[128];
} SceAvPlayerPostInitData;
```

Members

demuxVideoBufferSize The size of the demux video buffer in bytes. This defaults to 512*1024. If audio/video playback is jittery, the size of the buffer should be increased beyond the default.

reserved A reserved value. Ensure this is filled with 0 to avoid conflict with future parameters.

Description

The advanced initialization parameters. Note that additional parameters may be added in future releases of this library.

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SceAvPlayerStreamDetails

Contains the details (either audio, video or timed text) of a stream.

Definition

```
#include <sceavplayer.h>
typedef union SceAvPlayerStreamDetails {
    uint8_t reserved[16];
    SceAvPlayerAudio audio;
    SceAvPlayerVideo video;
    SceAvPlayerTimedText subs;
} SceAvPlayerStreamDetails;
```

Members

reserved	An array of reserved bytes.
audio	Audio details.
video	Video details.
subs	Timed text details.

Description

Contains the details (either audio, video or timed text) of a stream.

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SceAvPlayerStreamDetailsEx

Contains the details (either audio, video or timed text) of a stream.

Definition

```
#include <sceavplayer_ex.h>
typedef union SceAvPlayerStreamDetailsEx {
    SceAvPlayerAudioEx audio;
    SceAvPlayerVideoEx video;
    SceAvPlayerTimedTextEx subs;
    uint8_t reserved1[80];
} SceAvPlayerStreamDetailsEx;
```

Members

audio	The audio details.
video	The video details.
subs	The timed text details.
reserved1	A reserved value.

Description

Contains the details (either audio, video or timed text) of a stream.

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SceAvPlayerStreamInfo

Contains information about a stream.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerStreamInfo {
   uint32_t type;
   uint8_t reserved[4];
   SceAvPlayerStreamDetails details;
   uint64_t duration;
   uint64_t startTime;
} SceAvPlayerStreamInfo;
```

Members

type	The stream type.
reserved	A reserved value.
details	The details of the stream, which depend upon whether it is an audio or a video stream.
duration	The length of the stream in ms.
startTime	The start time of the stream in ms.

Description

Contains information about a stream.

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SceAvPlayerStreamType

The stream types.

Definition

```
#include <sceavplayer.h>
typedef enum SceAvPlayerStreamType {
   SCE_AVPLAYER_VIDEO,
   SCE_AVPLAYER_AUDIO,
   SCE_AVPLAYER_TIMEDTEXT,
   SCE_AVPLAYER_UNKNOWN
} SceAvPlayerStreamType;
```

Enumeration Values

Macro	Description
SCE_AVPLAYER_VIDEO	The video stream type.
SCE_AVPLAYER_AUDIO	The audio stream type.
SCE_AVPLAYER_TIMEDTEXT	The timed text stream type.
SCE_AVPLAYER_UNKNOWN	An unknown stream type.

Description

The stream types.

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SceAvPlayerTextPosition

Contains the positioning of some timed text.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerTextPosition {
   uint16_t top;
   uint16_t left;
   uint16_t bottom;
   uint16_t right;
} SceAvPlayerTextPosition;
```

Members

top	The top of the rectangle containing the timed text.
left	The left of the rectangle containing the timed text.
bottom	The bottom of the rectangle containing the timed text.
right	The right of the rectangle containing the timed text.

Description

Contains the positioning of some timed text.

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SceAvPlayerTimedText

Contains the details of a timed text stream.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerTimedText {
   uint8_t languageCode[4];
   uint16_t textSize;
   uint16_t fontSize;
   SceAvPlayerTextPosition position;
} SceAvPlayerTimedText;
```

Members

languageCode	The language code.
textSize	The size of the timed text.
fontSize	The size of the timed text font.
position	The position of the timed text.

Description

Contains the details of a timed text stream. The stream details.

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SceAvPlayerTimedTextEx

Contains the details of a timed text stream.

Definition

```
#include <sceavplayer_ex.h>
typedef struct SceAvPlayerTimedTextEx {
   uint8_t languageCode[4];
   uint8_t reserved[12];
   uint8_t reserved1[64];
} SceAvPlayerTimedTextEx;
```

Members

languageCode	The language code.
reserved	A reserved value.
reserved1	A reserved value.

Description

Contains the details of a timed text stream.

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SceAvPlayerTrickSpeeds

Contains all the possible playback speeds.

Definition

```
#include <sceavplayer.h>
typedef enum SceAvPlayerTrickSpeeds {
    SCE_AVPLAYER_SPEED_NORMAL = 100,
    SCE_AVPLAYER_SPEED_FF_2X = 200,
    SCE_AVPLAYER_SPEED_FF_4X = 400,
    SCE_AVPLAYER_SPEED_FF_8X = 800,
    SCE_AVPLAYER_SPEED_FF_16X = 1600,
    SCE_AVPLAYER_SPEED_FF_MAX = 3200,
    SCE_AVPLAYER_SPEED_RW_8X = -800,
    SCE_AVPLAYER_SPEED_RW_16X = -1600,
    SCE_AVPLAYER_SPEED_RW_MAX = -3200
} SceAvPlayerTrickSpeeds;
```

Enumeration Values

Macro	Value	Description
`SCE_AVPLAYER_SPEED_NORMAL`	`100`	Normal playback speed.
`SCE_AVPLAYER_SPEED_FF_2X`	`200`	2X fast forward. Because only key/“i” frames are displayed, 2X should only be used when the key frame interval is small.
`SCE_AVPLAYER_SPEED_FF_4X`	`400`	4X fast forward. Because only key/“i” frames are displayed, 4X should only be used when the key frame interval is small.
`SCE_AVPLAYER_SPEED_FF_8X`	`800`	8X fast forward. Above 8X is generally a good user experience.
`SCE_AVPLAYER_SPEED_FF_16X`	`1600`	16X fast forward.
`SCE_AVPLAYER_SPEED_FF_MAX`	`3200`	32X fast forward. Faster is possible. This is only a recommendation.
`SCE_AVPLAYER_SPEED_RW_8X`	`-800`	8X rewind. Because only key/“i” frames are displayed, rewind speeds below 8X are not recommended.
`SCE_AVPLAYER_SPEED_RW_16X`	`-1600`	16X rewind.
`SCE_AVPLAYER_SPEED_RW_MAX`	`-3200`	32X rewind. Faster is possible. This is only a recommendation.

Description

Contains all the possible playback speeds.

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SceAvPlayerVideo

Contains the details of a video stream.

Definition

```
#include <sceavplayer.h>
typedef struct SceAvPlayerVideo {
   uint32_t width;
   uint32_t height;
   float aspectRatio;
   uint8_t languageCode[4];
} SceAvPlayerVideo;
```

Members

width	The default width of the video.
height	The default height of the video.
aspectRatio	The default aspect ratio of the video.
languageCode	The video language code.

Description

Contains the details of a video stream.

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SceAvPlayerVideoEx

Contains the details of a video stream.

Definition

```
#include <sceavplayer_ex.h>
typedef struct SceAvPlayerVideoEx {
   uint32_t width;
   uint32_t height;
   float aspectRatio;
   uint8_t languageCode[4];
   uint32_t framerate;
   uint32_t cropLeftOffset;
   uint32_t cropRightOffset;
   uint32_t cropTopOffset;
   uint32_t cropBottomOffset;
   uint8_t reserved1[44];
} SceAvPlayerVideoEx;
```

Members

width	The default width of the video.
height	The default height of the video.
aspectRatio	The default aspect ratio of the video.
languageCode	The video language code.
framerate	The video framerate.
cropLeftOffset	The crop width.
cropRightOffset	The crop height.
cropTopOffset	The crop top offset.
cropBottomOffset	The crop bottom offset.
reserved1	A reserved value.

Description

Contains the details of a video stream.

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Functions

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sceAvPlayerAddSource

Adds a source file to the end of the video player playback queue.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerAddSource(
    SceAvPlayerHandle h,
    const char *argFilename
);
```

Arguments

[in] *h*	The video player handle.
[in] *argFilename*	A pointer to the source video filename, which should include the full path.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Adds a source file to the end of the video player playback queue.

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sceAvPlayerClose

Closes the `libsceAvPlayer` API and frees any outstanding memory allocations.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerClose(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h* The video player handle.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Closes the `libsceAvPlayer` API and frees any outstanding memory allocations.

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sceAvPlayerCurrentTime

Retrieves the current playback time.

Definition

```
#include <sceavplayer.h>
uint64_t sceAvPlayerCurrentTime(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h*	The video player handle.

Return Values

Value	Description
>0	The current 64-bit uint playback time in milliseconds.
=0	No current playback time is available.

Description

Retrieves the current playback time. This value reflects the base clock time and not just the previous audio or video frame timestamp. As a result it is very accurate. A/V sync uses this same base clock.

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sceAvPlayerDisableStream

Disables a stream.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerDisableStream(
    SceAvPlayerHandle h,
    uint32_t argStreamID
);
```

Arguments

[in] *h*	The video player handle.
[in] *argStreamID*	The stream ID.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Disables a stream.

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sceAvPlayerEnableStream

Enables a stream.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerEnableStream(
    SceAvPlayerHandle h,
    uint32_t argStreamID
);
```

Arguments

[in] *h*	The video player handle.
[in] *argStreamID*	The stream ID.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Enables a stream.

Notes

If SceAvPlayerInitData::*autoStart* has been set to true during initialization, there is no need to start the player by calling sceAvPlayerEnableStream() from the callback supplied during initialization.

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sceAvPlayerGetAudioData

Retrieves the relevant audio frame.

Definition

```
#include <sceavplayer.h>
bool sceAvPlayerGetAudioData(
    SceAvPlayerHandle h,
    SceAvPlayerFrameInfo *audioInfo
);
```

Arguments

[in] *h*	The video player handle.
[in,out] *audioInfo*	Receives information about the frame.

Return Values

Value	Description
`true`	Valid data was delivered.
`false`	There was no data available.

Description

Retrieves the relevant audio frame.

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sceAvPlayerGetStreamInfo

Retrieves detailed information on each stream.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerGetStreamInfo(
    SceAvPlayerHandle h,
    uint32_t argStreamID,
    SceAvPlayerStreamInfo *argInfo
);
```

Arguments

[in] *h*	The video player handle.
[in] *argStreamID*	The stream ID.
[in,out] *argInfo*	Receives information about the stream.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Retrieves detailed information on each stream.

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sceAvPlayerGetVideoData

Retrieves the relevant video frame.

Definition

```
#include <sceavplayer.h>
bool sceAvPlayerGetVideoData(
    SceAvPlayerHandle h,
    SceAvPlayerFrameInfo *videoInfo
);
```

Arguments

[in] *h*	The video player handle.
[in,out] *videoInfo*	Receives information about the frame.

Return Values

Value	Description
`true`	Valid data was delivered.
`false`	There was no data available.

Description

Retrieves the relevant video frame.

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sceAvPlayerGetVideoDataEx

Retrieves the relevant video frame and the extended details about it.

Definition

```
#include <sceavplayer_ex.h>
bool sceAvPlayerGetVideoDataEx(
    SceAvPlayerHandle h,
    SceAvPlayerFrameInfoEx *videoInfo
);
```

Arguments

[in] *h*	The video player handle.
[in,out] *videoInfo*	Receives information about the frame.

Return Values

Value	Description
`true`	Valid data was delivered.
`false`	There was no data available.

Description

Retrieves the relevant video frame and the extended details about it.

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sceAvPlayerInit

Initializes the `libsceAvPlayer` API and supplies it with initialization parameters.

Definition

```
#include <sceavplayer.h>
SceAvPlayerHandle sceAvPlayerInit(
    SceAvPlayerInitData *pInit
);
```

Arguments

[in] *pInit* A pointer to the initialization structure, which contains the function pointers required by the library.

Return Values

Value	Description
SceAvPlayerHandle	The player handle. If the operation failed, a value of `NULL` is returned.

Description

Initializes the `libsceAvPlayer` API and supplies it with initialization parameters.

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sceAvPlayerIsActive

Checks the status of the video player.

Definition

```
#include <sceavplayer.h>
bool sceAvPlayerIsActive(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h*	The video player handle.

Return Values

Value	Description
`true`	The operation was successful.
`false`	The operation failed.

Description

Checks the status of the video player.

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sceAvPlayerJumpToTime

Jumps to a time offset in ms.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerJumpToTime(
    SceAvPlayerHandle h,
    uint64_t argJumpTimeMsec
);
```

Arguments

[in] *h*	The video player handle.
[in] *argJumpTimeMsec*	The requested time offset.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Jumps to a time offset in ms.

Notes

This function actually jumps to the nearest random access point before or after the specified offset. This is an IDR picture in the case of an AVC video, and in the case of an audio-only source, it will usually be the start of any audio frame. The accuracy of the jump depends on the number of random access points in the media file, which is determined by the encoder settings.

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sceAvPlayerPause

Pauses playback.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerPause(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h* The video player handle.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Pauses playback.

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sceAvPlayerPostInit

Allows advanced initialization of the `libsceAvPlayer` API.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerPostInit(
    SceAvPlayerHandle h,
    SceAvPlayerPostInitData *pPostInit
);
```

Arguments

[in] *h*	The video player handle.
[in] *pPostInit*	A pointer to the advanced initialization structure, which contains the size of the demux video buffer.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Allows advanced initialization of the `libsceAvPlayer` API. Use of this function is optional, and it should be used with caution.

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sceAvPlayerResume

Resumes from pause.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerResume(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h*	The video player handle.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Resumes from pause.

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sceAvPlayerSetLooping

Turns seamless looping of a single file on or off.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerSetLooping(
    SceAvPlayerHandle h,
    bool loopFlag
);
```

Arguments

[in] *h*	The video player handle.
[in] *loopFlag*	A flag that indicates whether the video player should loop the video.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Turns seamless looping of a single file on or off. Looping is off by default.

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sceAvPlayerSetTrickSpeed

Sets the trickmode speed (see SceAvPlayerTrickSpeeds enumeration for valid values).

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerSetTrickSpeed(
    SceAvPlayerHandle h,
    int32_t argTrickSpeed
);
```

Arguments

[in] *h*	The video player handle.
[in] *argTrickSpeed*	The requested trickmode speed.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Sets the trickmode speed (see SceAvPlayerTrickSpeeds enumeration for valid values).

Notes

Setting the trick speed back to SCE_AVPLAYER_SPEED_NORMAL is required to resume playback with audio. All other speed variations will output without audio.

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sceAvPlayerStart

Starts playback.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerStart(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h* The video player handle.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Starts playback.

Notes

If `SceAvPlayerInitData::autoStart` has been set to true during initialization, there is no need to start the player by calling `sceAvPlayerStart()` from the callback supplied during initialization.

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sceAvPlayerStop

Stops playback.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerStop(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h* The video player handle.

Return Values

Value	Description
0	The operation was successful.
<0	The operation failed.

Description

Stops playback.

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sceAvPlayerStreamCount

Retrieves how many valid streams are available.

Definition

```
#include <sceavplayer.h>
int32_t sceAvPlayerStreamCount(
    SceAvPlayerHandle h
);
```

Arguments

[in] *h* The video player handle.

Return Values

Value	Description
>=0	The number of streams available in the video at the top of the queue.
<0	The operation failed.

Description

Retrieves how many valid streams are available.

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Callback Functions

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SceAvPlayerAllocate

A memory allocation function pointer.

Definition

```
#include <sceavplayer.h>
typedef void * (*SceAvPlayerAllocate)(
    void *argP,
    uint32_t argAlignment,
    uint32_t argSize
);
```

Arguments

[out] *argP*	Optional supplied pointer.
[in] *argAlignment*	The alignment of the memory to allocate.
[in] *argSize*	The size of the memory to allocate.

Return Values

Value	Description
!=NULL	The address of the memory allocated.
NULL	The operation failed.

Description

A memory allocation function pointer.

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SceAvPlayerAllocateTexture

A graphics memory allocation and mapping function pointer.

Definition

```
#include <sceavplayer.h>
typedef void * (*SceAvPlayerAllocateTexture)(
    void *argP,
    uint32_t argAlignment,
    uint32_t argSize
);
```

Arguments

[out] *argP*	Optional supplied pointer.
[in] *argAlignment*	The alignment of the memory to allocate.
[in] *argSize*	The size of the memory to allocate.

Return Values

Value	Description
`!=NULL`	The address of the memory allocated.
`NULL`	The operation failed.

Description

A graphics memory allocation and mapping function pointer.

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SceAvPlayerCloseFile

A file close function pointer.

Definition

```
#include <sceavplayer.h>
typedef int (*SceAvPlayerCloseFile)(
    void *argP
);
```

Arguments

[out] *argP* Optional supplied pointer.

Return Values

Value	Description
>=0	The operation was successful.
<0	The operation failed.

Description

A file close function pointer.

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SceAvPlayerDeallocate

A memory deallocator function pointer.

Definition

```
#include <sceavplayer.h>
typedef void (*SceAvPlayerDeallocate)(
    void *argP,
    void *argMemory
);
```

Arguments

[out] *argP*	Optional supplied pointer.
[in] *argMemory*	A pointer to the memory to deallocate.

Return Values

None

Description

A memory deallocator function pointer.

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SceAvPlayerDeallocateTexture

A graphics memory deallocation and unmapping function pointer.

Definition

```
#include <sceavplayer.h>
typedef void (*SceAvPlayerDeallocateTexture)(
    void *argP,
    void *argMemory
);
```

Arguments

[out] *argP*	Optional supplied pointer.
[in] *argMemory*	A pointer to the memory to deallocate and unmap.

Return Values

None

Description

A graphics memory deallocation and unmapping function pointer.

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SceAvPlayerEventCallback

An event callback function pointer.

Definition

```
#include <sceavplayer.h>
typedef void (*SceAvPlayerEventCallback)(
    void *p,
    int32_t argEventId,
    int32_t argSourceId,
    void *argEventData
);
```

Arguments

[out] *p*	Optional supplied pointer.
[in] *argEventId*	An event ID from SceAvPlayerEvents.
[in] *argSourceId*	The source ID.
[in] *argEventData*	A reserved pointer to event data.

Return Values

None

Description

An event callback function pointer.

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SceAvPlayerOpenFile

A file open function pointer.

Definition

```
#include <sceavplayer.h>
typedef int (*SceAvPlayerOpenFile)(
    void *argP,
    const char *argFilename
);
```

Arguments

[out] *argP*	Optional supplied pointer.
[in] *argFilename*	The name of the file to open.

Return Values

Value	Description
>=0	The operation was successful.
<0	The operation failed.

Description

A file open function pointer.

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SceAvPlayerReadOffsetFile

A file read with offset function pointer.

Definition

```
#include <sceavplayer.h>
typedef int (*SceAvPlayerReadOffsetFile)(
    void *argP,
    uint8_t *argBuffer,
    uint64_t argPosition,
    uint32_t argLength
);
```

Arguments

[out] `argP`	Optional supplied pointer.
[in,out] `argBuffer`	The target read buffer.
[in] `argPosition`	The offset position in the file.
[in] `argLength`	The length of the read.

Return Values

Value	Description
>=0	The operation was successful (the number of bytes read).
<0	The operation failed.

Description

A file read with offset function pointer.

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SceAvPlayerSizeFile

A file size retrieval function pointer.

Definition

```
#include <sceavplayer.h>
typedef uint64_t (*SceAvPlayerSizeFile)(
    void *argP
);
```

Arguments

[out] *argP* Optional supplied pointer.

Return Values

Value	Description
>0	The size of the file.
=0	The operation failed.

Description

A file size retrieval function pointer.

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