

# MP4RecordingClass

## Description

A class used to record video and audio data streams into a MP4 file on the SD card.

## Syntax

```
class MP4Recording
```

## Members

### Public Constructors

MP4Recording::MP4Recording	Constructs a MP4Recording object
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### Public Methods

MP4Recording::configVideo	Initialize MP4Recording video stream parameters.
MP4Recording::configAudio	Initialize MP4Recording audio stream parameters.
MP4Recording::begin	Start recording MP4 to SD card.
MP4Recording::end	Stop recording MP4 to SD card.
MP4Recording::setRecordingFileName	Set base file name of recorded MP4 files.
MP4Recording::setRecordingDuration	Set per-file MP4 recording duration.
MP4Recording::setRecordingFileCount	Set total number of MP4 files to record.
MP4Recording::setLoopRecording	Enable loop recording mode for continuous recording.

MP4Recording::setRecordingDataType	Enable recording video data and audio data.
MP4Recording::getRecordingFileName	Get currently configured base file name of recorded MP4 files.
MP4Recording::getRecordingDuration	Get currently configured per-file MP4 recording duration.
MP4Recording::getRecordingFileCount	Get currently configured total number of MP4 files to record.
MP4Recording::getRecordingState	Get current MP4 recording state.
MP4Recording::printInfo	Print current MP4 recording parameters.

# MP4Recording::configVideo

## Description

Initialize MP4Recording video stream parameters.

## Syntax

```
void configVideo(VideoSetting& config);
```

## Parameters

config: VideoSetting class object containing desired video configuration

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::configAudio

## Description

Initialize MP4Recording audio stream parameters.

## Syntax

```
void configAudio(void);
```

## Parameters

NA

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::begin

## Description

Start MP4 recording to SD card.

## Syntax

```
void begin(void);
```

## Parameters

NA

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::end

## Description

Stop MP4 recording to SD card.

## Syntax

```
void end(void);
```

## Parameters

NA

## Returns

NA

## Example Code

NA

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::setRecordingFileName

## Description

Set base file name of recorded MP4 files.

## Syntax

```
void setRecordingFileName(const char* filename);
```

```
void setRecordingFileName(String filename);
```

## Parameters

filename: Desired recorded MP4 filename, expresses as a character array or String class object

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

Filename can be up to 127 characters long.

"MP4Recording.h" must be included to use the class function.

# MP4Recording::setRecordingDuration

## Description

Set per-file MP4 recording duration.

## Syntax

```
void setRecordingDuration(uint32_t secs);
```

## Parameters

secs: Duration of MP4 to record, expressed in seconds

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.



# MP4Recording::setRecordingFileCount

## Description

Set total number of MP4 files to record.

## Syntax

```
void setRecordingFileCount(uint32_t count);
```

## Parameters

count: Total number of MP4 files to record to SD card

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

If configured to record more than 1 file, a number will be appended to the end of the base file name.

"MP4Recording.h" must be included to use the class function.

# MP4Recording::setLoopRecording

## Description

Enable loop recording mode for continuous recording.

## Syntax

```
void setLoopRecording(int enable);
```

## Parameters

enable: Enable or disable loop recording

## Returns

NA

## Example Code

NA

## Notes and Warnings

Enabling loop recording will overwrite the oldest previously recorded MP4 file when the total number of MP4 files to record has been reached.

"MP4Recording.h" must be included to use the class function.

# MP4Recording::setRecordingDataType

## Description

Enable recording video data and audio data.

## Syntax

```
void setRecordingDataType(uint8_t type);
```

## Parameters

type: one of the following values, default value of STORAGE\_ALL

STORAGE\_ALL – record both video data and audio data

STORAGE\_VIDEO – record only video data

STORAGE\_AUDIO – record only audio data

## Returns

NA

## Example Code

Example: RecordMP4VideoOnly

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4VideoOnly/RecordMP4VideoOnly.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4VideoOnly/RecordMP4VideoOnly.ino))

## Notes and Warnings

“MP4Recording.h” must be included to use the class function.

# MP4Recording::getRecordingFileName

## Description

Get currently configured base file name of recording MP4 files.

## Syntax

```
String getRecordingFileName(void);
```

## Parameters

NA

## Returns

A String class object containing the currently configured MP4 base file name.

## Example Code

NA

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::getRecordingDuration

## Description

Get currently configured per-file MP4 recording duration.

## Syntax

```
uint32_t getRecordingDuration(void);
```

## Parameters

NA

## Returns

Currently configured per-file recording duration, expressed in seconds.

## Example Code

NA

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::getRecordingFileCount

## Description

Get currently configured total number of MP4 files to record.

## Syntax

```
uint32_t getRecordingFileCount(void);
```

## Parameters

NA

## Returns

Currently configured total number of MP4 files to record.

## Example Code

NA

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::getRecordingState

## Description

Get current MP4 recording state.

## Syntax

```
uint8_t getRecordingState(void);
```

## Parameters

NA

## Returns

TRUE if MP4 is currently recording, FALSE if MP4 recording has stopped

## Example Code

NA

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.

# MP4Recording::printInfo

## Description

Print out current configuration of MP4 recording.

## Syntax

```
void printInfo(void);
```

## Parameters

NA

## Returns

NA

## Example Code

Example: RecordMP4SingleVideoWithAudio

([https://github.com/ambiot/ambpro2\\_arduino/blob/dev/Arduino\\_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino](https://github.com/ambiot/ambpro2_arduino/blob/dev/Arduino_package/hardware/libraries/Video/examples/RecordMP4SingleVideoWithAudio/RecordMP4SingleVideoWithAudio.ino))

## Notes and Warnings

"MP4Recording.h" must be included to use the class function.