Use this Help Guide when you have any questions on how to use your product.

How to Use

Before use

Getting started

Recording

Playback

Saving images with an external device

Using the Wi-Fi function

Menu operations

Charging time/recording time of movies/number of recordable photos

Additional information
# Table Of Contents

Digital HD Video Camera Recorder HDR-PJ810/PJ810E/PJ820/PJ820E ...........................................i

## Before use
- Model Information ................................................................. 25
- Parts and controls ............................................................... 26
- Screen indicators ................................................................. 27

## Getting started
- Checking the supplied items ................................................... 28
- Power source preparations ..................................................... 29
- Initial setup ........................................................................ 30
- Preparing a memory card ....................................................... 31

## Recording
- Recording movies/photos ....................................................... 32
- Useful functions for recording ............................................... 33

## Playback
- Playing images using Event View ........................................ 34
- Playing images using Highlight Playback ............................. 35
- Playing MP4 movies (HD movie) (switching the movie format) .................................................................................. 36
- Editing images from the playback screen ................................ 37
- Using the built-in projector ................................................... 38
- Playing images on a high definition TV ................................. 39
- Playing images on a non-high-definition TV .......................... 40

## Saving images with an external device
- Using the PlayMemories Home software ................................ 41
- Saving images on an external media device ............................. 42
- Creating a disc with a recorder ............................................... 43

## Using the Wi-Fi function
- What you can do with the Wi-Fi function ............................. 44
- Controlling via a smartphone ............................................... 45
- Transferring images to a smartphone .................................... 46
- Transferring images to a computer ....................................... 47
- Transferring images to a TV ................................................ 48
- Connecting a smartphone .................................................... 49
- Installing PlayMemories Mobile ......................................... 50

## Menu operations
- Using menu items ............................................................... 51
- Shooting Mode .................................................................. 52
- Camera/Mic ....................................................................... 53
- Image Quality/Size ............................................................. 57
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Before use

Model Information

Parts and controls

Screen indicators

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Getting started

Checking the supplied items

Power source preparations

Initial setup

Preparing a memory card

Notes on use

Copyright 2014 Sony Corporation
Recording

Recording movies/photos

Useful functions for recording

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playback

Playing images using Event View

Playing images using Highlight Playback

Playing MP4 movies (HD movie) (switching the movie format)

Editing images from the playback screen

Using the built-in projector

Playing images on a high definition TV

Playing images on a non-high-definition TV

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Saving images with an external device

Using the PlayMemories Home software

Saving images on an external media device

Creating a disc with a recorder

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using the Wi-Fi function

What you can do with the Wi-Fi function

Controlling via a smartphone

Transferring images to a smartphone

Transferring images to a computer

Transferring images to a TV

Connecting a smartphone

Installing PlayMemories Mobile

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Menu operations

### Using menu items

### Shooting Mode

### Camera/Mic

### Image Quality/Size

### Playback Function

### Edit/Copy

### Setup

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Charging time/recording time of movies/number of recordable photos

Check the charging time

Expected recording and playback times for individual batteries

Expected movie recording time and number of recordable photos for the internal memory

Expected movie recording time and number of recordable photos for memory cards

Bit-rate for each recording mode

Pixels recorded at each image size of photos

Notes on use
Additional information

Precautions

Handling of this product

Maintenance

Using this product abroad

Trademarks

License

Zoom magnifications

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Troubleshooting

If you have problems

Overall operations

Batteries/power sources

Monitor

Viewfinder

Memory card

Wireless Remote Commander

Recording

Playback

Wi-Fi

Editing movies/photos on this product

Playback on a TV

Copying/Connecting to other devices

Connecting to a computer
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Self-diagnosis display/Warning indicators

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Warning messages

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

How to Use

**Before use**

**Model Information**
- Model Information

**Parts and controls**
- Parts and controls (front/top)
- Parts and controls (LCD monitor)
- Parts and controls (side)
- Parts and controls (back/bottom)
- Parts and controls (Wireless Remote Commander)

**Screen indicators**
- Screen indicators

**Getting started**

**Checking the supplied items**
- Supplied items
- Attaching the Step Down Ring

**Power source preparations**
- Attaching the battery pack
- Charging the battery pack using the AC Adaptor
- Charging the battery pack using your computer
- Turning the power on
- Using this product supplying power from a wall outlet (wall socket)

**Initial setup**
- Setting the language, date and time
- Adjusting the angle of the LCD monitor for easier viewing
- Adjusting the angle of the viewfinder for easier viewing
- Displaying items on the LCD monitor

**Preparing a memory card**
- Inserting a memory card
- Types of memory card you can use with this product
Recording

Recording movies/photos
- Recording movies
- Shooting photos

Useful functions for recording
- Zooming
- Capturing photos during movie recording (Dual Capture)
- Recording in mirror mode
- Intelligent Auto
- Decreasing the voice volume of the person recording the movie (My Voice Canceling)
- Recording the selected subject clearly (Face Priority)
- Recording subjects other than people (Tracking focus)
- Recording movies in dim places (Video Light)
- Controlling the image settings manually with the MANUAL dial
- Assigning frequently-used menu items to the MANUAL button

Playback

Playing images using Event View
- Playing movies and photos from the Event View screen
- Screen display on the Event View screen

Playing images using Highlight Playback
- Playing back a short movie (Highlight Playback)
- Changing the settings for Highlight Playback
- Saving Highlight Playback (Scenario Save)
- Playing back a saved scenario

Playing MP4 movies (HD movie) (switching the movie format)
- Playing MP4 movies (HD movie) (switching the movie format)

Editing images from the playback screen
- Notes on editing
- Deleting the selected images
- Deleting by date
- Dividing a movie
- Capturing a photo from a movie
- Viewing trajectory of a moving object (Motion Shot Video)

Using the built-in projector
- Notes on using the projector
- Using the built-in projector
- Using the projector for your computer or smartphone

Playing images on a high definition TV
- Connecting this product to a high definition TV
- Enjoying 5.1ch surround sound
Using BRAVIA Sync
On Photo TV HD
On the HDMI cable

Playing images on a non-high-definition TV
Connecting this product to a non-high-definition TV

Saving images with an external device

Using the PlayMemories Home software
Using the PlayMemories Home software
Checking the computer system
Installing the PlayMemories Home software in your computer
Disconnecting this product from the computer
About the dedicated software for this product
Creating a Blu-ray disc

Saving images on an external media device
Notes on use of the external media
Saving images on an external media device
Saving the desired images in this product to the external media device
Playing back images in the external media device on this product
Deleting images in the external media device

Creating a disc with a recorder
Creating a disc with a recorder

Using the Wi-Fi function

What you can do with the Wi-Fi function
What you can do with the Wi-Fi function

Controlling via a smartphone
Using your smartphone or tablet as a wireless remote commander
Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)

Transferring images to a smartphone
Transferring movies (MP4) and photos to your smartphone or tablet
Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)

Transferring images to a computer
Send to Computer

Transferring images to a TV
Playing images on a TV (View on TV)

Connecting a smartphone
Connecting to an Android smartphone or tablet
Connecting to an iPhone or iPad
Connecting to an NFC-enabled smartphone or tablet

Installing PlayMemories Mobile
Menu operations

Using menu items

- Setting up menu items
- How to use the keyboard

Shooting Mode

- Movie
- Photo
- Smth Slw REC
- Golf Shot

Camera/Mic

- White Balance
- Spot Meter/Fcs
- Spot Meter
- Spot Focus
- Exposure
- Focus
- IRIS
- Shutter Speed
- AGC Limit
- AE Shift
- White Balance Shift
- Low Lux
- Scene Selection
- Picture Effect
- Cinematone
- Fader
- Self-Timer
- SteadyShot (Movie)
- SteadyShot (Photo)
- Digital Zoom
- Conversion Lens
- Auto Back Light
- Dial Setting
- Face Detection
- Smile Shutter
- Smile Sensitivity
- Flash (Only when connecting an external flash)
- Flash Level (Only when connecting an external flash)
- Red Eye Reduction (Only when connecting an external flash)
- Premium CloserVoice
- My Voice Canceling
- Blt-in Zoom Mic
- Auto Wind NR
- Audio Mode
- Audio Rec Level
- Ctrl with Smartphone
- My Button
- Focus Magnifier
- Grid Line
- Display Setting
- Zebra
- Peaking
- Audio Level Display

**Image Quality/Size**
- REC Mode
- Frame Rate
- Dual Video REC
- Image Size

**Playback Function**
- Event View
- Scenario

**Edit/Copy**
- Send to Smartphone
- View on TV
- Send to Computer
- Delete
- Protect
- Copy
- Direct Copy

**Setup**
- Media Select
- Media Info
- Format
- Empty
- Repair Img. DB F.
- File Number
- Data Code
- Volume
- Motion Interval ADJ
- Download Music (HDR-PJ810/PJ820)
- Empty Music (HDR-PJ810/PJ820)
- WPS Push
Charging time/recording time of movies/number of recordable photos

Check the charging time
- Charging time

Expected recording and playback times for individual batteries
- Expected recording time with each battery pack
- Expected playback time with each battery pack

Expected movie recording time and number of recordable photos for the internal memory
- Notes on recording movies
- Expected recording time of movies
- Expected number of recordable photos

Expected movie recording time and number of recordable photos for memory cards
- Notes on recording movies
- Expected recording time of movies
Expected number of recordable photos

Bit-rate for each recording mode
- Bit-rate and recording pixels

Pixels recorded at each image size of photos
- Recording pixels and aspect ratio

Additional information

Precautions
- About the AVCHD format
- About the memory card
- About the InfoLITHIUM battery pack

Handling of this product
- On use and care
- On connecting to a computer or accessory etc.
- Notes on optional accessories
- On moisture condensation
- Notes on disposal/transfer the ownership of this product
- Notes on the Wireless Remote Commander

Maintenance
- On handling the LCD monitor
- To clean the casing and the projector lens surface
- About care and storage of the lens

Using this product abroad
- Using this product abroad
- World time difference

Trademarks
- On trademarks

License
- Notes on the License

Zoom magnifications
- Zoom magnifications

Notes on use
Troubleshooting

**If you have problems**
- If you have problems

**Overall operations**
- The power does not turn on.
- This product does not operate even when the power is set to on.
- The menu settings have been changed automatically.
- This product gets warm.
- A rattling noise is heard when this product is shaken.
- Intelligent Auto is canceled.

**Batteries/power sources**
- The power abruptly turns off.
- The POWER/CHG (charge) lamp does not light while the battery pack is being charged.
- The POWER/CHG (charge) lamp flashes while the battery pack is being charged.
- The remaining battery power is not displayed correctly.
- The battery pack is quickly discharged.

**Monitor**
- Menu items are grayed out.
- The buttons do not appear on the LCD monitor.
- The buttons on the touch panel do not work correctly or do not work at all.
- The buttons on the LCD monitor quickly disappear.
- There are dots in the shape of a grid on the monitor.
- The backlight of the LCD monitor turns off if you do not attempt to operate this product for a while.

**Viewfinder**
- The image in the viewfinder is not clear.
- The image in the viewfinder is no-longer displayed.

**Memory card**
- Operations using the memory card cannot be performed.
- Images stored on the memory card cannot be deleted.
- The data file name is not indicated correctly or flashes.
- Images cannot be played back or the memory card is not recognized.
Wireless Remote Commander

- The supplied Wireless Remote Commander does not function.
- Another DVD device operates when you use the supplied Wireless Remote Commander.

Recording

- Pressing START/STOP or PHOTO does not record images.
- Photos cannot be recorded.
- The access lamp remains lit or flashing even if recording has stopped.
- The imaging field looks different.
- The actual recording time for movies is less than the expected recording time of the recording media.
- This product stops recording.
- There is a slight time lag between the moment when START/STOP is pressed and the actual movie recording starts or stops.
- The auto focus does not function.
- SteadyShot does not function.
- Images cannot be recorded or played back correctly.
- The subjects passing across this product very fast appear crooked.
- Horizontal stripes appear on the images.
- [Monitor Brightness] cannot be set.
- Sound is not recorded correctly.
- Photos are recorded automatically.

Playback

- Images cannot be played back.
- Photos cannot be played back.
- The movie freezes.
- An icon appears on a thumbnail.
- No sound or only a quiet sound is heard during playback.
- Left and right sound is heard unbalanced when playing back movies on computers or other devices.

Wi-Fi

- The wireless access point you want to connect to does not appear.
- [WPS Push] does not work.
- [Ctrl with Smartphone], [Send to Smartphone], [Send to Computer] or [View on TV] terminates prematurely.
- Cannot transfer movies to your smartphone.
- The shooting screen does not display smoothly. The connection is cut off.
- The NFC connection does not work.

Editing movies/photos on this product

- Unable to edit.
- A movie cannot be divided.
- The demonstration movies cannot be deleted.

Playback on a TV

- Neither image nor sound is played on the connected TV.
- The top, bottom, right, and left edges of images are trimmed slightly on a connected TV.
- The image appears distorted on the 4:3 TV.
- Black bands appear at the top and bottom of the LCD monitor of the 4:3 TV.
Copying/Connecting to other devices
- Images are not copied correctly.

Connecting to a computer
- PlayMemories Home cannot be installed.
- PlayMemories Home does not work correctly.
- This product is not recognized by the computer.

Self-diagnosis display/Warning indicators

Self-diagnosis display/Warning indicators
- Self-diagnosis display

Warning messages

Warning messages
- Warning Indicators
Notes on use

**Before use**

To make full use of this content, please read the following notes thoroughly. Please note that they are subject to change without prior notice.

June 2013

**Recommended system environment**

The following system environments are recommended for displaying this content. You may not be able to view the content on other system environments.

- **For viewing on a computer**
  - Recommended browser
    - With Microsoft Windows
      - Microsoft Internet Explorer 8 or later
      - Mozilla Firefox: latest version
      - Google Chrome™: latest version
    - With Apple Mac OS
      - Apple Safari Ver. 5 or later
      - Mozilla Firefox: latest version
      - Google Chrome: latest version

- **For viewing on a smartphone or tablet**
  - Basic operation has been confirmed on the standard browser for the noted devices running the following operating systems.
    - Android™ 2.3 or later: Xperia series, Walkman running Android
    - iOS 4 or later: iPhone, iPod touch, iPad

- **JavaScript**
  - JavaScript is used with this content for viewing convenience. If JavaScript is disabled in your web browser settings, the content may not operate properly or it may not be displayed correctly.

- **Style Sheets**
  - Cascading Style Sheets are used in designing this content. Page layout may not be as intended if you view the content with style sheets disabled or on a web browser that is not compatible with style sheets. However, operation will not be affected.

- **Cookies**
  - This content uses cookies. To use services incorporating cookies, you need to set your browser to allow cookies.

**Handling of personal information obtained from websites**
Sony may use cookies, web beacons or similar technologies to make statistical analysis of customers’ usage of this content while preserving anonymity.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Model Information

Model Information
Explains how to confirm the model name of this product and differences between each model.
Help Guide

How to Use

Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Parts and controls

Parts and controls (front/top)
Explains the parts and controls on the front and top sides of this product.

Parts and controls (LCD monitor)
Explains the parts and controls on the LCD monitor.

Parts and controls (side)
Explains the parts and controls on the side of this product.

Parts and controls (back/bottom)
Explains the parts and controls on the back and bottom sides of this product.

Parts and controls (Wireless Remote Commander)
Explains the name of buttons on the Wireless Remote Commander.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Screen indicators

Screen indicators
Explains the icons displayed at times such as when changing the settings.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Checking the supplied items

**Supplied items**
Check the supplied accessories.

**Attaching the Step Down Ring**
Attach the Step Down Ring and change the filter diameter.

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Power source preparations

Attaching the battery pack
Attach the battery pack to this product.

Charging the battery pack using the AC Adaptor
Charge the battery pack using the supplied AC Adaptor.

Charging the battery pack using your computer
Charge the battery pack by connecting this product to your computer with the Built-in USB Cable.

Turning the power on
Turn on this product.

Using this product supplying power from a wall outlet (wall socket)
Shows how to use this product while supplying power from a wall outlet (wall socket).

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Initial setup

Setting the language, date and time
Set the language, date and time when using this product for the first time.

Adjusting the angle of the LCD monitor for easier viewing
You can adjust the angle of the LCD monitor for easier viewing.

Adjusting the angle of the viewfinder for easier viewing
You can adjust the angle of the viewfinder for easier viewing.

Displaying items on the LCD monitor
Shows how to set the screen display.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Preparing a memory card

Inserting a memory card
Shows how to insert a memory card.

Types of memory card you can use with this product
Introduces types of memory card you can use with this product.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Recording movies/photos

Recording movies
Record movies.

Shooting photos
Shoot photos.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Useful functions for recording

**Zooming**
You can record an image with the subject magnified.

**Capturing photos during movie recording (Dual Capture)**
You can shoot photos during movie recording.

**Recording in mirror mode**
You can rotate the LCD monitor 180 degrees so the LCD monitor faces toward you to record yourself.

**Intelligent Auto**
This product records images after selecting the most suitable setting for the subjects or the situation automatically.

**Decreasing the voice volume of the person recording the movie (My Voice Canceling)**
You can record movies decreasing the voice volume of the person recording the movie.

**Recording the selected subject clearly (Face Priority)**
This product can track a face you select and adjust the focus, exposure, and skin tone of the face automatically.

**Recording subjects other than people (Tracking focus)**
This product can track a subject you select and adjust the focus automatically.

**Recording movies in dim places (Video Light)**
You can record movies using the video light.

**Controlling the image settings manually with the MANUAL dial**
Use the menu assigned to the MANUAL button.

**Assigning frequently-used menu items to the MANUAL button**
You can register your desired functions to the MANUAL button.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playing images using Event View

Playing movies and photos from the Event View screen
You can search for recorded images by date and recording time (Event View).

Screen display on the Event View screen
Explains the Event View screen.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Playing images using Highlight Playback

Playing back a short movie (Highlight Playback)
You can enjoy a digest of movies and photos, similar to a short movie.

Changing the settings for Highlight Playback
You can set the playback range of the Highlight Playback and select a theme for Highlight Playback.

Saving Highlight Playback (Scenario Save)
You can save your favorite Highlight Playback as a “Scenario.” Up to 8 scenarios can be saved.

Playing back a saved scenario
You can play back Highlight Scenarios saved on this product.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Playing MP4 movies (HD movie) (switching the movie format)

The format of a movie to be played or edited can be changed on the Event View screen.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Editing images from the playback screen

Notes on editing
Read the precautions regarding editing images.

Deleting the selected images
Select and delete unnecessary images.

Deleting by date
Select unnecessary images by date of recording and delete them.

Dividing a movie
Split a recorded movie at your desired point.

Capturing a photo from a movie
You can capture images from movies recorded with this product.

Viewing trajectory of a moving object (Motion Shot Video)
You can view the trajectory of a fast-moving object.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using the built-in projector

**Notes on using the projector**
Read the precautions regarding using the projector.

Using the built-in projector
You can use a flat surface such as a wall as a screen to view recorded images using the built-in projector.

Using the projector for your computer or smartphone
You can project images from a computer or smartphone using the built-in projector.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Playing images on a high definition TV

Connecting this product to a high definition TV
You can play movies in high definition image quality (HD) by connecting this product to an HDMI compatible TV.

Enjoying 5.1ch surround sound
You can record Dolby Digital 5.1ch surround sound with the built-in microphone.

Using BRAVIA Sync
You can operate this product with the remote commander of your TV by connecting this product to a BRAVIA Sync compatible TV launched in 2008 or later with the HDMI cable.

On Photo TV HD
Explains Photo TV HD.

On the HDMI cable
Read the precautions regarding the HDMI cable.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Playing images on a non-high-definition TV

Connecting this product to a non-high-definition TV
Play back images with this product connected to a TV by an AV cable (sold separately).

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using the PlayMemories Home software

**Using the PlayMemories Home software**
The PlayMemories Home software allows you to import movies and still images to your computer to use them in a variety of ways.

**Checking the computer system**
Check the recommended computer environment for using software.

**Installing the PlayMemories Home software in your computer**
Installing the PlayMemories Home software on your computer enables you to make use of your recorded images.

**Disconnecting this product from the computer**
Disconnect this product from the computer connected with the Built-in USB Cable.

**About the dedicated software for this product**
You can download the dedicated software from the Sony website.

**Creating a Blu-ray disc**
You can create a Blu-ray disc with an AVCHD movie previously imported to a computer.

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Saving images on an external media device

**Notes on use of the external media**
Read the precautions when using the external media.

**Saving images on an external media device**
Easily save movies or photos on an external media device such as an external hard disk drive.

**Saving the desired images in this product to the external media device**
Save selected movies or photos on an external media device such as an external hard disk drive.

**Playing back images in the external media device on this product**
Play back images saved on an external media device from this product.

**Deleting images in the external media device**
Delete images saved on an external media device.

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Creating a disc with a recorder

You can copy images played back on this product on a disc or video cassette.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

What you can do with the Wi-Fi function

What you can do with the Wi-Fi function
Explains what you can do using the Wi-Fi function of this product.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Controlling via a smartphone

Using your smartphone or tablet as a wireless remote commander
You can operate this product using your smartphone or tablet as a wireless remote commander.

Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)
You can operate this product using your NFC-enabled smartphone or tablet as a wireless remote commander.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Transferring images to a smartphone

Transferring movies (MP4) and photos to your smartphone or tablet
Transfer images to your smartphone or tablet.

Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)
Transfer images to your NFC-enabled Android smartphone or tablet.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Transferring images to a computer

Send to Computer
You can transfer and save movies and photos to your computer.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Transferring images to a TV

Playing images on a TV (View on TV)
You can view images on your TV connected to the network by transferring images from this product without connecting this product and TV with a cable.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Connecting a smartphone

Connecting to an Android smartphone or tablet
Shows how to connect this product to your Android smartphone or tablet.

Connecting to an iPhone or iPad
Shows how to connect this product to your iPhone or iPad.

Connecting to an NFC-enabled smartphone or tablet
You can easily connect this product to your NFC-enabled Android smartphone or tablet.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Installing PlayMemories Mobile

About the PlayMemories Mobile software
Explains PlayMemories Mobile.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using menu items

Setting up menu items
Shows how to set the menu items.

How to use the keyboard
Explains how to use the keyboard to be displayed.

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Shooting Mode

Movie
You can select the movie recording mode.

Photo
You can select the photo shooting mode.

Smth Slw REC
This product records approximately 3-second-long fast actions or motions as an approximately 12-second-long slow-motion movie.

Golf Shot
Divides 2 seconds of fast movement into frames which are then recorded as a movie and photos.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Camera/Mic

**White Balance**
You can adjust the color balance to the recording environment.

**Spot Meter/Fcs**
Exposure and focus can be adjusted for the selected subject automatically.

**Spot Meter**
Exposure can be adjusted and set for the selected subject automatically.

**Spot Focus**
Focus can be adjusted automatically for the subject selected.

**Exposure**
You can fix the brightness of an image manually.

**Focus**
You can adjust the focus manually.

**IRIS**
You can shoot images with the IRIS priority mode.

**Shutter Speed**
You can shoot images with the Shutter Speed priority mode.

**AGC Limit**
You can select the upper limit for the AGC (Auto Gain Control).

**AE Shift**
You can adjust the exposure according to your preference.
White Balance Shift
You can adjust the white balance according to your preference.

Low Lux
You can record bright color images, even in dim light.

Scene Selection
You can record images effectively in various situations.

Picture Effect
You can select your desired effect to shoot more impressive images.

Cinematone
This product automatically adjusts the image quality of the movie to resemble the atmosphere of film camera images.

Fader
You can record a transition with the effects adding to the interval between scenes.

Self-Timer
Press PHOTO to start the count down. A photo is recorded after about 10 seconds.

SteadyShot (Movie)
This product has a balanced optical SteadyShot function that allows you to reduce camera shake when shooting with zooming, as well as when shooting with a wide-angle shot.

SteadyShot (Photo)
You can compensate for camera shake.

Digital Zoom
You can select the maximum zoom level.

Conversion Lens
Set this menu item when you want to use a conversion lens (sold separately) that is compatible with this product.

Auto Back Light
This product adjusts the exposure for backlit subjects automatically.

Dial Setting
You can assign one menu item you often use to the MANUAL dial.
Face Detection
You can set this product to detect a face automatically.

Smile Shutter
The shutter is released automatically when this product detects a smile.

Smile Sensitivity
Sets the smile detection sensitivity for using the Smile Shutter function.

Flash (Only when connecting an external flash)
Select the desired flash setting.

Flash Level (Only when connecting an external flash)
Adjust the brightness of the flash light.

Red Eye Reduction (Only when connecting an external flash)
Prevent redeye by activating the pre-flash before the flash operates.

Premium CloserVoice
Record sound in front of this product more clearly.

My Voice Canceling
You can record the voice of the subject clearly by decreasing the voice volume of the person recording the movie.

Blit-in Zoom Mic
You can record a movie with vivid sound appropriate to the zoom position.

Auto Wind NR
This product records a movie with less wind noise input from the built-in microphone. This function automatically cuts the low-range wind noise according to the noise level.

Audio Mode
You can change the recording sound format.

Audio Rec Level
You can adjust the audio recording level.

Ctrl with Smartphone
You can use your smartphone as a wireless remote commander.
My Button
You can assign functions that you frequently use when recording to one of the My Buttons.

Focus Magnifier
You can magnify an image that appears at the center of the LCD monitor by about 2.0 times to confirm the sharpness of the focus.

Grid Line
You can display the lines and check that the subject is horizontal or vertical.

Display Setting
You can set the duration of displaying the icons or indicators on the LCD monitor while recording.

Zebra
You can display a zebra pattern as a guide for adjusting brightness.

Peaking
You can display a subject on the LCD monitor with its outlines enhanced with colors. This function helps you to adjust the focus.

Audio Level Display
You can select whether or not to display the audio level meter.

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Image Quality/Size

**REC Mode**
You can select your desired image quality for AVCHD movies.

**Frame Rate**
You can select the frame rate to be used to record AVCHD movies.

**Dual Video REC**
You can set the dual recording mode (recording an MP4 movie during movie recording) to on or off.

**Image Size**
You can select a size for the photos you are going to shoot.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playback Function

Event View
You can play back recorded images by date of recording (Event View).

Scenario
You can view Highlight Scenario that you have saved.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Edit/Copy

Send to Smartphone
Transfer images recorded with this product to your smartphone.

View on TV
You can view images on your TV connected to the network by transferring images from this product without connecting this product and TV with a cable.

Send to Computer
Transfer images recorded with this product to your computer.

Delete
You can delete unnecessary images.

Protect
Protect movies and photos to avoid deleting them by mistake.

Copy
You can copy images stored on the recording media using this product.

Direct Copy
You can save images on an external media device manually while the device is connected to this product.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Setup

**Media Select**
You can select the recording medium on which the images will be saved.

---

**Media Info**
You can check the remaining recordable time and the approximate free and used space of the recording media.

---

**Format**
Formatting deletes all the movies and photos to recover recordable free space.

---

**Empty**
Performing [Empty] deletes all the movies and photos in the media. It is recommended that you perform [Empty] before disposing of or transferring this product to another party to prevent leakage of your personal information.

---

**Repair Img. DB F.**
Repair the image database file when necessary, such as when the image database repair message appears.

---

**File Number**
You can select the way to assign file number of photos/MP4 movies.

---

**Data Code**
During playback, this product displays the information recorded automatically at the recording time.

---

**Volume**
You can adjust the volume of playback sound.

---

**Motion Interval ADJ**
Adjusts the residual image intervals of a motion shot video.

---

**Download Music (HDR-PJ810/PJ820)**
You can transfer music files from audio CDs etc., to this product by connecting this product to a computer.
Empty Music (HDR-PJ810/PJ820)
You can delete all music files stored on this product.

WPS Push
If your access point has a WPS button, you can register the access point to this product easily.

Access point settings
You can register your access point manually.

Edit Device Name
You can change the device name for Wi-Fi Direct etc.

Disp MAC Address
Display the MAC address of this product.

SSID/PW Reset
To change the device that is permitted to connect to this product, reset the SSID/password.

Network Info Reset
To change the access point to connect to, reset the connection information.

TV Type
You need to convert the signal depending on the horizontal to vertical ratio of the TV connected.

HDMI Resolution
Select the output image resolution when connecting this product to a TV with the HDMI cable.

CTRL FOR HDMI
When connecting this product to a BRAVIA Sync compatible TV with an HDMI cable, you can play back movies on this product by aiming the TV’s Remote Commander at the TV.

USB Connect
Select this item if a USB connection does not start even when you connect this product to an external device with the Built-in USB Cable.

USB Connect Setting
You can set the USB transfer mode for connecting this product to a computer or other USB device.

USB Power Supply
Set whether to use USB power supplied function when this product is connected to the AC Adaptor or a USB device such as a
**USB LUN Setting**
Improves compatibility with external devices by limiting the functions of the USB connection.

**Beep**
You can turn on or off the operation sound.

**Monitor Brightness**
You can adjust the brightness of the LCD monitor.

**Auto Keystone ADJ**
The automatic keystone correction function corrects distorted images (up and down) to display the projection screen in a square shape.

**Airplane Mode**
When you board an airplane, you can deactivate the Wi-Fi function temporarily.

**REC Lamp**
You can make the camera recording lamp on the front of this product not to turn on.

**Remote Ctrl**
You can lock the Wireless Remote Commander buttons to prevent accidental operation by remote controls for other devices.

**Language Setting**
You can select the language to be used on the LCD monitor.

**24p Mode (HDR-PJ810E/PJ820E)**
You can record 24p movies with changing the signal format.

**Calibration**
You can calibrate where the touch panel responds when touching buttons.

**Battery Info**
You can check the estimated remaining capacity of the battery pack.

**Power Save**
You can change the settings for the backlight of the LCD monitor and the power status of this product.

**Initialize**
All the settings return to the default.

**Demo Mode**
Set playback of the demonstration movie.

**Date & Time Setting**
Set the date & time settings.

**Area Setting**
You can adjust a time difference without stopping the clock. Select your local area when using this product in other time zones.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Check the charging time

**Charging time**
Informs you of the approximate time required to fully charge a fully discharged battery pack.

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Expected recording and playback times for individual batteries

**Expected recording time with each battery pack**
Informs you of the expected recording time with each battery pack.

**Expected playback time with each battery pack**
Informs you of the expected playback time with each battery pack.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Expected movie recording time and number of recordable photos for the internal memory

**Notes on recording movies**
Read the precautions regarding movie recording.

**Expected recording time of movies**
Informs you of the expected recording time when saving on the internal memory.

**Expected number of recordable photos**
Informs you of the expected number of images you can save on the internal memory.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Expected movie recording time and number of recordable photos for memory cards

Notes on recording movies
Read the precautions regarding movie recording.

Expected recording time of movies
Informs you of the expected recording time of movies when saving on a memory card.

Expected number of recordable photos
Informs you of the expected number of images you can save on a memory card.

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Bit-rate for each recording mode

Bit-rate and recording pixels
Explains the bit-rate, pixels and aspect ratio of each recording mode for movies (movie + audio, etc).

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Pixels recorded at each image size of photos

Recording pixels and aspect ratio

Explains the photo recording pixels and the aspect ratio.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Precautions

**About the AVCHD format**
Explain the AVCHD standard.

**About the memory card**
Read the precautions regarding memory cards.

**About the InfoLITHIUM battery pack**
Read the battery information.

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Handling of this product

On use and care
Read the precautions, etc for using this product.

On connecting to a computer or accessory etc.
Read the information regarding connecting to your computer or an accessory.

Notes on optional accessories
Read the information on accessories (sold separately).

On moisture condensation
Read the information on moisture condensation.

Notes on disposal/transfer the ownership of this product
Read the notes on disposal/transfer of this product.

Notes on the Wireless Remote Commander
Read the information on the Wireless Remote Commander.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Maintenance

**On handling the LCD monitor**
Read the information on care of the LCD monitor.

**To clean the casing and the projector lens surface**
Read the information on care of the casing and lens.

**About care and storage of the lens**
Read the information on care and storage of the lens.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Using this product abroad

Read the information on using this product abroad.

World time difference

Check the time difference for cities worldwide.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Trademarks

On trademarks
Read the information on trademarks.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

License

Notes on the License
Read the notes on the license.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Zoom magnifications

**Zoom magnifications**
Introduces the zoom magnifications you can set on this product for recording.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
If you have problems

Explains the procedure to follow if you run into any problems using this product.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Overall operations

The power does not turn on.

This product does not operate even when the power is set to on.

The menu settings have been changed automatically.

This product gets warm.

A rattling noise is heard when this product is shaken.

Intelligent Auto is canceled.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Batteries/power sources

The power abruptly turns off.

The POWER/CHG (charge) lamp does not light while the battery pack is being charged.

The POWER/CHG (charge) lamp flashes while the battery pack is being charged.

The remaining battery power is not displayed correctly.

The battery pack is quickly discharged.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Monitor

Menu items are grayed out.

The buttons do not appear on the LCD monitor.

The buttons on the touch panel do not work correctly or do not work at all.

The buttons on the LCD monitor quickly disappear.

There are dots in the shape of a grid on the monitor.

The backlight of the LCD monitor turns off if you do not attempt to operate this product for a while.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Viewfinder

- The image in the viewfinder is not clear.
- The image in the viewfinder is no-longer displayed.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Memoy card

Operations using the memory card cannot be performed.

Images stored on the memory card cannot be deleted.

The data file name is not indicated correctly or flashes.

Images cannot be played back or the memory card is not recognized.

Notes on use
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Wireless Remote Commander

The supplied Wireless Remote Commander does not function.

Another DVD device operates when you use the supplied Wireless Remote Commander.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Recording

Pressing START/STOP or PHOTO does not record images.

Photos cannot be recorded.

The access lamp remains lit or flashing even if recording has stopped.

The imaging field looks different.

The actual recording time for movies is less than the expected recording time of the recording media.

This product stops recording.

There is a slight time lag between the moment when START/STOP is pressed and the actual movie recording starts or stops.

The auto focus does not function.

SteadyShot does not function.

Images cannot be recorded or played back correctly.

The subjects passing across this product very fast appear crooked.

Horizontal stripes appear on the images.

[Monitor Brightness] cannot be set.
Sound is not recorded correctly.

Photos are recorded automatically.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playback

Images cannot be played back.

Photos cannot be played back.

The movie freezes.

An icon appears on a thumbnail.

No sound or only a quiet sound is heard during playback.

Left and right sound is heard unbalanced when playing back movies on computers or other devices.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Wi-Fi

The wireless access point you want to connect to does not appear.

[WPS Push] does not work.

[Ctrl with Smartphone], [Send to Smartphone], [Send to Computer] or [View on TV] terminates prematurely.

Cannot transfer movies to your smartphone.

The shooting screen does not display smoothly. The connection is cut off.

The NFC connection does not work.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Editing movies/photos on this product

Unable to edit.

A movie cannot be divided.

The demonstration movies cannot be deleted.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playback on a TV

Neither image nor sound is played on the connected TV.

The top, bottom, right, and left edges of images are trimmed slightly on a connected TV.

The image appears distorted on the 4:3 TV.

Black bands appear at the top and bottom of the LCD monitor of the 4:3 TV.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Copying/Connecting to other devices

Images are not copied correctly.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Connecting to a computer

PlayMemories Home cannot be installed.

PlayMemories Home does not work correctly.

This product is not recognized by the computer.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Self-diagnosis display/Warning indicators

Self-diagnosis display

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Warning messages

Warning Indicators
If warning messages appear, follow the instructions.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Model Information

In this Help Guide, the differences in the specifications for each model are described together. If you find the description "Models with ... " like below, confirm in this chapter whether the description applies to this product.

- (models with the internal memory)
- (models with the NTSC color system)

To confirm the model name of this product

See the bottom of this product.

A: Model name (HDR-xxxx)

Differences in functions

Models with the NTSC color system: HDR-PJ810/PJ820
Models with the PAL color system: HDR-PJ810E/PJ820E
Models with the USB IN/OUT jacks: HDR-PJ810/PJ820
Models with the USB Output only jack: HDR-PJ810E/PJ820E

Note

- For the following items, the descriptions are explained with the model name.
  - Parts and controls
  - Menu items
  - Expected recording time of movies
  - Expected number of recordable photos

Related Topic

- Parts and controls (front/top)
Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Parts and controls (front/top)

1. Built-in microphone
2. Multi interface shoe

For details on compatible accessories of the Multi interface shoe, visit the Sony website in your area, or consult your Sony dealer or local authorized Sony service facility.
Operations with other manufacture’s accessories are not guaranteed. If you use a shoe adaptor (sold separately), you can also use accessories compatible with an Active Interface Shoe.

3. Video light
4. N mark
   NFC: Near Field Communication
5. Lens (G lens)
6. Remote sensor
7. Camera recording lamp
   The camera recording lamp lights up in red during recording. The lamp flashes when the remaining recording media capacity or battery power is low.
8. MANUAL button
9. MANUAL dial

Notes on use
Parts and controls (LCD monitor)

1. LCD monitor/Touch panel
   If you rotate the LCD panel 180 degrees, you can close the LCD monitor with the screen facing out. This is convenient during playback operations.
2. Speaker
3. PROJECTOR FOCUS lever
4. Projector lens

Notes on use

Copyright 2014 Sony Corporation
Parts and controls (side)

1. PROJECTOR IN jack
2. Memory card access lamp
   While the lamp is lit or flashing, this product is reading or writing data.
3. Memory card slot
4. HDMI OUT jack
5.  (Shooting Mode) button
6.  (My Voice Canceling) button
   Suppresses the voice of the person recording the movie.
7. PROJECTOR button
8.  (View Images) button
9. LIGHT (Video Light) button
10. POWER button

Notes on use
Parts and controls (back/bottom)

1. Power zoom lever
2. PHOTO button
3. Viewfinder lens adjustment lever
4. Eyecup
5. Viewfinder
6. POWER/CHG (charge) lamp
7. START/STOP button
8. Battery pack
9. DC IN jack
10. (microphone) jack (PLUG IN POWER)
11. (headphones) jack
12. Grip belt
13. Loop for a shoulder belt
14. Built-in USB Cable
15. Multi/Micro USB Terminal
   - Supports Micro USB compatible devices.
   - If you use an adaptor cable (sold separately), you can also use accessories via an A/V Remote Connector.
16. Tripod receptacle
Attach a tripod (sold separately: the length of the screw must be less than 5.5 mm (7/32 in.)). Depending on the specifications of the tripod, this product may not attach in the proper direction.

17. BATT (battery) release lever

**To fasten the grip belt**

![Diagram of grip belt]

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Parts and controls (Wireless Remote Commander)

1. DATA CODE button
   Displays the date and time and the camera settings data when you press this button during playback.

2. PHOTO button
   The on-screen image when you press this button will be recorded as a still image.

3. SCAN/SLOW buttons
4. (Previous/Next) buttons

5. PLAY button
6. STOP button
7. DISPLAY button
8. Transmitter
9. START/STOP button
10. Power zoom buttons
11. PAUSE button
12. VISUAL INDEX button
   Displays a VISUAL INDEX screen during playback.
13. / / / / ENTER buttons
   When you press any of these buttons, the light blue frame appears on the LCD monitor. Select a desired button or an item with / / / , then press ENTER to enter.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Screen indicators

The following indicators appear when you change the settings.

On the left side of the screen (1)

MENU button

Self-timer recording

[Airplane Mode] set to [On]

Video light

Fader

[Face Detection] set to [Off]

[Smile Shutter]

Manual focus

Scene Selection

White Balance

SteadyShot off

White Balance Shift

Conversion Lens

Zebra

Peaking

Cinematone

Intelligent Auto

At the center of the screen (2)

Slideshow Set

Warning

Playback mode

REC /STBY Recording mode
On the right side of the screen (3)

60i Frame rate (60p/50p/60i/50i/24p/25p), recording mode (PS/FX/FH/HQ/LP) and movie size

Dual Video REC

60 min Remaining battery

Recording/playback/editing media

0:00:00 Counter (hour:minute:second)

00min Estimated recording time

24.5M Approximate number of recordable photos and photo size

Playback folder of the memory card

100/112 Current playing movie or photo/Number of total recorded movies or photos

Connection to the external media device

At the bottom of the screen (4)

Audio Rec Level

[Auto Wind NR] set to [Off]

[My Voice Canceling] set to [On]

Blt-in Zoom Mic

Audio Mode

5.1ch Audio Level Display

AGC Limit

Spot Meter/Fcs/Spot Meter/Exposure

Audio Level Display

AE Shift

Shutter Speed

F1.8 IRIS

Intelligent Auto

Data file name

Protect

Note

- Indicators and their positions are approximate and may differ from what you actually see.
- Some indicators may not appear, depending on the model.

Related Topic

Screen display on the Event View screen

Notes on use
Supplied items

The numbers in ( ) indicate the supplied quantity.

Camcorder (1)
AC Adaptor (1)

- The shape of the AC Adaptor varies depending on the countries/regions.

HDMI cable (1)

USB connection support cable (1)

Step Down Ring (1)

Wireless Remote Commander (1)

Rechargeable battery pack NP-FV50 (1)
When using this product while connected to a wall outlet (wall socket), such as while charging, make sure to attach the battery pack to this product.

"Operating Guide" (1)

**Hint**

- The USB connection support cable is designed for use with this product only. Use this cable when the Built-in USB Cable of this product is too short for connection.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Attaching the Step Down Ring

Attach the Step Down Ring and change the filter diameter.

1. Align the Step Down Ring with this product properly (①), then turn it in the direction of the arrow until the Step Down Ring is locked in place (②).

Hint

- You can change the filter diameter to 37 mm (1 1/2 in.) by attaching the Step Down Ring, allowing you to use the recommended conversion lens.
- You cannot attach the wide end conversion lens/wide conversion lens, if the Step Down Ring is attached.
- To remove the Step Down Ring, turn it in the opposite direction from that of the arrow.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Attaching the battery pack

Attach the battery pack to this product.

1. Close the LCD monitor and attach the battery pack (①).
   - Align the indentation on this product and projection on the battery pack, then slide the battery pack upwards.

To remove the battery pack

Turn off this product. Slide the battery release lever (①) and remove the battery pack (②).

Note

- You cannot use any InfoLITHIUM battery pack other than the V series to this product.
- When attaching a video light (sold separately), it is recommended that you use an NP-FV70 or NP-FV100 battery pack.
- You cannot use the NP-FV30 InfoLITHIUM battery pack with this product.
- In the default setting, the power turns off automatically if you leave this product without any operation for about 2 minutes, to save battery power (Power Save).
Charging the battery pack using the AC Adaptor

Charge the battery pack using the supplied AC Adaptor. Attach the battery pack in advance.

1. Close the LCD monitor.

![Image of a camcorder with the LCD monitor closed]

2. Pull out the Built-in USB Cable from this product.

![Image of pulling out a USB cable from a camcorder]

3. Connect this product to a wall outlet (wall socket) using the USB connection support cable and the AC Adaptor.
   - The POWER/CHG (charge) lamp lights orange.
   - The POWER/CHG (charge) lamp turns off when the battery pack is fully charged. Disconnect the USB connection support cable from this product.

![Image of a camcorder connected to an AC Adaptor]

A: USB connection support cable
B: AC Adaptor

**To store the Built-in USB Cable**

Put the Built-in USB Cable back in the pocket on the grip belt after use.
Note

- The shape of the AC Adaptor varies depending on the countries/regions.
- Be aware of the following notes on using the AC Adaptor.
  - Use a nearby wall outlet (wall socket) when using the AC Adaptor. Disconnect the AC Adaptor from the wall outlet (wall socket) immediately if any malfunction occurs while using this product.
  - Do not use the AC Adaptor placed in a narrow space, such as between a wall and furniture.
  - Do not short-circuit the USB jack of the AC Adaptor or battery terminal with any metallic objects. This may cause a malfunction.
  - To disconnect the AC Adaptor from this product, first disconnect the USB connection support cable from the AC Adaptor, and then disconnect this product from the USB connection support cable holding the connectors.

Hint

- It is recommended that you charge the battery in a temperature range of 10 °C to 30 °C (50 °F to 86 °F).

Related Topic

- Charging time
- Expected recording time with each battery pack
- Expected playback time with each battery pack
- Using this product abroad

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Charging the battery pack using your computer

Charge the battery pack by connecting this product and your computer with the Built-in USB Cable. Attach the battery pack in advance.

1. Close the LCD monitor.

2. Pull out the Built-in USB Cable from this product.

3. Connect this product to a running computer using the Built-in USB Cable.
   - The POWER/CHG (charge) lamp turns orange.
   - The POWER/CHG (charge) lamp turns off when the battery pack is fully charged. Disconnect the Built-in USB Cable from the computer, and then store it in the pocket on the grip belt.
   - If the Built-in USB Cable is not long enough for the connection, use the USB connection support cable.

①: Built-in USB Cable
②: To a wall outlet (wall socket)
**To put the Built-in USB Cable away**

Put the Built-in USB Cable back in the pocket on the grip belt after use.

**Hint**

- It is recommended that you charge the battery in a temperature range of 10 °C to 30 °C (50 °F to 86 °F).

**Related Topic**

- Charging time
- Expected recording time with each battery pack
- Expected playback time with each battery pack
- Using this product abroad

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Turning the power on

Turn on this product.

1. Open the LCD monitor of this product and turn the power on.
   - You can also turn on this product by pressing POWER or by pulling out the viewfinder.

To turn off the power

Close the LCD monitor.
If the viewfinder is pulled out, retract the viewfinder as shown in the illustration below.
- You can also turn off this product by pressing POWER.

On turning this product on or off using the LCD monitor or the viewfinder

The power of this product is turned on or off depending on the status of the LCD monitor or the viewfinder.

**LCD monitor: Open, Viewfinder: Retracted**
Power On

**LCD monitor: Open, Viewfinder: Pulled out**
Power On

**LCD monitor: Closed, Viewfinder: Retracted**
Power Off

**LCD monitor: Closed, Viewfinder: Pulled out**
Power On
• Even if the LCD monitor is closed, if the viewfinder is pulled out, this product is not turned off. When you turn off the power of this product, make sure that the viewfinder is retracted to the original position.
Using this product supplying power from a wall outlet (wall socket)

Supply power to this product using the AC Adaptor.

1. Attach the battery pack, and then pull out the Built-in USB Cable.

2. Connect this product to a wall outlet (wall socket) using the USB connection support cable and the AC Adaptor.

**Note**
- The battery pack is not charged, even when the AC Adaptor is connected to this product, as long as the power is on.
- To supply power via the AC Adaptor to this product, set [USB Power Supply] to [On]. Also, the battery pack must be attached to this product.
- Even when connecting the AC Adaptor to this product, this product may subsidiarily use power from the battery pack depending on the environment in which you use this product.

**Related Topic**
- Charging the battery pack using the AC Adaptor
- USB Power Supply
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Setting the language, date and time

Set the language, date and time when using this product for the first time.

1. Open the LCD monitor of this product and turn the power on.

2. Select the desired language, then select [Next].

A: Touch the LCD monitor

3. Select the desired geographical area with ⇧/⇨, then select [Next].

4. Set [Daylight Savings] or [Summer Time], select the date format and the date and time.
   - If you set [Daylight Savings] or [Summer Time] to [On], the clock advances 1 hour.
   - When you select the date and time, select one of the items and adjust the value with ⇧/⇨.
   - When you select [OK] - [X], the date and time setting operation is complete.

Hint
The date and time are recorded automatically and can be displayed only during playback. To display them, select [MENU] - [Setup] - [Playback Settings] - [Data Code] - [Date/Time].

**Related Topic**

- Date & Time Setting
- Calibration

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Adjusting the angle of the LCD monitor for easier viewing

You can adjust the angle of the LCD monitor for easier viewing.

1. First open the LCD monitor 90 degrees to this product (①), and then adjust the angle (②).
Digital HD Video Camera Recorder  
HDR-PJ810/PJ810E/PJ820/PJ820E

Adjusting the angle of the viewfinder for easier viewing

You can adjust the angle of the viewfinder for easier viewing.

1. Pull out the viewfinder (①) and close the LCD monitor and then adjust the angle you want (②).

2. Adjust the appearance using the viewfinder lens adjustment lever located on the above of the viewfinder.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Displaying items on the LCD monitor

Items on the LCD monitor disappear if you do not operate this product for a few seconds after you turn this product on or switch between the movie recording and photo shooting modes. To display items on the LCD monitor again, touch anywhere on the LCD monitor other than buttons.

**Hint**

- To keep the LCD monitor active, use [Display Setting] to change the setting.

**Related Topic**

- Display Setting

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Inserting a memory card

1. Open the cover and insert the memory card until it clicks.

A: Access lamp
B: Insert the card with the notched edge in the direction as illustrated.

Note
- To ensure stable operation of the memory card, it is recommended to format the memory card with this product before the first use. Formatting the memory card will erase all the data stored on it and the data will be irrecoverable. Save your important data on your PC, etc.
- If [Failed to create a new Image Database File. It may be possible that there is not enough free space.] is displayed, format the memory card.
- Confirm the direction of the memory card. If you forcibly insert the memory card in the wrong direction, the memory card, memory card slot, or image data may be damaged.
- Do not insert any memory card other than those that fit into the memory card slot. Doing so may cause a malfunction.
- When inserting or ejecting the memory card, be careful so that the memory card does not pop out and drop.
- Memory card will not be recognized by this product unless it is inserted straight in the correct direction.
- If [Preparing image database file. Please wait.] is displayed, wait until the message disappears.

Hint
- To eject the memory card, open the cover and lightly push the memory card in once.

Related Topic
Displaying items on the LCD monitor
Expected recording time of movies

Expected number of recordable photos

Types of memory card you can use with this product

Media Select

Format

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Types of memory card you can use with this product

The following types of memory cards can be used with this product.

**Types of Memory Stick media you can use with this product**

In this Help Guide, the following types of Memory Stick media you can use with this product are called Memory Stick PRO Duo media.

- Memory Stick PRO Duo media (*)
- Memory Stick PRO-HG Duo media (*)
- Memory Stick XC-HG Duo media (**)

*Memory Stick PRO Duo media with a capacity up to 32 GB have been confirmed to operate properly with this product.
**Memory Stick PRO Duo media with a capacity up to 64 GB have been confirmed to operate properly with this product.

**Types of SD memory card you can use with this product**

In this Help Guide, the following types of SD cards you can use with this product are called “SD card.”

- SD memory card
- SDHC memory card
- SDXC memory card

**Note**

- For recording movies, use the card of Class 4 or faster.
- SD memory cards with a capacity up to 64 GB have been confirmed to operate properly with this product.

---

**Related Topic**

- Expected recording time of movies
- Expected number of recordable photos

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Recording movies

1. Open the LCD monitor of this product and turn the power on.

2. Press START/STOP to start recording.
   - To stop recording, press START/STOP again.

Note

- If you close the LCD monitor while recording movies, this product stops recording (only when the viewfinder is retracted).
- The maximum continuous recordable time of a movie is about 13 hours.
- When a movie file exceeds 2 GB, the next movie file is created automatically.
- The following states will be indicated if data is still being written onto the recording media after recording has finished. During this time, do not apply shock or vibration to this product, or remove the battery pack or AC Adaptor.
  - Access lamp is lit or flashing
  - The media icon in the upper right of the LCD monitor is flashing
- The LCD monitor of this product can display recording images across the entire monitor (full pixel display). However, this may cause slight trimming of the top, bottom, right, and left edges of images when played back on a TV which is not compatible with full pixel display. It is recommended you record images with [Grid Line] set to [On] using the outer frame of [Grid Line] as a guide.
- Check the subject on the LCD monitor, and then start recording.
- If the lens cover does not fully open, only a black screen and sound may be recorded.
In the default setting, this product records an AVCHD movie and MP4 movie simultaneously in the movie recording mode. When you do not want to record an MP4 movie, set [Dual Video REC] to [Off].

### Related Topic
- Expected recording time of movies
- Media Select
- Media Info
- Grid Line
- Dual Video REC

### Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Shooting photos

Shoot photos.

1. Open the LCD monitor of this product and turn the power on.

2. Press the (Shooting Mode) button to select the photo recording mode.
   - You can also select the photo recording mode by selecting [MODE] on the LCD monitor.

3. Press PHOTO lightly to adjust the focus, then press it fully.
   - When the focus is adjusted properly, the AE/AF lock indicator appears on the LCD monitor.

**Note**

- The following states will be indicated if data is still being written onto the recording media after recording has finished. During this time, do not apply shock or vibration to this product, or remove the battery pack or AC Adaptor.
  - Access lamp is lit or flashing
The media icon in the upper right of the LCD monitor is flashing

Related Topic

Image Size

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Zooming

You can record an image with the subject magnified.

1. Move the power zoom lever to magnify or reduce the size of the image.

   **W:**
   Wider range of view (Wide angle)

   **T:**
   Close view (Telephoto)

   - Move the power zoom lever slightly for a slower zoom. Move it further for a faster zoom.

**Note**

- Be sure to keep your finger on the power zoom lever. If you move your finger off the power zoom lever, the operation sound of the power zoom lever may also be recorded.
- You cannot change the zoom speed with the W/T button on the LCD monitor.
- The minimum possible distance between this product and subject while maintaining sharp focus is about 1 cm (about 13/32 in.) for wide angle and about 80 cm (about 31 1/2 in.) for telephoto.

**Related Topic**

- Digital Zoom
- Zoom magnifications
Capturing photos during movie recording (Dual Capture)

You can shoot photos during movie recording.

1. Press PHOTO during movie recording to capture still photos.

**Note**

- You may not be able to shoot photos depending on the setting in [REC Mode] and [Frame Rate].
- You cannot capture photos during movie recording in the following situation(s):
  - When an item of [Picture Effect] is selected

**Related Topic**

- REC Mode
- Frame Rate
- Picture Effect

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Recording in mirror mode

You can rotate the LCD monitor 180 degrees so the LCD monitor faces toward you to record yourself.

1. Open the LCD monitor 90 degrees to this product (①), then rotate it 180 degrees to the lens side (②), and then start recording.

   ![Diagram showing steps 1 and 2]

    ①  ②

**Hint**

- A mirror-image of the subject appears on the LCD monitor, but the image will be normal when recorded.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Intelligent Auto

This product records images after selecting the most suitable setting for the subjects or the situation automatically.

   - To cancel the Intelligent Auto function, select [AUTO] - [Off] - [OK].

2. Point this product toward the subject and start recording.
   - The icons that correspond to the conditions detected are displayed.

About the detectable scenes

Face detection: (Portrait), (Baby)
Scene detection: (Backlight), (Landscape), (Night Scene), (Spotlight), (Low light), (Macro)
Camera-shake detection: (Walk), (Tripod)
Sound detection: , (Auto Wind NR)

Note

- This product may not detect the expected scene or subject, depending on the recording conditions.
Decreasing the voice volume of the person recording the movie (My Voice Canceling)

You can record movies decreasing the voice volume of the person recording the movie.

1. Press the \( \text{\textregistered} \) button.
   - When [My Voice Canceling] is set to [On], \( \text{\textregistered} \) is displayed.

Note

- Set [My Voice Canceling] to [Off] if you want to record a movie without decreasing the voice volume of the person recording the movie.
- Depending on the recording condition, you cannot decrease the voice volume of the person recording the movie as expected.
- The [My Voice Canceling] function does not activate while an external microphone is connected to this product.

Hint

- You can also set [My Voice Canceling] from the menu.

Related Topic

- My Voice Canceling
Recording the selected subject clearly (Face Priority)

This product can track a face you select and adjust the focus, exposure, and skin tone of the face automatically.

1. Touch one of the faces targeted.
   - To cancel the Face Priority function, select  

![Image of Face Priority function]

A: A double-line frame appears
B: Cancels the function

**Note**
- The subject you touched may not be detected, depending on the surrounding brightness or hairstyle of the subject.
- Make sure to set the [Face Detection] setting to [Auto].
Recording subjects other than people (Tracking focus)

This product can track a subject you select and adjust the focus automatically.

1. Touch the subject you want to track while recording.
   - To cancel the Tracking focus function, select \[ \text{[ ]} \].

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Recording movies in dim places (Video Light)

You can record movies using the video light.

1. Press LIGHT.
   - Each time you press the LIGHT button, the setting changes as follows.
     Off (no indicator) - Auto (AUTO) - On ( ) - and so on.

   A: Video light

**Note**
- The video light generates strong light. Do not use the video light directly in front of the eyes at close range.
- The battery drains quickly while using the video light.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Controlling the image settings manually with the MANUAL dial

Use the menu assigned to the MANUAL button.

1. Press the MANUAL button to switch to the manual operation mode.
   - Pressing the MANUAL button switches the operation mode between manual and automatic.

2. Rotate the MANUAL dial to make adjustments.

Note
   - Manual settings will be retained even if you change the assigned item of the MANUAL dial. However, if you set [Exposure] after setting [AE Shift] manually, [Exposure] will override [AE Shift].
   - If you set either one of [Exposure], [IRIS], or [Shutter Speed], the settings of other 2 items are canceled.

Related Topic

- Display Setting
- AE Shift
- Exposure
- IRIS
- Shutter Speed
Assigning frequently-used menu items to the MANUAL button

You can register your desired functions to the MANUAL button.

1. Press and hold the MANUAL button down for a few seconds.
   - The [Dial Setting] screen is displayed.

2. Rotate the MANUAL dial and select the item to be assigned.
   - Select [RESET] to reset the items adjusted manually to the default settings.

3. Press the MANUAL button to confirm.

**Items you can control with the MANUAL dial**

- [Focus]
- [Exposure]
- [IRIS]
- [Shutter Speed]
- [AE Shift]
- [White Balance Shift]

**Hint**

- The camera data that appears on the LCD monitor will differ, depending on the recording settings of this product. The settings will be displayed with the following icons.
  - AUTO: Automatic
  - MANUAL: Exposure is set manually.
  - AE A: IRIS priority
  - AES: Shutter speed priority

**Related Topic**

Focus
Exposure

IRIS

Shutter Speed

AE Shift

White Balance Shift

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playing movies and photos from the Event View screen

You can search for recorded images by date and time of recording (Event View).

1. Open the LCD monitor and press (View Images) to enter the playback mode.
   - You can also operate by selecting (View Images) on the LCD monitor.

2. Select ◀/▶ to move the desired event to the center (①) and then select it (②).
   - This product displays recorded images as an event automatically, based on the date and time.

3. Select the image.
   - This product plays from the selected image to the last image in the event.

4. Select the appropriate buttons on the LCD monitor for various playback operations.
**Buttons for playback operations**

- ⬅️/➡️: Previous/Next
- ❌: Delete
- ⏪/⏩: Fast-reverse/fast-forward
- ⚪️: Context
- ⏸️/▶️: Play/Pause
- ■: Stop
- ☑️: Play/stop slide show
- 🎬: Motion shot video

**Note**
- To prevent your image data from being lost, save all your recorded images on external media periodically.
- Some buttons described above may not appear, depending on the image being played back.
- In the default setting, a protected demonstration movie is pre-recorded.

**Hint**
- As you repeat selecting ⬅️/➡️ during playback, movies are played as fast as about 5 times - about 10 times - about 30 times - about 60 times.
- Select ⏸️/▶️ during pause to play movies slowly.
- To repeat Slideshow, select ☑️ - [Slideshow Set] when ☑️ is selected with the Switch Image Type button.

**Related Topic**
- Send to Computer
- Protect

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Screen display on the Event View screen

Explains items displayed on the Event View screen.

**Event View screen**

1. To the MENU screen
2. Event name
3. To the previous event
4. To the movie/photo recording mode
5. To play back short movies (Highlight Playback)
6. Remaining battery
7. To switch movie format (HD/MP4)
8. Events
9. To the next event
10. Time-line bar
11. To change Event Scale (approx. 3 months/1.5 years)

**Index screen**
1. Event name
2. To close the index screen
3. To the previous event
4. To the next event
5. To the movie/photo recording mode
6. Last played image
7. Recorded time/number of photos
8. To switch between the movie/photo playback screen
9. Movie
10. Photo

Hint

- Reduced-size images which enable you to view many images at the same time on an index screen are called "thumbnails."

Related Topic

- Event View

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Playing back a short movie (Highlight Playback)

You can enjoy movies and photos as a short movie.

1. Open the LCD monitor and press 🎥 (View Images) to enter the playback mode.
   - You can also operate by selecting 🎥 (View Images) on the LCD monitor.

2. Display the desired event at the center of the Event View, and select 📦 Highlight.

3. Play a movie or a photo.

4. Select the desired operation when the highlight playback finishes.
   A: This product plays the Highlight Playback scenes again.
   B: You can change the settings for Highlight Playback.

Buttons for playback operations
Note

- MP4 movies cannot be played using the Highlight Playback function.
- Highlight Playback scenes will change each time you select a Highlight Playback.
- The [Playback Range] setting is cleared when the Highlight Playback stops.
- After the music file is transferred to this product, if you cannot play the music, the music file may be damaged. Delete the music file by selecting [MENU] - [Setup] - [Playback Settings] - [Empty Music], then transfer the music file again. You can restore the music data recorded on this product at the default using “Music Transfer.” For operating instructions, see “Music Transfer” help (models with the USB IN/OUT jacks).
- The audio used for the Highlight Playback will be converted to 2ch stereo.

Related Topic

Empty Music (HDR-PJ810/PJ820)
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Changing the settings for Highlight Playback

You can set the playback range of the Highlight Playback and select a theme for Highlight Playback.

1. Select [Highlight Setting] on the LCD monitor before or after the Highlight Playback.
   - You can also change the setting by selecting ⌘ while this product is playing highlight scenes.

Descriptions of menu items

[Playback Range]
You can set the playback range (starting and ending date) of the Highlight Playback.

[Theme]
You can select a theme for Highlight Playback.

[Music]
You can select music.

[Audio mix]
The original sound is played back with the music.

[Length]
You can set the length of the Highlight Playback segment.

[Highlight Point]
You can set the points in a movie or photo that will be used in a Highlight Playback.
Play the desired movie, and select ⌘ - OK. Or play the desired photo and select OK. 

⌘ appears on the movie or photo that is used in a Highlight Playback.
To erase the points, select ⌘ - [Clear All Points].

Related Topic

Playing back a short movie (Highlight Playback)
Saving Highlight Playback (Scenario Save)

You can save your favorite Highlight Playback as a “Scenario.” Up to 8 scenarios can be saved.

1. Select [Replay] on the LCD monitor after a Highlight Playback has finished.

2. When the Highlight Playback starts again, select 

   ![Highlight Setting]
   
   Scenario Save

```
Note

- The scenarios can be played on this product only.
```

**Related Topic**

- Playing back a short movie (Highlight Playback)
- Playing back a saved scenario
Playing back a saved scenario

You can play back Highlight Scenarios saved on this product.

1. Select [Playback Function] - [Scenario], select the desired scenario, and then select OK.

Hint

To erase a saved scenario, select [Erase] on the [Scenario] screen.

Related Topic

- Saving Highlight Playback (Scenario Save)

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Playing MP4 movies (HD movie) (switching the movie format)

The format of a movie to be played or edited can be changed on the Event View screen.

1. Press (View Images) to enter the playback mode.

2. Select the movie format you want to play from [HD] or [MP4] at the top right corner of the LCD monitor.

- The format of a movie to be played or edited will be switched.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Notes on editing

- Some basic editing operations can be done on this product. If you want to do advanced editing operations, install and use the PlayMemories Home software.
- You cannot restore images once they are deleted. Save important movies and photos before deleting.
- Do not remove the battery pack or the AC Adaptor from this product while deleting or dividing the images. Doing so may damage the recording media.
- Do not eject the memory card while deleting or dividing images saved on the memory card.
- If you delete or divide movies that are included in saved scenarios, the scenarios will also be deleted.

Related Topic

- Using the PlayMemories Home software
- Saving Highlight Playback (Scenario Save)
- Delete
- Dividing a movie
Deleting the selected images

Select and delete unnecessary images.

1. Press the " button on this product to enter the playback mode.

2. On the Event View screen, select [HDR], and then select the movie format you want to delete.

3. [MENU] - [Edit/Copy] - [Delete].

4. Select [Multiple Images], and then select the type of image you want to delete.

5. Add check marks ✓ to the movies or photos to be deleted and select OK.

**Hint**

- You cannot delete protected images ( ). Release the protection of the data before deleting.
- To delete the unwanted part of a movie, divide the movie and then delete that part.

**Related Topic**

Protect
Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Deleting by date

Select unnecessary images by date of recording and delete them.

1. Press the (play) button on this product to enter the playback mode.

2. On the Event View screen, select [ ], and then select the movie format you want to delete.

3. MENU - [Edit/Copy] - [Delete].

4. Select [All In Event].

5. Select the date you want to delete using [ ]/ [ ], and then select [OK].

Related Topic

Format
Dividing a movie

Split a recorded movie at your desired point.

1. Select [Divide] on the movie playback screen.

2. Select the point where you want to divide the movie into scenes using [▶]/[■], and then select [OK].

A: Returns to the beginning of the selected movie
B: Adjusts the dividing point with more precision

**Note**
- A slight difference may occur from the point where you select and the actual dividing point, as this product selects the dividing point based on about half-second increments.
- An MP4 movie cannot be divided.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Capturing a photo from a movie

You can capture images from movies recorded with this product.

1. Select the [Photo Capture] that appears on the playback screen of a movie.

2. Select the scene you want to capture a photo using the buttons, and then select OK.

- The image size of the photo will be [2.1 M].
  
A: Returns to the beginning of the selected movie
B: Adjusts the capturing point with more precision

Note

- You cannot capture photos from a movie saved on a memory card. (models with the USB output only jack)

Hint

- The recording date and time of captured photos are the same as the recording date and time of the movies.
- If the movie you are capturing from has no data code, the recording date and time of the photo will be the date and time you captured from the movie.
Viewing trajectory of a moving object (Motion Shot Video)

You can view the trajectory of a fast-moving object.

1. On the Event View screen, play your desired movie, and then select \[\text{View Move}\].
   To stop [Motion Shot Video] playback, select \[\text{View Move}\].

**Note**

- [Motion Shot Video] cannot be saved as movies.
- Trajectories of a moving object may not be plottable if the object is moving slowly or almost not at all.

**Hint**

- If this function does not work well, you can use \[\text{View Move}\] to change the interval of trajectories to be plotted.
- You can capture photos from your favorite scene of a [Motion Shot Video] ([Photo Capture]).

**Related Topic**

- Playing movies and photos from the Event View screen
- Capturing photos during movie recording (Dual Capture)
- Motion Interval ADJ

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Notes on using the projector

- The LCD monitor turns off while an image is being projected.
- Be careful of the following operations or situations while using the projector.
  - Make sure not to project images towards the eyes.
  - Make sure not to touch the projector lens.
  - The LCD monitor and the projector lens become hot while in use.
  - Using the projector shortens battery life (using the supplied AC Adaptor is recommended).
- The following operations are unavailable while you are using the projector.
  - Operation of this product with the LCD monitor closed
  - Several other functions
- When the projected images contain a lot of black, faint color unevenness may appear. This is caused by light reflection in the projector lens and is not a malfunction.
Using the built-in projector

You can use a flat surface such as a wall as a screen to view recorded images using the built-in projector.

1. Face the projector lens towards a surface, such as a wall, and then press PROJECTOR.

2. Select [Image Shot on This Device] on the LCD monitor.


   - This screen appears the first time you use the built-in projector after this product is turned on.

4. Adjust the focus of the projected image using the PROJECTOR FOCUS lever.

   A: PROJECTOR FOCUS lever

   - The projected image is larger when the distance between this product and the reflecting surface increase.
   - It is recommended that you place this product further than 0.5 m (1.6 feet) away (approximate distance) from the
5. Use the power zoom lever to move the selection frame that appears on the projection screen, and then press the PHOTO button.

A: Power zoom lever
B: PHOTO button

- For details on playback, see “Playing movies and photos from the Event View screen.”
- When you use the wireless remote commander, press ▲/▼/◄/► to move the selection frame and press ENTER to start playing the framed item.
- Press PROJECTOR to turn off the projector.

Related Topic

- Playing movies and photos from the Event View screen
- Auto Keystone ADJ

Notes on use
Using the projector for your computer or smartphone

You can project images from a computer or smartphone using the built-in projector.

1. Connect the PROJECTOR IN jack of this product to an HDMI output jack of the other device using the HDMI cable (supplied).

![Connection Diagram]

2. Face the projector lens towards a surface, such as a wall, and then press PROJECTOR.

3. Select [Image from External Device] on the LCD monitor.


   ![Project Screen]

   - This screen appears the first time you use the built-in projector after this product is turned on.

5. Adjust the focus of the projected image using the PROJECTOR FOCUS lever.

   ![Focus Adjustment]

   A: PROJECTOR FOCUS lever

   - The further you position this product from the wall, the larger the screen will be.
It is recommended that you place this product further than 0.5 m (1.6 feet) away (approximate distance) from the surface that the images are to be projected onto.

6. Select the image you want to view using your computer or smartphone.
   • To turn off the projector, press PROJECTOR.

**Note**

• You can only operate the PROJECTOR FOCUS lever while projecting images.

**Hint**

• If the terminal of the device connected is not compatible with the HDMI cable (supplied), use an HDMI plug adaptor (sold separately).

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the HDMI cable</td>
</tr>
<tr>
<td>Auto Keystone ADJ</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Connecting this product to a high definition TV

You can play movies in high definition image quality (HD) by connecting this product to an HDMI compatible TV.

1. Switch the input on the TV to the connected jack.

2. Connect the HDMI cable (①) (supplied) to the HDMI OUT jack (②) on this product and to the HDMI input jack (③) on the TV.

3. Play a movie or a photo on this product.

**Note**
- Refer to the instruction manuals of the TV as well.
- Use the supplied AC Adaptor as the power source.
- If the TV does not have an HDMI input jack, use an AV cable (sold separately).
- If you connect this product to the TV using more than one type of cable to output images, HDMI input takes priority on the TV.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Enjoying 5.1ch surround sound

You can record Dolby Digital 5.1ch surround sound with the built-in microphone (default setting). Realistic sound can be enjoyed when playing a movie on devices that support 5.1ch surround sound input.

DOLBY
DIGITAL
5.1 CREATOR

A: Built-in microphone

Note

- The sound of MP4 movies is recorded in 2ch sound.
- The built-in speaker does not output 5.1ch surround sound even if you play back a movie recorded with 5.1ch surround sound on this product.
- To enjoy the 5.1ch surround sound of the movies recorded in 5.1ch sound, you need a device compatible with 5.1ch surround.
- When you connect this product with the supplied HDMI cable, the sound of movies recorded in 5.1ch sound is automatically output in 5.1ch sound.

Related Topic

Audio Mode

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using BRAVIA Sync

You can operate this product with the remote commander of your TV by connecting this product to a BRAVIA Sync compatible TV launched in 2008 or later with the HDMI cable.

You can operate the menu of this product by pressing the SYNC MENU button of the remote commander of your TV. You can display the LCD monitor of this product such as Event View, play selected movies or display selected photos by pressing up/down/left/right/enter buttons of the remote commander of your TV.

**Note**

- There may be some operations you cannot do with the remote commander.
- Set [CTRL FOR HDMI] to [On].
- Also set your TV accordingly. Refer to the instruction manual of the TV for details.
- The operation of BRAVIA Sync differs according to each model of BRAVIA. Refer to the instruction manual of your TV for details.
- If you turn off the TV, this product is turned off simultaneously.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRL FOR HDMI</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
On Photo TV HD

This product is compatible with the Photo TV HD standard. Photo TV HD allows for highly-detailed, photo-like depiction of subtle textures and colors. By connecting Sony’s Photo TV HD-compatible devices using the HDMI cable (*), a whole new world of photos can be enjoyed in breathtaking HD quality.

* The TV will automatically switch to the appropriate mode when displaying photos.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
On the HDMI cable

- Use the supplied HDMI cable or an HDMI cable with the HDMI logo.
- Use an HDMI micro connector on one end (for this product), and a plug suitable for connecting your TV on the other end.
- Copyright-protected images are not output from the HDMI OUT jack of this product.
- Some TVs may not function correctly (e.g., no sound or image) with this connection.
- Do not connect the HDMI OUT jack of this product to an external device HDMI OUT jack, as malfunction may result.

HDMI (High-Definition Multimedia Interface) is an interface to send both video/audio signals. The HDMI OUT jack outputs high quality images and digital audio.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Connecting this product to a non-high-definition TV

Play back images with this product connected to a TV by an AV cable (sold separately).

A: AV cable (sold separately)

1. Switch the input on the TV to the connected jack.

2. Connect the Multi/Micro USB terminal of this product and the VIDEO/AUDIO jack of your TV using an AV cable (sold separately).

3. Play a movie or a photo on this product.

**Note**
- Refer to the instruction manuals of the TV as well.
- Use the supplied AC Adaptor as the power source.

Related Topic

- TV Type

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Using the PlayMemories Home software

The PlayMemories Home software allows you to import movies and still images to your computer to use them in a variety of ways.

A: Import images from this product
B: The functions below are also available on a Windows PC
C: View images in a calendar
D: Create a movie disc
E: Upload images to online services
F: Play the imported images
G: Share images on PlayMemories Online

Installing the PlayMemories Home software in your computer

PlayMemories Home can be downloaded from the following URL.
www.sony.net/pm/

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Checking the computer system

You can check the system requirements for software at the following URL.
www.sony.net/pcenv/

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Installing the PlayMemories Home software in your computer

Installing the PlayMemories Home software on your computer enables you to make use of your recorded images.

1. Access the following download page using an Internet browser on your computer to download the PlayMemories Home software.
   www.sony.net/pm/
   - Install the software according to the on-screen instructions.
   - When the installation has completed, PlayMemories Home starts.
   - If the PMB (Picture Motion Browser) software is installed on your computer, it will be overwritten by the PlayMemories Home software. Use PlayMemories Home, the successor software of PMB.

2. Connect this product and your computer with the Built-in USB Cable.
   - If the PlayMemories Home software is already installed on your computer, connect this product to your computer. Functions that can be used with this product will then be available.

   ![USB Cable Connection Diagram]

   ① Built-in USB Cable
   ② To the USB jack of your computer

**Note**
- Log on to your computer as an administrator.
- You may need to restart your computer. When prompted to restart, follow the on-screen instructions.
- Depending on the usage environment, DirectX can then be installed.

**Hint**
- For details on PlayMemories Home, refer to the help of PlayMemories Home.
Disconnecting this product from the computer

Disconnect this product from the computer connected with the Built-in USB Cable.

1. Click in the task tray, and then click .
   - If you use a Windows Vista computer, click in the task tray.

2. Click the message displayed on the computer screen.

3. Select on the LCD monitor, and then disconnect the Built-in USB Cable.

**Note**
- If you use a Mac computer, drag and drop the memory card or the drive icon to the Trash before disconnecting. The connection with the computer is released.
- If you use a Windows 7 or Windows 8 computer, a disconnection icon may not be displayed. In this case, you can release the connection without performing the above operations.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

About the dedicated software for this product

You can download the dedicated software from the Sony website.

**Windows:**
www.sony.co.jp/imsoft/Win/

**Mac:**
www.sony.co.jp/imsoft/Mac/

**Note**
- The software that can be used with this product will differ, depending on the countries/regions.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Creating a Blu-ray disc

You can create a Blu-ray disc with an AVCHD movie previously imported to a computer.

To create a Blu-ray disc, the “BD Add-on Software” must be installed.
http://support.d-imaging.sony.co.jp/BDUW/

- Your computer must support the creation of Blu-ray discs.
- BD-R (unrewritable) and BD-RE (rewritable) media are available for creating Blu-ray discs. You cannot add contents to either type of disc after creating the disc.
- To play back a Blu-ray disc that has been created with a movie that was recorded in [60p Quality] (models with the NTSC color system) / [50p Quality] (models with the PAL color system) image quality, you need a device that complies with the AVCHD Ver. 2.0 format.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Notes on use of the external media

Read the precautions when using external media.

**Note**
- For this operation, you need the USB Adaptor Cable VMC-UAM2 (sold separately).
- After attaching the battery pack to this product, connect the AC Adaptor to the Built-in USB Cable and a wall outlet (wall socket).
- Refer to the instruction manual supplied with the external media device.
- You may not be able to use external media devices with a code function.
- The file systems this product recognizes are FAT/NTFS. To use an external media device formatted with a file system that this product cannot recognize, format it on your computer, etc. in advance. Before formatting, make sure that you have no important data saved on the external media device as formatting will delete the data.
- Operation is not guaranteed with all devices satisfying the operating requirements.
- The number of scenes you can save on the external media device is as follows. However, even if the external media device has free space, you cannot save scenes exceeding the following number.
  - AVCHD movies: Max. 3,999
  - The total of photos and MP4 movies: Max. 40,000
- The number of scenes may be smaller depending on the type of images recorded.
- If this product does not recognize the external media device, try the following operations.
  - Reconnect the USB Adaptor Cable to this product.
  - If the external media device has the AC power cord (mains lead), connect it to a wall outlet (wall socket).
- You cannot copy images from an external media device to this product.

**Devices that cannot be used as an external media device**

- The following devices cannot be used as an external media device:
  - ordinary disc drive such as CD or DVD drive
  - media devices connected via a USB hub
  - media devices with a built-in USB hub
  - card reader

Related Topic

- Charging the battery pack using the AC Adaptor
Saving images on an external media device

Easily save movies or photos on an external media device such as an external hard disk drive.

1. Connect this product to the external media device using a USB Adaptor Cable (sold separately).

   ![USB Connection](image)

   A: USB Adaptor Cable (sold separately)
   - Make sure not to disconnect the Built-in USB Cable while [Preparing image database file. Please wait.] is displayed on the LCD monitor.
   - If [Repair Img. DB F.] is displayed on the LCD monitor of this product, select **OK**.

2. Select [Copy.] on the LCD monitor of this product.

   ![Copy Option](image)

   - Movies and photos that are stored on the recording media, and that have not yet been saved on to an external media device can be saved on the connected media device at this time.
   - This operation is available only when there are newly recorded images in this product.
   - To disconnect the external media device, select **OK** while either Event View or Event Index is displayed.

Related Topic

- Charging the battery pack using the AC Adaptor
- Notes on use of the external media
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Saving the desired images in this product to the external media device

Save selected movies or photos on an external media device such as an external hard disk drive.

1. Connect this product to the external media device using a USB Adaptor Cable (sold separately).

   A: USB Adaptor Cable (sold separately)
   - Make sure not to disconnect the Built-in USB Cable while [Preparing image database file. Please wait.] is displayed on the LCD monitor.
   - If [Repair Img. DB F.] is displayed on the LCD monitor of this product, select OK.

2. Select [Play without copying].

3. Select MENU - [Edit/Copy] - [Copy], and then follow the on-screen instructions to save images.

**Hint**

- If you want to copy images that have not yet been copied, select MENU - [Edit/Copy] - [Direct Copy] while this product is connected to the external media device.

**Related Topic**

- Charging the battery pack using the AC Adaptor
- Notes on use of the external media
Playing back images in the external media device on this product

Play back images saved on an external media device from this product.

1. Connect this product to the external media device using a USB Adaptor Cable (sold separately).

A: USB Adaptor Cable (sold separately)

2. Select [Play without copying.], and then select the image you want to view.

Hint

- You can also view images on a TV connected to this product.
- When an external media device is connected, \( \mathcal{E} \) will appear on the Event View screen.
- To play back the images saved on an external media device using your computer, select the drive that represents the external media device on the PlayMemories Home software, and then play movies.

Related Topic

- Charging the battery pack using the AC Adaptor
- Notes on use of the external media
- TV Type
Deleting images in the external media device

Delete images saved on an external media device.

1. Connect this product to the external media device using a USB Adaptor Cable (sold separately).

2. Select [Play without copying.].

3. Select [Menu] - [Edit/Copy] - [Delete], and then follow on-screen instructions to delete images.

Related Topic

- Charging the battery pack using the AC Adaptor
- Notes on use of the external media

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Creating a disc with a recorder

You can copy images on this product onto a disc or video cassette. Connect this product to a disc recorder with an AV cable (sold separately).

**Note**
- After attaching the battery pack to this product, connect this product to a wall outlet (wall socket) using the supplied AC Adaptor for this operation.
- Refer to the instruction manual supplied with the device connected.

1. Insert the recording medium in the recording device (a disc recorder, etc.).
   - If your recording device has an input selector, set it to the input mode.

2. Connect this product to the recording device with an AV cable (sold separately).
   - Connect this product to the input jacks of the recording device.

3. Start playback on this product, and record it on the recording device.

4. When dubbing is finished, stop the recording device, and then this product.

**Note**
- You cannot copy images to recorders connected with the HDMI cable.
- Since copying is performed via analog data transfer, the image quality may deteriorate.
- Images will be copied with standard definition image quality.
- When you connect a monaural device, connect the yellow plug of an AV cable (sold separately) to the video input.
Jack, and the white (left channel) or the red (right channel) plug to the audio input jack on the device.

**Hint**

- Change the [Data Code] setting if you want to copy the date and time and the camera setting data information.
- Set [TV Type] to [4:3] if the screen size of your display device such as TV is 4:3.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging the battery pack using the AC Adaptor</td>
</tr>
<tr>
<td>Data Code</td>
</tr>
<tr>
<td>TV Type</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
What you can do with the Wi-Fi function

Explains what you can do using the Wi-Fi function of this product.

**Saving movies and photos to your computer**

**Transferring movies (MP4) and photos to your smartphone or tablet**

**Using your smartphone or tablet as a wireless remote commander**
Playing images on a TV

Note

- You cannot use the Wi-Fi function of this product to connect to a public wireless network.
- PlayMemories Mobile is not guaranteed to work on all smartphones and tablets.

Related Topic

- Send to Computer
- Transferring movies (MP4) and photos to your smartphone or tablet
- Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)
- Using your smartphone or tablet as a wireless remote commander
- Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)
- Playing images on a TV (View on TV)

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using your smartphone or tablet as a wireless remote commander

You can operate this product using your smartphone or tablet as a wireless remote commander.

1. Install PlayMemories Mobile on your smartphone.
   - If PlayMemories Mobile is already installed in your smartphone, update the software to the latest version.

2. On the LCD monitor of this product, select [Camera/Mic] - [Shooting Assist] - [Ctrl with Smartphone].
   - The SSID and password are displayed on the LCD monitor of this product. This product is now ready to be operated using your smartphone.

3. Start PlayMemories Mobile, then on the smartphone screen, select the SSID displayed on the LCD monitor of this product, and then enter the password displayed on the LCD monitor of this product.
   - Connect to this product using your smartphone.

4. Operate this product using your smartphone.

**Note**
- The photo size stored on the smartphone is [2M] except when the image size is [S (VGA)].
- Movies are recorded on this product and are not stored on the smartphone.
- The operation methods and display screens for the application are subject to change without notice by future upgrades.
- This application is not guaranteed to work on all smartphones and tablets.

**Hint**
- For the latest supported OS, refer to the download page of PlayMemories Mobile.

**Related Topic**
About the PlayMemories Mobile software

Connecting to an Android smartphone or tablet

Connecting to an NFC-enabled smartphone or tablet

Connecting to an iPhone or iPad

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)

You can operate this product using your NFC-enabled smartphone or tablet as a wireless remote commander.

**Note**
- Make sure that your smartphone is not in sleep mode and the screen is unlocked in advance.

1. Install PlayMemories Mobile on your smartphone.
   - If PlayMemories Mobile is already installed in your smartphone, update the software to the latest version.

2. Select [Settings] on the smartphone, then select [More…] and place a checkmark next to [NFC].

3. Enter the recording mode, and then touch \( \text{N} \) (N mark) of this product to \( \text{N} \) (N mark) of your smartphone.

   - Make sure that \( \text{N} \) (N mark) is displayed on the LCD monitor of this product.
   - Hold this product and your smartphone together and keep them still for about 1-2 seconds until PlayMemories Mobile starts up on your smartphone.
4. Operate this product using your smartphone.

**Note**

- The photo size stored on the smartphone is [2M] except when the image size is [480 S (VGA)].
- Movies are recorded on this product and are not stored on the smartphone.
- The operation methods and display screens for the application are subject to change without notice by future upgrades.
- This application is not guaranteed to work on all smartphones and tablets.
- If the connections is not made successfully, try the procedures shown in “Connecting to an Android smartphone or tablet.”

**Hint**

- For the latest supported OS, refer to the download page of PlayMemories Mobile.

**Related Topic**

- About the PlayMemories Mobile software
- Connecting to an Android smartphone or tablet
- Connecting to an NFC-enabled smartphone or tablet

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Transferring movies (MP4) and photos to your smartphone or tablet

Transfer images to your smartphone or tablet.

1. Install PlayMemories Mobile on your smartphone.
   - If PlayMemories Mobile is already installed in your smartphone, update the software to the latest version.

2. Press the \( \text{\textbf{\text{Play}}} \) button on this product to enter the playback mode.

3. On the LCD monitor of this product, select \( \text{\textbf{\text{Menu}}} \) - [Edit/Copy] - [Send to Smartphone] - [Select on This Device].
   - If you select [Select on Smartphone], all images stored in the internal memory of this product or on the memory card are displayed on the smartphone screen.

4. Select the type of image you want to transfer.

5. Select the image you want to transfer, and add \( \text{\textbf{\text{\checkmark}}} \) mark, and then select \( \text{\textbf{\text{\text{\checkmark}}} \text{\text{\checkmark}}} \).

   - The SSID and a password are displayed on the LCD monitor of this product. This product is now ready to be connected from your smartphone.

   A: SSID
   B: Password
6. Start PlayMemories Mobile, then on the smartphone screen, select the SSID displayed on the LCD monitor of this product, and then enter the password displayed on the LCD monitor of this product.

7. The images are transferred from this product to the smartphone.
   - Transferred images will be stored in Gallery/Album on an Android smartphone/tablet or Album on an iPhone/iPad.

**Note**
- You cannot transfer AVCHD movies.
- [Send to Smartphone] is not available when MP4 movies or still images have not been saved on this product.
- If you want to import images recorded on a memory card, insert the memory card to this product, and then select the memory card in [Media Select].
- This application is not guaranteed to work on all smartphones and tablets.

**Hint**
- For the latest supported OS, refer to the download page of PlayMemories Mobile.

### Related Topic
- About the PlayMemories Mobile software
- Connecting to an Android smartphone or tablet
- Connecting to an NFC-enabled smartphone or tablet
- Connecting to an iPhone or iPad

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)

Transfer images to your NFC-enabled Android smartphone or tablet.

Note

- Make sure that your smartphone is not in sleep mode and the screen is unlocked in advance.

1. Install PlayMemories Mobile on your smartphone.
   - If PlayMemories Mobile is already installed in your smartphone, update the software to the latest version.

2. Select [Settings] on the smartphone, then select [More…] and place a checkmark next to [NFC].

3. Press the button on this product to enter the playback mode, and then display the image you want to transfer on the LCD monitor of this product.

4. Touch (N mark) of this product to (N mark) of your smartphone.

- Hold this product and your smartphone together and keep them still for about 1-2 seconds until PlayMemories
Mobile starts up on your smartphone.

- Make sure that \(N\) (N mark) is displayed on the LCD monitor of this product.

5. The images are transferred from this product to the smartphone.

- Transferred images will be stored in Gallery/Album on an Android smartphone/tablet or Album on an iPhone/iPad.

**Note**
- You cannot transfer AVCHD movies.
- [Send to Smartphone] is not available when MP4 movies or still images have not been saved on this product.
- If you want to import images recorded on a memory card, insert the memory card to this product, and then select the memory card in [Media Select].
- This application is not guaranteed to work on all smartphones and tablets.
- If the connections is not made successfully, try the procedures shown in “Connecting to an Android smartphone or tablet.”

**Hint**
- For the latest supported OS, refer to the download page of PlayMemories Mobile.

**Related Topic**

- About the PlayMemories Mobile software
- Connecting to an NFC-enabled smartphone or tablet
- Connecting to an Android smartphone or tablet

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Send to Computer

You can transfer and save movies and photos to your computer.

1. Install the software on your computer.
   For Windows: PlayMemories Home
   www.sony.net/pm/
   For Mac: Wireless Auto Import
   www.sony.co.jp/imsoft/Mac/
   - If connecting this product to your computer for the first time after installing the software, set [USB Connect Setting] to [Auto] or [MTP] on this product, and then connect this product to your computer with the Built-in USB Cable.
   - If the software is already installed in your computer, update the software to the latest version.

2. Connect this product to the wireless network access point.
   - If your access point does not support the WPS push button, refer to [Access point settings].
   - If your access point supports the WPS push button, refer to [WPS Push].
   - Settings for steps 1 and 2 are required only the first time.

3. Press the button on this product to enter the playback mode.

4. On the LCD monitor of this product, select [Edit/Copy] - [Send to Computer].
   - Images are automatically transferred to and saved on the computer.
   - Only newly recorded images are transferred.

**Note**
- You must turn on the computer to execute [Send to Computer].
- Depending on the settings of the application on the computer, this product may turn off automatically after saving images.
- If you want to import images recorded on a memory card, insert the memory card to this product in advance.
- Importing movies and multiple still images may take time.

**Related Topic**
- Access point settings
Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Playing images on a TV (View on TV)

You can view images on your TV connected to the network by transferring images from this product without connecting this product and TV with a cable.
Operations may be required on your TV before playing depending on the TV you use. Refer to the instruction manuals of the TV as well.

1. Connect this product to a wireless network access point.
   - If your access point does not support the WPS push button, refer to [Access point settings].
   - If your access point supports the WPS push button, refer to [WPS Push].
   - Step 1 can be skipped from the second time.

2. Press the button on this product to enter the playback mode.

3. Select [Edit/Copy] - [View on TV] - the type of image you want to transfer.

4. Play a movie or a photo on the TV.

**Note**

- This function is available with the DLNA player compatible TVs.
- You can view images only on TVs that are compatible with the network function (including wired network).
- It may take time until the images are played on the TV.
- This function is not available when using an access point without a security setting (WEP/WPA/WPA2) to protect from prying eyes.
- Select the access point you registered with this product when connecting your TV.
- To enjoy viewing movies comfortably, use a wired network connection for your TV. Depending on the wireless network environment, movies may not be played smoothly.
- Depending on the settings of the recorded movie, it may not play smoothly.

**Related Topic**

- [Access point settings]
- [WPS Push]
Connecting to an Android smartphone or tablet

Shows how to connect this product to your Android smartphone or tablet. Display the SSID and password in advance by selecting [Send to Smartphone] or [Ctrl with Smartphone] on this product.

1. Start up PlayMemories Mobile on the smartphone.

2. Select the SSID displayed on this product.

3. Enter the password displayed on this product.
Related Topic

- About the PlayMemories Mobile software
- Transferring movies (MP4) and photos to your smartphone or tablet
- Using your smartphone or tablet as a wireless remote commander

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Connecting to an iPhone or iPad

Shows how to connect this product to your iPhone or iPad. Display the SSID and password in advance by selecting [Send to Smartphone] or [Ctrl with Smartphone] on this product.

1. Open the settings menu.

2. Select Wi-Fi.

3. Select the SSID displayed on this product.

4. Enter the password displayed on this product.
5. Confirm that the SSID displayed on this product is selected.

6. Go back to Home and start up PlayMemories Mobile.

Related Topic

- About the PlayMemories Mobile software
- Transferring movies (MP4) and photos to your smartphone or tablet
- Using your smartphone or tablet as a wireless remote commander

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Connecting to an NFC-enabled smartphone or tablet

You can easily connect this product to your NFC-enabled Android smartphone or tablet.

**Note**
- Make sure that your smartphone is not in sleep mode and the screen is unlocked in advance.

1. Touch \( N \) (N mark) of this product to \( N \) (N mark) of your smartphone.
   - Make sure that \( N \) (N mark) is displayed on the LCD monitor of this product.

**What you can do with the NFC connection**

Operations available when you touch this product to an NFC-enabled smartphone differs depending on the status of this product.

**When this product is in movie/photo recording mode**

[Ctrl with Smartphone] starts up.

**When images are being played back on this product**

[Send to Smartphone] starts up and images being played back are transferred.

**Note**
- To use the one-touch functions of this product, an NFC-enabled smartphone or tablet is required.
- NFC (Near Field Communication) is an international standard for short-range wireless communication technology.
- If the connection is not made successfully, try the procedures shown in “Connecting to an Android smartphone or tablet.”

Related Topic
About the PlayMemories Mobile software

- Transferring movies (MP4) and photos to your smartphone or tablet
- Using your smartphone or tablet as a wireless remote commander

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

About the PlayMemories Mobile software

To perform operations such as [Ctrl with Smartphone] and [Send to Smartphone], the PlayMemories Mobile application for smartphone is required. Install the application from the applications store for your smartphone. If PlayMemories Mobile is already installed in your smartphone, update the application to the latest version. For details on PlayMemories Mobile, visit the PlayMemories Mobile support page (www.sony.net/pmm/).

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Setting up menu items

This product has various menu items under each of 6 menu categories.

1. Select **MENU**.

2. Select a category.

3. Select your desired menu item.

**Note**

- Select **X** to finish setting the menu or to return to the previous screen.

**To find a menu item quickly**

The [Camera/Mic] and [Setup] menus have sub-categories. Select the sub-category icon so that you can select your desired menu item.
A: Sub-category icons

**When you cannot select a menu item**

Some menu items or settings are not available, depending on the settings of this product. When you select grayed out menu items or settings, this product displays the reason why you cannot select the menu item.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
How to use the keyboard

A keyboard is displayed on the LCD monitor when text needs to be entered.

1. Switch character types.
   Each time you touch the key, the type of character to be input switches between letters, numerals and symbols.

2. Keyboard
   Each time you touch the key, the displayed character switches between the choices available.
   For example: If you want to enter “abd”
   Select [abc], touching it once to display “a” touch - select [abc], touching it twice to display “b” - select [def]
   touching it once to display “d.”

3. Space
   Enters a space.

4. Input box
   The characters you entered are displayed. ◄ indicates the limit to text length.

5. Move cursor
   Moves the cursor in the input box to the right or left.

6. Delete
   Deletes the character preceding the cursor.

7. Switches the next character to a capital or small letter.

8. Fix
   Finalizes the entry.

To cancel text entry, select X.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Movie

You can select the movie recording mode.

1.  [MENU] - [Shooting Mode] - [Movie].

Related Topic

Recording movies

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Photo

You can select the photo shooting mode.

1. [MENU] - [Shooting Mode] - [Photo].

Related Topic

- Shooting photos

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Smth Slw REC

This product records approximately 3-second-long fast actions or motions as an approximately 12-second-long slow-motion movie.

1.  
2.  Select to change the timing at which this product starts recording.

[3sec After] (default setting):
This product records a movie of approximately 3 seconds after the START/STOP button is pressed.

[3sec Before]:
This product records a move of approximately 3 seconds before the START/STOP button is pressed.

3. Press the START/STOP button.
   • [Recording...] disappears when recording is finished.

Note

- You cannot record sound.
- Image quality is not as good as that of normal recording.
- [REC Mode] will be set to [Standard HQ] automatically.
Golf Shot

Divides 2 seconds of fast movement into frames which are then recorded as a movie and photos. You can view a series of movement when playing back, which is convenient in cases such as checking golf swing or tennis form.

1. **MENU** - [Shooting Mode] - [Golf Shot].

2. Frame the subject in the white grid in the center of the LCD monitor, then press START/STOP right after the subject has taken a swing.

   ![Golf Shot Diagram]

   - If the moment when the largest sound in 1 second after the START/STOP button is pressed has been detected, this product assumes the moment as the sound of a club hitting the ball. When the sound of a club hitting the ball is detected, the recording time period is automatically adjusted according to at that moment.

   ![Diagram with points A, B, and C]

   - seconds
   A: The point when you press START/STOP
   B: The sound of a club hitting the ball
   C: This product records images in this 2 second period.

**Note**

- If this product cannot detect the sound of a club hitting the ball, this product automatically sets the impact point at 0.5 second before the START/STOP button has been pressed, and records a movie in the time period between 1.5 seconds before the impact point to 0.5 second after the impact point.
- The size of photos becomes 1,920×1,080.
- You cannot record sound.
- Image quality is not as good as that of normal recording.
- [REC Mode] will be set to [Standard HQ] automatically.
- Impact sound may be detected by the built-in microphone even when an external microphone is attached.
- The image recorded may be noisy when this product has failed to analyze the shot properly because there may be movement in background of the recording screen. It is recommended that you record images under stable conditions (for example, using a tripod).

**Hint**

- You can check your form using self-timer. Select [ ] / [ ] - [On], this product starts countdown of the timer after you press the START/STOP button. The point when the count reaches 0 is assumed as the moment of impact and motion before and after 0 is recorded.
White Balance

You can adjust the color balance to the recording environment.


**Descriptions of menu items**

\[\text{WB} \text{(Auto) (default setting):}\]

The white balance is adjusted automatically.

If you have changed the battery pack while [Auto] was selected, or taken this product outdoors after inside use (or vice versa), aim this product at a nearby white object for about 10 seconds for better color balance adjustment.

\[\text{WB} \text{(Outdoor):}\]

The white balance is appropriately adjusted for the following recording conditions:

- Outdoors
- Night views, neon signs and fireworks
- Sunrise or sunset
- Under daylight fluorescent lamps

\[\text{WB} \text{(Indoor):}\]

The white balance is appropriately adjusted for the following recording conditions:

- Indoors
- At party scenes or studios where the lighting conditions change quickly
- Under video lamps in a studio, or under sodium lamps or incandescent-like color lamps

\[\text{WB} \text{(One Push):}\]

The white balance will be adjusted according to the ambient light.

1. Select \[\text{WB}\].
2. Keep framing white object such as a piece of paper, to fill the LCD monitor under the same lightning conditions as you will shoot the subject.
3. Select \[\text{SET}\].

If the lighting conditions changed by bringing this product outdoors from inside the house, or vice versa, you need to redo the [One Push] procedure to readjust the white balance.

**Note**

- Set [White Balance] to [Auto] or adjust the color in [One Push] under white or cool white fluorescent lamps.
While you are recording a movie, (One Push) cannot be set.
- If you set [White Balance], [Scene Selection] is set to [Auto].

Related Topic

- Scene Selection

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Spot Meter/Fcs

Exposure and focus can be adjusted for the selected subject automatically.

1. \text{[MENU]} - [Camera/Mic] - [\text{[Manual Settings]}] - [Spot Meter/Fcs].

2. Touch the subject of which you want to adjust the exposure and focus.
   - To adjust the brightness and focus automatically, select [Auto].

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{image.png}
\caption{Example of Touching the Subject}
\end{figure}

\textbf{Note}

- [Exposure] and [Focus] are automatically set to [Manual].

\begin{table}[h]
\centering
\begin{tabular}{|l|}
\hline
\textbf{Related Topic} \\
\hline
- Exposure \\
- Focus \\
\hline
\end{tabular}
\end{table}

\textbf{Notes on use}

4-489-505-11(1)

Copyright 2014 Sony Corporation
Spot Meter

Exposure can be adjusted and set for the selected subject automatically. This function is useful when there is strong contrast between the subject and the background, such as subjects in the spotlight on stage.

1. **MENU** - [Camera/Mic] - [Manual Settings] - [Spot Meter].

2. Touch the subject of which you want to adjust the exposure.
   - To return the setting to automatic exposure, select [Auto].

**Note**

- [Exposure] is automatically set to [Manual].

**Related Topic**

- Exposure

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Spot Focus

Focus can be adjusted automatically for the subject selected.

1. MENU - [Camera/Mic] - [Manual Settings] - [Spot Focus].
2. Touch the subject of which you want to adjust the focus.
   - To adjust the focus automatically, select [Auto].

**Note**
- [Focus] is automatically set to [Manual].

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
</tr>
</tbody>
</table>
Exposure

You can fix the brightness of an image manually. Adjust the brightness when the subject is too bright or too dark.


**Descriptions of menu items**

**Auto (default setting):**
The exposure is adjusted automatically.

**Manual:**
Select **-** if the subject is white or the backlight is bright, or select **+** if the subject is black or the light is dim.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Focus

You can adjust the focus manually. You can select this function also when you want to focus on a certain subject intentionally.


**Descriptions of menu items**

**Auto (default setting):**
The focus is adjusted automatically.

**Manual:**

lander appears.
Adjust the focus using [ ] (nearby subject) or [ ] (distant subject).  appears when the focus cannot be adjusted any closer, and  appears when the focus cannot be adjusted farther away.

**Note**

- The minimum possible distance between this product and subject while maintaining sharp focus is about 1 cm (about 13/32 in.) for wide angle and about 80 cm (about 31 1/2 in.) for telephoto.

**Hint**

- It is easier to focus on the subject by moving the power zoom lever towards T (telephoto) to adjust the focus, then towards W (wide angle) to adjust the zoom for recording. When you want to record a subject at close range, move the power zoom lever to W (wide angle), then adjust the focus.
- This product displays the focal distance information for a few seconds when [Focus] is set to [Manual] or when you set the focus manually. You can use this information as a guide when the subject is dark and focus adjustment is difficult.
- The focal distance information will not appear correctly if a conversion lens (sold separately) is being used.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
IRIS

You can shoot images with the IRIS priority mode. Changing IRIS parameter changes the focus range. You can change the IRIS parameter depending on what type of images you want to shoot, either to sharpen the subject with its background blurred or sharpen the whole image.


**Descriptions of menu items**

**Auto (default setting):**
The IRIS is adjusted automatically.

**Manual:**
Adjust the iris by selecting [+] to sharpen the whole image (increase the IRIS parameter), and [-] to sharpen the subject with its background blurred (decrease the IRIS parameter).
Shutter Speed

You can shoot images with the Shutter Speed priority mode. You can express the movement of a moving subject in various way by adjusting the shutter speed.


Descriptions of menu items

**Auto (default setting):**
The shutter speed is adjusted automatically.

**Manual:**
Adjust the shutter speed using + to get a fast shutter speed, and - to get a slow shutter speed.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
AGC Limit

You can select the upper limit for the AGC (Auto Gain Control).


Descriptions of menu items

Off (default setting):
The gain is automatically adjusted.

24dB/21dB/18dB/15dB/12dB/9dB/6dB/3dB/0dB (AGC†):
The gain is automatically adjusted up to the selected limit.

Note

- The upper limit you can select for the AGC (Auto Gain Control) depends on the status of this product.
  - When this product is set to the movie recording mode, the upper limit is 24 dB.
  - When this product is set to the photo shooting mode, the upper limit is 18 dB.
  - When this product is set to use [Smth Slw REC], the upper limit is 12 dB.

- At a higher gain, the brightness becomes more appropriate in dim scenes, but the noise increases. At a lower gain, the noise decreases, but the shutter speed becomes slower to compensate for the lack of brightness, causing camera shake or subject blur.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

AE Shift

You can adjust the exposure according to your preference.


Descriptions of menu items

Off (default setting):
The exposure is adjusted automatically.

On (Adjusted number and EV):
Adjust the automatic exposure level using [ – ] when the subject is white or the background is bright, and [ + ] when the subject is dark or the light is dim.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
White Balance Shift

You can adjust the white balance according to your preference.


Descriptions of menu items

**Off (default setting):**
The white balance is adjusted automatically.

**On (values and adjusted number):**
Adjust the white balance using + when the images appear bluish, and - when the images appear reddish.
Low Lux

You can record bright color images, even in dim light.


**Descriptions of menu items**

**Off (default setting):**
The Low Lux function is not used.

**On ( ):**
The Low Lux function is used.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Scene Selection

You can record images effectively in various situations.

1. **MENU** - [Camera/Mic] - [Camera Settings] - [Scene Selection] - desired setting.

**Descriptions of menu items**

- **(Auto)(default setting):**
  Adjusts image quality automatically.

- **(Night Scene)(*):**
  Using a tripod (sold separately) allows you to shoot beautiful night scenes.

- **(Sunrise&Sunset)(*):**
  Reproduces the atmosphere of scenes such as sunsets or sunrises.

- **(Fireworks)(*):**
  Takes spectacular shots of fireworks.

- **(Landscape)(*):**
  Shoots distant subjects clearly. This setting also prevents this product from focusing on glass or metal mesh in windows.
between this product and the subject.

(Portrait):
Brings out the subject such as people or flowers while creating a soft background.

(Spotlight):
Prevents people’s faces from appearing excessively white when subjects are lit by strong light.

(Beach):
Takes the vivid blue of the ocean or a lake.

(Snow):
Takes bright pictures of a white landscape.

*Adjusted to focus on subjects farther away only.

**Note**
- If you set [Scene Selection], the following settings are canceled.
  - White Balance
  - IRIS
Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Picture Effect

Allows you to shoot more impressive images by selecting the desired effect.


**Descriptions of menu items**

**Off (default setting):**
Does not use the Picture Effect.

**Toy Camera:**
Allows you to shoot an image having a unique color tone with its surrounding colors dark. Select the effect you want with [OPTION].

**Pop Color:**
Allows you to shoot a pop art-like colorful image with emphasis on the color tone.

**Posterization:**
Creates a high contrast, abstract look by heavily emphasizing primary colors, or in black and white. Select the effect you want with [OPTION].

**Retro Photo:**
Creates the look of an aged photo with sepia color tones and faded contrast.

**Soft High-key:**
Allows you to shoot soft, clear images with an emphasis on brightness.

**Partial Color:**
Allows you to shoot an image that makes a strong impression by leaving a specified color on portions of a monochrome image. Select the effect you want with [OPTION].

**High Contrast Mono.:**
Creates an intense, high-contrast image in black and white.

**Note**

- When you select a [Picture Effect] item, the following functions are not available.
  - Recording photos in the movie recording mode
  - Some other functions
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Cinematone

This product automatically adjusts the image quality of the movie to resemble the atmosphere of film camera images.

1. **MENU** - [Camera/Mic] - [Camera Settings] - [Cinematone] - desired setting.

**Descriptions of menu items**

**Off (default setting):**
Does not use the Cinematone function.

**On:**
Uses the Cinematone function.

**Note**
- When you switch this function on or off, the image will be paused temporarily.
- When [Cinematone] is set to [On], the [Scene Selection] setting changes to [Auto].

Related Topic

- Scene Selection

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Fader

You can record a transition with the following effects adding to the interval between scenes. Select the desired effect in [STBY] (to fading in) or [REC] (to fading out) mode.


### Descriptions of menu items

**Off (default setting):**
Does not use an effect.

**White Fader(=[W]):**
Fades in/out with the white effect.

A: Out  
B: In

**Black Fader(=[B]):**
Fades in/out with the black effect.  
Images recorded using the [Black Fader] effect may appear dark on the index screen.

A: Out  
B: In

**Note**

- When you press START/STOP, the setting is cleared.

**Notes on use**
Self-Timer

Press PHOTO to start the count down. A photo is recorded after about 10 seconds.

**Note**
- You can also operate by pressing PHOTO on the Wireless Remote Commander.


**Descriptions of menu items**

**Off (default setting):**
Cancels the self-timer.

**On ( ):**
Starts the self-timer recording. To cancel the recording, select ( ).
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

SteadyShot (Movie)

This product has a balanced optical SteadyShot function that allows you to reduce the camera-shake when shooting with zooming, as well as when shooting with a wide-angle shot.

1. **MENU** - [Camera/Mic] - [Camera Settings] - [SteadyShot] - desired setting.

**Descriptions of menu items**

**Active (default setting):**
Records a movie using a more effective SteadyShot function.

**Standard:**
This product reduces camera shake using the SteadyShot function in wide-angle shooting.

**Off ([]):**
This product does not use the SteadyShot function.

**Note**
- The angle of view will be changed after changing the settings of the [SteadyShot] function.
- The zoom magnification varies depending on the [SteadyShot] setting.

**Related Topic**

- [Zoom magnifications]

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

SteadyShot (Photo)

You can compensate for camera shake. Set [SteadyShot] to [Off] when using a tripod (sold separately), then the image becomes natural.

1. 

Descriptions of menu items

On (default setting):
The SteadyShot function is used.

Off:
The SteadyShot function is not used.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Digital Zoom

You can select the maximum zoom level. Note that the image quality decreases when you use the digital zoom.


Descriptions of menu items

**Off (default setting):**
Digital zoom cannot be used.

**160:**
Up to 160 zoom is performed digitally.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Conversion Lens

Set this menu item when you want to use a conversion lens (sold separately) that is compatible with this product. When using a conversion lens (sold separately), use this function to record using the optimum compensation for camera shake and focus for the lens.

1. **MENU** - [Camera/Mic] - [Camera Settings] - [Conversion Lens] - desired setting.

**Descriptions of menu items**

**Off (default setting):**
Select this when you do not use a conversion lens.

**Tele Conversion (缩小):**
Select this when you use a tele-conversion lens.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Auto Back Light

This product adjusts the exposure for backlit subjects automatically.


Descriptions of menu items

On (default setting):
The exposure for backlit subjects is adjusted automatically.

Off:
Does not adjust the exposure for backlit subjects.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Dial Setting

You can assign one menu item you often use to the MANUAL dial.

1. **MENU** - [Camera/Mic] - [Camera Settings] - [Dial Setting] - desired setting.

**Menu items that you can set**

Focus/Exposure/IRIS/Shutter Speed/AE Shift/White Balance Shift

**Related Topic**

- Assigning frequently-used menu items to the MANUAL button

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Face Detection

You can set this product to detect a face automatically. This product adjusts the focus/color/exposure automatically for the face of the selected subject.


**Descriptions of menu items**

**Auto (default setting):**
Dects faces.

**Off (OFF):**
Does not detect faces.

**Note**
- Faces may not be detected depending on recording conditions.

**Hint**
- Recording conditions for better face detection performance are as follows.
  - Shoot in a sufficiently bright place.
  - The subject is not wearing glasses, a hat or mask.
  - The subject faces directly towards the camera.

**Related Topic**

- Recording subjects other than people (Tracking focus)
- Smile Shutter

---

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Smile Shutter

The shutter is released automatically when this product detects a smile. If you do not want to take photos automatically, select [Off].


**Descriptions of menu items**

**Dual Capture ([Smile] Icon):**
Only during movie recording, the shutter is released automatically, when this product detects a smile.

**Always On ([Smile] Icon):**
The shutter is released when this product detects a smile whenever this product is in recording mode.

**Off (default setting):**
Smiles are not detected, so photos are not recorded automatically.

**Note**
- Smiles may not be detected depending on recording conditions, subject conditions, and the setting of this product.

**Notes on use**
Smile Sensitivity

Sets the smile detection sensitivity for using the Smile Shutter function.


**Descriptions of menu items**

**Big Smile:**
Detects a big smile.

**Normal Smile (default setting):**
Detects a normal smile.

**Slight Smile:**
Detects even a slight smile.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Flash (Only when connecting an external flash)

Select the flash setting.
Select the desired flash setting when you record photos using an external flash (sold separately) compatible with this product.

1. MENU - [Camera/Mic] - [Flash] - [Flash] - desired setting.

Descriptions of menu items

**Auto (default setting):**
Automatically flashes when there is insufficient ambient light.

**On (ς):**
Always uses the flash regardless of the surrounding brightness.

**Off (ς):**
Records without flash.

**Note**
- The flash does not operate in the movie recording mode.
- A shadow may be produced on photos if you use the flash when you take photos with the conversion lens (sold separately) attached.

**Hint**
- Particles (dust, pollen, etc.) floating close to the lens are accentuated by a flash, and they appear as white circular spots. To reduce this phenomenon, brighten the recording place and record the subject without a flash.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Flash Level (Only when connecting an external flash)

You can select the brightness of the flash light. Select the desired brightness when you record photos using an external flash (sold separately) compatible with this product.


**Descriptions of menu items**

**High:**
Makes the flash level higher.

**Normal (default setting):**
Normal flash level

**Low:**
Makes the flash level lower.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Red Eye Reduction (Only when connecting an external flash)

Prevent red eye by activating the pre-flash before the flash operates.
Set this function when you record photos using an external flash (sold separately) compatible with this product.


**Descriptions of menu items**

**Off (default setting):**
Does not use Red Eye Reduction to prevent red eye.

**On ( ):**
Uses Red Eye Reduction to prevent red eye.

**Note**
- The redeye reduction may not produce the desired effect due to individual differences and other conditions.
- The redeye function does not work with automatic recording by [Smile Shutter].

**Related Topic**

- **Smile Shutter**

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Premium CloserVoice

Record sound in front of this product more clearly.


Descriptions of menu items

**On:**
Records sound in front of this product more clearly.

**Off (default setting):**
Records sound as it is heard in situations such as music concerts.

**Note**
- The [Premium CloserVoice] function does not activate while an external microphone is connected to this product.

Related Topic

Audio Rec Level

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
My Voice Canceling

You can record the voice of the subject clearly by decreasing the voice volume of the person recording the movie.

1. **MENU** - [Camera/Mic] - [Microphone] - [My Voice Canceling].

**Descriptions of menu items**

**Off (default setting):**  
Does not decrease the voice volume of the person recording the movie.

**On (44):**  
Decreases the voice volume of the person recording the movie and records the voice of the subject clearly.

**Note**

- Set [My Voice Canceling] to [Off] if you want to record a movie without decreasing the voice volume of the person recording the movie.
- Depending on the recording condition, you cannot decrease the voice volume of the person recording the movie as expected.
- The [My Voice Canceling] function does not activate while an external microphone is connected to this product.

**Related Topic**

- Decreasing the voice volume of the person recording the movie (My Voice Canceling)

**Notes on use**

4-489-505-11(1)  
Copyright 2014 Sony Corporation
Blt-in Zoom Mic

You can record a movie with vivid sound appropriate to the zoom position.


**Descriptions of menu items**

**Off (default setting):**
The microphone does not record sound following zooming in or out.

**On ( ):**
The microphone records sound following zooming in or out.

**Note**

---

**Related Topic**

- Audio Rec Level

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Auto Wind NR

This function automatically cuts the low-range wind noise according to the noise level when recording using the built-in microphone.


**Descriptions of menu items**

**Off (Off):**
Does not reduce the wind noise.

**On (default setting):**
Reduces the wind noise.

**Note**
- When you set [Auto Wind NR] to [Off], Intelligent Auto is set to [Off].
- [Auto Wind NR] will not function while an external microphone is attached to this product.

**Related Topic**

Intelligent Auto

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Audio Mode

You can change the recording sound format.


**Descriptions of menu items**

**5.1ch Surround (5.1ch) (default setting):**
Records sound in 5.1ch surround.

**2ch Stereo (2ch):**
Records sound in 2ch stereo.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Audio Rec Level

You can adjust the audio recording level.


**Descriptions of menu items**

**Auto (default setting):**
The audio recording level is adjusted automatically.

**Manual (+/-):**
Adjust the audio recording level with + to raise the audio recording level and - to lower the audio recording level.

**Note**
- The setting will be reset each time you switch between [Auto] and [Manual].
- When [Audio Rec Level] is set to [Manual], the following will switch to [Off].
  - Premium CloserVoice
  - Blt-in Zoom Mic
- It is recommended that you wear headphones to operate while checking the level.
- When continuously recording loud sound, lower the recording level in advance to record dynamic sound.
- The limiter is always active regardless of the setting value of the recording level.
- When you are using a dedicated microphone that is connected with the Multi interface shoe, the recording level setting will be invalid, and you will not be able to adjust the recording level.
- After setting [My Voice Canceling] to [On], you cannot change the audio recording level anymore.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Ctrl with Smartphone

You can use your smartphone as a wireless remote commander.

1. **MENU** - [Camera/Mic] - [Shooting Assist] - [Ctrl with Smartphone].

Related Topic

- Using your smartphone or tablet as a wireless remote commander
- Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
My Button

You can assign functions that you frequently use when recording to one of the My Buttons.

1. \[MENU\] - [Camera/Mic] - [Shooting Assist] - [My Button].

2. Select the menu item that you want to assign to a My Button using \[\uparrow/\downarrow\].

3. Select one of the My Buttons to which the menu item will be assigned.

4. Select \[OK\].

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Focus Magnifier

You can magnify an image that appears at the center of the LCD monitor by about 2.0 times to confirm the sharpness of the focus.

1. MENU - [Camera/Mic] - [Shooting Assist] - [Focus Magnifier] - desired setting.

Descriptions of menu items

Off (default setting):
Does not magnify images.

On:
Magnify images.

Note

- Even though the image displayed on this product has been magnified, the recorded image is not magnified.
- The image that is output to an external device is not magnified.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Grid Line

You can display the lines and check that the subject is horizontal or vertical.


**Descriptions of menu items**

**Off (default setting):**
Does not display the grid lines.

**On:**
Displays the grid lines.

**Hint**
- Positioning the subject at the cross point of the grid lines makes a balanced composition.
- The lines is not recorded.
- The outer frame of grid lines shows the display area of a TV which is not compatible with full pixel display.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Display Setting

You can set the duration of displaying the icons or indicators on the LCD monitor while recording.


**Descriptions of menu items**

**Auto (default setting):**
Displays for about 3 seconds.
The rec and zoom buttons on the LCD monitor are displayed.

**On:**
Always displays. The rec and zoom buttons on the LCD monitor are not displayed.

**Note**
- You cannot change the setting of the icons or indicators on the LCD monitor while in playback mode.
Zebra

You can display a zebra pattern as a guide for adjusting brightness.


**Descriptions of menu items**

**Off (default setting):**
Does not display the zebra pattern.

**Sz 70 (70):**
Displays the zebra pattern over the part of an image that exceeds the brightness level of about 70 IRE.

**Sz 100 (100):**
Displays the zebra pattern over the part of an image that exceeds the brightness level of about 100 IRE.

IRE (Institute of Radio Engineers) is a measure of the video signal level that is used as the bases of brightness; the reference level (pedestal level) is set to 0 (%) and the maximum level (completely white level) is set to 100 (%).

**Note**
- With a subject that exceeds a brightness level of 100 IRE, the image may become overexposed.

**Hint**
- The zebra pattern will not be recorded with the image.

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Peaking

You can display an image on the LCD monitor with its outlines enhanced with colors. This function helps you to adjust the focus.


**Descriptions of menu items**

**Off (default setting):**
Does not display the enhanced outlines.

**Red (White)**
Displays the enhanced outlines in white.

**Red (Red)**
Displays the enhanced outlines in red.

**Red (Yellow)**
Displays the enhanced outlines in yellow.

**Note**
- The enhanced outlines may not appear in a dark location.

**Hint**
- The enhanced outlines will not be recorded on the image.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Audio Level Display

You can select whether or not to display the audio level meter. Shape of the audio level meter differs depending on the [Audio Mode] setting.


**Descriptions of menu items**

**On (default setting):**
Displays audio level meter.

**Off:**
Does not display the audio level meter.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
REC Mode

You can select your desired image quality for AVCHD movies. The recording time or the type of media device to which the images can be copied may differ, depending on the movie quality selected.

1. **MENU** - [Image Quality/Size] - [**RECORDING Mode**] - desired setting.

**Descriptions of menu items**

**Highest Quality** **FX**: Records a movie in the highest quality possible for this product (when in 60i (*)/50i (**)/24p (*)/25p (**)).

**High Quality** **FH**: Records a higher quality movie (when in 60i (*)/50i (**)/24p (*)/25p (**)).

**Standard** **HQ**: Records a standard quality movie (when in 60i (*)/50i (**)).

**Long Time** **LP**: Records a long movie (when in 60i (*)/50i (**)).

**60p Quality** **PS (*)/50p Quality** **PS (**)**: Records a movie in 60p (*)/50p (**).

*Models with the NTSC color system
**Models with the PAL color system

**Hint**

- Types of media that images can be saved on will depend on the image quality selected.
  - 60p Quality **PS (*)/50p Quality** **PS (**)/Highest Quality **FX**: External media, Blu-ray discs
  - High Quality **FH**/Standard **HQ**/Long Time **LP**: External media, Blu-ray discs, AVCHD recording discs

*Models with the NTSC color system: [60p Quality **PS (*)] can be set only when the [Frame Rate] is set to [60p].
**Models with the PAL color system: [50p Quality **PS (**) can be set only when the [Frame Rate] is set to [50p].
Frame Rate

You can select the frame rate to be used to record AVCHD movies. Using 60i(*) or 50i(**) is recommended for standard recording. Set [Frame Rate] first, before setting [REC Mode].

1. MENU - [Image Quality/Size] - [Frame Rate] - desired setting.

Descriptions of menu items

60i(*)/50i(**) (default setting):
This is an ordinary setting for recording.

60p(*)/50p(**):
You can record movies with a volume of data twice that of 60i(*) or 50i(**) per unit time. When you play a movie recorded with this setting on a TV, the TV must be compatible with 60p(*) or 50p(**) movie playback and you have to set [HDMI Resolution] to 1080p.

24p(*)/25p(**):
You can record movies which provide an atmosphere closer to that of film images with this setting. It is recommended that you record movies with this setting using a tripod.

*Models with the NTSC color system
**Models with the PAL color system

Note

- The media that the recorded images can be saved on will depend on the recording mode that has been set during recording.

Related Topic

REC Mode
Dual Video REC

You can set the dual recording mode (recording an MP4 movie during movie recording) to on or off.


**Descriptions of menu items**

**On (default setting):**
Records an MP4 movie while recording an HD movie.

**Off:**
Does not record an MP4 movie while recording an HD movie.

**Note**
- When [REC Mode] is set to [60p Quality PS (models with the NTSC color system)]/[50p Quality PS (models with the PAL color system)], [Dual Video REC] will be set to [Off].

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Image Size

You can select a size for the photos you are going to shoot. The number of photos you can shoot differs, depending on the image size selected.


Descriptions of menu items

- L (24.5M)
- L (18.4M)
- M (12.3M)
- M (9.2M)
- S (2.1M)
- S (VGA)

Note

- The image size selected with this setting also is applied to photos taken by the Dual Capture function.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation

Sony Help Guide
How to Use
Event View

You can play back recorded images by date of recording (Event View).


Related Topic

Playing movies and photos from the Event View screen

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Scenario

You can view Highlight Scenario that you have saved.

1. [MENU] - [Playback Function] - [ Scenario].

Related Topic

- Playing back a saved scenario

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Send to Smartphone

Transfer images recorded with this product to your smartphone.

1. Press the button on this product to enter the playback mode.

2. - [Edit/Copy] - [Send to Smartphone].

Related Topic

- Transferring movies (MP4) and photos to your smartphone or tablet
- Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
View on TV

You can view images on your TV that is compatible with the network function by transferring images from this product without connecting this product and TV with a cable. Operations may be required on your TV before playing depending on the TV you use. For details, refer to the instruction manuals of the TV.

1. Press \( \text{\textbf{\text{play}}} \) on this product to enter the playback mode.

2. \( \text{MENU} \) - [Edit/Copy] - [View on TV].

Related Topic

Playing images on a TV (View on TV)
Send to Computer

Transfer images recorded with this product to your computer.

1. Press the ▶ button on this product to enter the playback mode.

2. MENU - [Edit/Copy] - [Send to Computer].

Related Topic

Send to Computer

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Delete

You can delete unnecessary images.

1. Press the \( \text{ } \) button on this product to enter the playback mode.

2. On the Event View screen, select \( \text{ } \), and then select the movie format you want to delete.

3. \( \text{ } \) - \( \text{ } \) - \( \text{ } \) - desired setting.

Descriptions of menu items

Multiple Images:
You can select images to be deleted. Select the type of image you want to delete, then add \( \checkmark \) to the desired images, and then select \( \text{ } \).

All In Event:
You can delete all images in the selected date at one time. Select the date you want to delete using \( \uparrow \)/\( \downarrow \), and then select \( \text{ } \).

Related Topic

- Deleting the selected images
- Deleting by date

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Protect

Protect movies and photos to avoid deleting them by mistake. ○ will be displayed on the protected images.

1. Press the button on this product to enter the playback mode.

2. On the Event View screen, select [ ], and then select the movie format you want to protect.


Descriptions of menu items

Multiple Images:
You can select images to be protected. Select the type of image you want to protect, then add ✓ to the desired images, and then select [ ].

Set All In Event:
You can protect all images in the selected date at one time. Select the date you want to protect using [ ]/[ ], and then select [ ].

Remove All In Event:
You can remove the protection from all images in the selected date at one time. Select the date you want to remove the protection using [ ]/[ ], and then select [ ].

Note

- You cannot select multiple dates.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Copy

You can copy images stored on the recording media of this product. The original copy of the image will not be deleted after the copy operation has been completed. After you select [Copy], a display asking you to select the source and the destination for the images to be copied appears. Select the desired item.

1. `MENU` - [Edit/Copy] - [Copy] - desired source and desired destination for the images - desired setting.

**Descriptions of menu items**

**Multiple Images:**
You can select images to be copied. Select the type of image you want to copy, then add ✓ to the desired images, and then select `OK`.

**All In Event:**
You can copy all images in the selected date at one time.
Select the date you want to copy using « / », and then select `OK`.

**Note**
- When you record an image on the memory card for the first time, create the image database file by selecting [Repair Img. DB F.] - [Memory Card].
- Connect this product to a wall outlet (wall socket) using the supplied AC Adaptor to prevent this product from running out of power during copy.

**Related Topic**
- Repair Img. DB F.
- Media Select
- Saving images on an external media device

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Direct Copy

You can save images on an external media device manually while the device is connected to this product.

1. Press (View Images).
2. MENU - [Edit/Copy] - [Direct Copy].

Note

- You can perform this operation when this product is connected to an external device.

Related Topic

- Saving the desired images in this product to the external media device

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Media Select

You can select your desired medium for recording, playback and editing.


Descriptions of menu items

Int. Memory (default setting):
Records, plays or edits images on the internal memory.

Memory Card:
Records, plays or edits images on a memory card.

Note

- You cannot select a different recording medium for movies and for photos.

Related Topic

- Screen indicators
- Expected recording time of movies
- Expected number of recordable photos

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Media Info

You can check the remaining recordable time and the approximate free and used space of the recording media.


**Note**

- Since there is a management file area, the used space is not displayed as 0% even if you perform [Format].

**Related Topic**

- Media Select
- Format

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Format

Formatting deletes all the movies and photos to recover recordable free space.


**Note**
- Connect this product to a wall outlet (wall socket) using the supplied AC Adaptor for this operation.
- To avoid the loss of important images, you should save them before formatting the recording media.
- Protected movies and photos will also be deleted.
- Make sure not to do the following while [Executing...] is displayed.
  - Open/Close the LCD monitor.
  - Operate buttons on this product.
  - Eject the memory card from this product.
  - Disconnect the AC Adaptor.
  - Remove the battery pack.

**Hint**
- Perform [Empty] to prevent data on the internal memory from being recovered.

**Related Topic**

- Protect
- Empty

**Notes on use**

Copyright 2014 Sony Corporation
Empty

It is recommended that you perform [Empty] before disposing of or transferring this product to another party to prevent leakage of your personal information.

1. Connect the AC Adaptor to this product.


**Note**
- You cannot perform [Empty] unless you connect the AC Adaptor to the wall outlet (wall socket).
- To avoid the loss of important images, they should be saved on a computer or other devices before performing [Empty].
- Disconnect all cables except the AC Adaptor. Do not disconnect the AC Adaptor during the operation.
- If you stop performing [Empty] while [Executing...] appears, be sure to complete the operation by performing [Format] or [Empty] before you use this product next time.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Repair Img. DB F.

Repair the image database file when necessary, such as when the image database repair message appears.


Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
File Number

You can select the way to assign file number of photos/MP4 movies.


**Descriptions of menu items**

**Series (default setting):**
Assigns file numbers of photos/MP4 movies in sequence. The file number becomes larger each time you record a photo/MP4 movie.

Even if the memory card is replaced with another one, the file number is assigned in sequence.

**Reset:**
Assigns file numbers in sequence, following the largest file number existing on the recording medium. When the memory card is replaced with another one, the file number is assigned for each memory card.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Data Code

During playback, this product displays the information recorded automatically at the time of recording. You can check the following information.


**Descriptions of menu items**

**Off (default setting):**
Data code is not displayed.

**Date/Time:**

1. Date
2. Time

**Camera Data:**

Movie

Photo
SteadyShot off
White Balance
Shutter Speed
F-stop
Gain
Brightness
Exposure
Flash

**Note**

- The data code is displayed on the TV screen if you connect this product to a TV.
- Depending on the recording media condition, [-- -- --] may appear.
Volume

You can adjust the volume of playback sound.

1. 

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Motion Interval ADJ

Adjusts the residual image intervals of a motion shot video.

1. 
   - [Setup] - [Playback Settings] - [Motion Interval ADJ].

2. Adjust the setting value of the residual image intervals with 
   [ ] / [ ].

3. Select [OK].

Related Topic

Viewing trajectory of a moving object (Motion Shot Video)
Download Music (HDR-PJ810/PJ820)

You can transfer music files from audio CDs etc., to this product by connecting this product to a computer.

1. 

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Empty Music (HDR-PJ810/PJ820)

You can delete all music files stored on this product.


---

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

WPS Push

If your access point has a WPS button, you can register the access point to this product easily.

1. **MENU** - [Setup] - [Connection] - [WPS Push].
2. Press the WPS button on the access point you want to register.

**Note**
- [WPS Push] requires that the security of the access point be WPA or WPA2 and that the WPS push button method is supported. If the security of your access point is set to WEP or your access point does not support the WPS push button method, register the access point manually.
- For details on the supported functions and settings for your access point, refer to the manual of your access point or contact the administrator of your access point.
- Depending on the surrounding conditions such as obstacles between this product and access point, signal condition and the materials of the wall, etc., connections may not be established or the communication distance may be shorter. Move this product or decrease the distance between this product and the access point.

**Related Topic**

![Access point settings](image)

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Access point settings

You can register your access point manually. Before starting the procedure, check the SSID name, security mode, and password of the access point. The password may be preset in some devices. For details, see the access point operating instructions or contact the administrator.

1. MENU - [Setup] - [Connection] - [Access point settings].

2. Select the access point you want to register.

   The desired access point is displayed:
   Select the access point.

   The desired access point is not displayed:
   Select [Manual setting], then enter the SSID name of the access point, and then select the security mode.

3. Enter the password, and then select [Next] - [Register].

   - Access points without the icon do not require a password to be entered.

Other setting items

Depending on the status or the setting method of your access point, there may be more setting items.

WPS PIN:
Displays the PIN to enter to the connected device.

IP address setting:
Select [Auto] or [Manual].
**IP address:**
If you are entering the IP address manually, enter the fixed address.

**Subnet mask/Default gateway:**
When you set [IP address setting] to [Manual], enter the IP address and subnet mask to match your network environment.

**Priority Connection:**
Select [On] or [Off].

**Note**
- To give the registered access point priority, set [Priority Connection] to [On].

**Hint**
- For input method, see "How to use the keyboard."

**Related Topic**
- WPS Push
- How to use the keyboard
Edit Device Name

You can change the device name for Wi-Fi Direct etc.


2. Select the input box, input the device name, and then select [OK].

**Hint**

- For input method, see "How to use the keyboard."

**Related Topic**

- Access point settings
- How to use the keyboard

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Disp MAC Address

Display the MAC address of this product.

1. **MENU** - [Setup] - [Connection] - [Disp MAC Address].
   - The MAC address is displayed.

---

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
SSID/PW Reset

This product shares the SSID/password for [Send to Smartphone] and [Ctrl with Smartphone] with a device that has permission to connect. If you want to change the device that is permitted to connect to this product, reset the SSID/password by the following procedure.

1. **[MENU]** - [Setup] - **[Connection]** - [SSID/PW Reset] - **[OK]**.

**Note**

- After resetting the SSID/password, you must set the smartphone again.

**Related Topic**

- Using your smartphone or tablet as a wireless remote commander
- Using your smartphone or tablet as a wireless remote commander using the NFC function (NFC one-touch remote)
- Transferring movies (MP4) and photos to your smartphone or tablet
- Transferring movies (MP4) and photos to your smartphone or tablet using the NFC function (NFC one-touch sharing)
Network Info Reset

In addition to the SSID/password, you can also reset the information of the access point, etc. If you want to change the access point to connect to, reset the connection information by the following procedure.

1. MENU - [Setup] - [Connection] - [Network Info Reset].

Note

- After resetting the connection information, you must set the smartphone or the access point again.
You need to convert the signal depending on the horizontal to vertical ratio of the TV connected.

1. **[Menu]** - [Setup] - [Connection] - [TV Type] - desired setting.

**Descriptions of menu items**

**16:9 (default setting):**
Select this to view your movies on a 16:9 (wide) TV.

![A](image1.png) ![B](image2.png)

A: Images recorded in 16:9 (wide) mode
B: Images recorded in 4:3 mode

**4:3:**
Select this to view your movies and photos on a 4:3 standard TV.

![A](image3.png) ![B](image4.png)

A: Images recorded in 16:9 (wide) mode
B: Images recorded in 4:3 mode

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

HDMI Resolution

Select the output image resolution when connecting this product to a TV with the HDMI cable.


Descriptions of menu items

Auto (default setting):
Outputs the signal according to the TV automatically.

1080p:
Outputs the 1080p signal.

1080i:
Outputs the 1080i signal.

720p:
Outputs the 720p signal.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
CTRL FOR HDMI

When connecting this product to a BRAVIA Sync compatible TV with an HDMI cable, you can play back movies on this product by aiming the TV's Remote Commander at the TV.


**Descriptions of menu items**

**On (default setting):**
Operates this product using the TV’s Remote Commander.

**Off:**
Does not operate this product using the TV’s Remote Commander.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
USB Connect

Select this item if a USB connection does not start even when you connect this product to an external device with the Built-in USB Cable.

1. **MENU** - [Setup] - [Connection] - [USB Connect].

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
USB Connect Setting
You can set the USB transfer mode for connecting this product to a computer or other USB device.


Descriptions of menu items

Auto (default setting):
This product automatically selects the USB transfer mode depending on the connected device.

MTP:
This is a USB transfer mode compatible with certain types of computers.

Mass Storage:
This is a USB transfer mode compatible with many types of USB devices.

Note
- When this product is connected to an external device in the [MTP] mode, image files will be displayed with the recorded date, however, some information included in the image files cannot be displayed on the connected device. To import images from this product to your computer, use the PlayMemories Home software.
- If the “Device Stage” window does not open when you connect this product to a computer equipped with Windows 7 or Windows 8, set [USB Connect Setting] to [Auto].

“Device Stage” is a menu of Windows 7 or Windows 8, that is used to manage devices (camcorder, camera, etc.) that are connected to the computer.

Notes on use
4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

USB Power Supply

Set whether to use USB power supplied function when this product is connected to the AC Adaptor or a USB device such as a computer.

1. MENU - [Setup] - [Connection] - [USB Power Supply].

**Descriptions of menu items**

**On (default setting):**
Power is supplied when connected using the Built-in USB Cable.

**Off:**
Does not supply power when connected using the Built-in USB Cable.

**Note**
- If you changed this setting while the Built-in USB Cable was connected to this product, disconnect the Built-in USB Cable and connect it again.
- The setting of [USB Power Supply] is effective only when this product is connected to a USB device that is compatible with the 500 mA power supply standard.
- Only the playback functions are available while this product is connected to a USB device that is compatible with the 500 mA power supply standard.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
USB LUN Setting

Improves compatibility with external devices by limiting the functions of the USB connection.


**Descriptions of menu items**

**Multi (default setting):**
Use this setting for ordinary operations.

**Single:**
Try this setting only if you cannot connect to an external device.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Beep

You can turn on or off the melody which sounds when you start/stop recording, or operate this product.


Descriptions of menu items

On (default setting):
A melody sounds.

Off:
Cancels the melody.
Monitor Brightness

You can adjust the brightness of the LCD monitor.


**Descriptions of menu items**

**Normal (default setting):**
Normal setting (normal brightness).

**Bright:**
Select this when the LCD monitor is not bright enough. This adjustment does not affect the recorded images in any way.
Auto Keystone ADJ

The automatic keystone correction function corrects distorted images (up and down) to display the projection screen in a square shape.


**Descriptions of menu items**

**On (default setting):**
Automatically corrects the vertical keystone distortion.

**Off:**
Does not correct the distortion. Select this setting when projecting images on a tilted screen.

**Note**
- Depending on angle to project at, vertical keystone distortion may not be corrected well.

**Related Topic**

- Using the built-in projector

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Airplane Mode

When you board an airplane, you can deactivate the Wi-Fi function temporarily.


Descriptions of menu items

**Off (default setting):**
Normal setting.

**On ( ✈):**
Use the setting when you are on board an airplane.

---

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

REC Lamp

You can make the camera recording lamp on the front of this product not to turn on.


**Descriptions of menu items**

**On (default setting):**
The camera recording lamp lights up.

**Off:**
The camera recording lamp does not light up.
Remote Ctrl

You can lock the Wireless Remote Commander buttons to prevent accidental operation by remote controls for other devices.


**Descriptions of menu items**

**On (default setting):**
Select this when you use the supplied Wireless Remote Commander.

**Off:**
Select this when you do not use supplied Wireless Remote Commander.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Language Setting

You can select the language to be used on the LCD monitor.


Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

24p Mode (HDR-PJ810E/PJ820E)

You can record 24p movies with changing the signal format.

   If you want to return the system to 50i mode, select [OK] in the [Cancel 24p Mode] screen.

**Note**
- This product reboots each time you change the setting.
- When you change the setting, formatting the recording media is required.
- When you select [24p Mode], the following settings will be limited.
  - The movie recording format is limited to AVCHD 24p (FX, FH).
  - Depending on the connected TV, images may not be played back normally because the video signal output from this product is in the NTSC format.
  - You cannot set [Frame Rate].

---

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Calibration

Use this function if the buttons on the touch panel does not work correctly.


2. Touch “×” displayed on the LCD monitor with the corner of memory card or the like 3 times.

![Calibration Menu]

**Note**

- If you did not press the right spot, try the calibration again.
- Do not use a sharp-pointed object for calibration. Doing so may damage the LCD monitor.
- You cannot calibrate the LCD monitor if it is rotated, or closed with the LCD monitor facing out.

**Hint**

- Select [Cancel] to cancel calibration.

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Battery Info

You can check the estimated remaining capacity of the battery pack.


\textbf{Notes on use}

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Power Save

You can change the settings for the backlight of the LCD monitor and the power status of this product.


**Descriptions of menu items**

**Standard (default setting):**
The backlight of the LCD monitor turns dark automatically if you do not attempt to operate this product for more than about 1 minute. This product turns off automatically if you do not attempt to operate this product for more than about 2 minutes.

**Max:**
The brightness of the LCD monitor is adjusted to the surrounding brightness automatically. The backlight of the LCD monitor turns dark automatically if you do not attempt to operate this product for more than about 15 seconds. This product turns off automatically if you do not attempt to operate this product for more than about 1 minute.

**Off:**
The backlight of the LCD monitor is always on brightly. This product does not turn off automatically.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Initialize

All the settings return to the default.


**Hint**

- Even if you use this function, all movies and photos are retained.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Demo Mode

When an AC Adaptor (sold separately) is connected to the DC IN jack of this product and no operation is attempted within a certain period with the movie recording mode or the Event View mode set, a demonstration movie starts playing.


**Descriptions of menu items**

**On (default setting):**
Make the settings for playback of the demonstration movie.

**Off:**
The demonstration does not appear.

**Note**
- In the default setting, the protected demonstration movie is pre-recorded in the Event View. If you delete the demonstration movie, you cannot recover it.
- A movie you have recorded will be registered as the demonstration movie if it satisfies all of the following conditions.
  - The movie is protected.
  - The movie is the one that was recorded first.
  - The movie is saved on the internal memory.
  - The movie is recorded in the AVCHD format.
- When you operate this product, the demonstration playback will be suspended.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Date & Time Setting

Set the date & time settings.

1. ［MENU］ - [Setup] - [Clock Settings] - [Date & Time Setting] - desired setting.

Descriptions of menu items

Date & Time Format:
You can select the order of year, month and day displayed.

Daylight Savings/Summer Time:
Sets the summertime. The clock is set to move the time forward 1 hour.

Date & Time:
You can set the clock.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Area Setting

You can adjust a time difference without stopping the clock. Select your local area when using this product in other time zones.


Hint

- You can set another place as a [Destination].

Related Topic

World time difference

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Charging time

Approximate time (min.) required when you fully charge a fully discharged battery pack.

**When using the AC Adaptor**

**NP-FV50 (supplied):**
165 min

**NP-FV70:**
260 min

**NP-FV100:**
420 min

**When using your computer**

**NP-FV50 (supplied):**
305 min

**NP-FV70:**
555 min

**NP-FV100:**
930 min

**Hint**

- The charging times shown in the table above are measured when charging this product at a temperature of 25 °C (77 °F). It is recommended that you charge the battery in a temperature range of 10 °C to 30 °C (50 °F to 86 °F).
- The charging times are measured without using the USB Connection support cable.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Expected recording time with each battery pack

Approximate recording time with each battery pack is shown as follows.

**Continuous recording time**

**NP-FV50 (supplied):**
- 120 min
- 130 min

**NP-FV70:**
- 250 min
- 270 min

**NP-FV100:**
- 500 min
- 535 min

**Typical recording time**

**NP-FV50 (supplied):**
- 60 min
- 65 min

**NP-FV70:**
- 125 min
- 135 min

**NP-FV100:**
- 250 min
- 265 min

**Top:**
When the LCD monitor is opened

**Bottom:**
When recording with the viewfinder without opening the LCD monitor

**Hint**
- Each recording time is measured with the following settings.
- REC Mode is set to [Standard HQ]
- Dual Video REC is set to [On]

- Typical recording time shows the time when you repeat recording start/stop, switching the [Shooting Mode], and zooming.
- Times measured when using this product at 25 °C (77 °F). 10 °C to 30 °C (50 °F to 86 °F) is recommended.
- The recording and playback time will be shorter, depending on the conditions under which you use this product, such as when use this product in low temperatures.
Expected playback time with each battery pack

Approximate playback time with each battery pack is shown as follows.

**NP-FV50 (supplied):**
- 200 min
- 215 min

**NP-FV70:**
- 415 min
- 440 min

**NP-FV100:**
- 830 min
- 870 min

**Top:**
When the LCD monitor is opened

**Bottom:**
When recording with the viewfinder without opening the LCD monitor

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Notes on recording movies

Read the following precautions regarding movie recording.

**Note**
- The recordable time may vary depending on the recording and subject conditions and [REC Mode].
- You can record movies of a maximum of 3,999 scenes with high definition image quality (HD). And you can record a maximum of 40,000 MP4 movies and photos collectively.
- The maximum continuous recording time of a movie is approximately 13 hours.
- This product uses the VBR (Variable Bit Rate) format to automatically adjust image quality to suit the recording scene. This technology causes fluctuations in the recording time of the media. Movies containing quickly moving and complex images are recorded at a higher bit-rate, and this reduces the overall recording time.
Expected recording time of movies

The expected recording time when saving on the internal memory is shown as follows.

**HDR-PJ810/PJ810E:**

**60p Quality **PS (**)/50p Quality **PS (**):
- [Dual Video REC] is set to [Off]: 2 h 30 min (2 h 30 min)

**Highest Quality **FX:
- [Dual Video REC] is set to [On]: 2 h 35 min (2 h 35 min)
- [Dual Video REC] is set to [Off]: 3 h (3 h)

**High Quality **FH:
- [Dual Video REC] is set to [On]: 3 h 25 min (3 h 25 min)
- [Dual Video REC] is set to [Off]: 4 h 5 min (4 h 5 min)

**Standard **HQ:
- [Dual Video REC] is set to [On]: 5 h 25 min (4 h 20 min)
- [Dual Video REC] is set to [Off]: 7 h 15 min (5 h 30 min)

**Long Time **LP:
- [Dual Video REC] is set to [On]: 7 h 55 min (6 h 55 min)
- [Dual Video REC] is set to [Off]: 12 h 30 min (10 h 15 min)

**HDR-PJ820/PJ820E:**

**60p Quality **PS (**)/50p Quality **PS (**):
- [Dual Video REC] is set to [Off]: 5 h 10 min (5 h 10 min)

**Highest Quality **FX:
- [Dual Video REC] is set to [On]: 5 h 20 min (5 h 20 min)
- [Dual Video REC] is set to [Off]: 6 h 5 min (6 h 5 min)

**High Quality **FH:
- [Dual Video REC] is set to [On]: 6 h 55 min (6 h 55 min)
- [Dual Video REC] is set to [Off]: 8 h 15 min (8 h 15 min)

**Standard **HQ:
- [Dual Video REC] is set to [On]: 10 h 50 min (8 h 45 min)
- [Dual Video REC] is set to [Off]: 14 h 30 min (11 h)
Long Time **LP**:

[Dual Video REC] is set to [On]: 15 h 50 min (13 h 55 min)

[Dual Video REC] is set to [Off]: 25 h 5 min (20 h 40 min)

* Models with the NTSC color system

** Models with the PAL color system

**Note**

- The number in ( ) is the minimum recordable time.
- If you want to record up to the maximum recording time, you need to delete the demonstration movie on this product.

### Related Topic

- [Notes on recording movies](#)
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Expected number of recordable photos

The expected number of images you can save on the internal memory is shown as follows. You can record a maximum of 40,000 MP4 movies and photos collectively.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Expected recording time of movies

The expected recording time of movies when saving on a memory card is shown as follows.

### 16 GB

#### 60p Quality PS (*)/50p Quality PS (**):
- [Dual Video REC] is set to [Off]: 1 h 15 min (1 h 15 min)

#### Highest Quality FX:
- [Dual Video REC] is set to [On]: 1 h 15 min (1 h 15 min)
- [Dual Video REC] is set to [Off]: 1 h 25 min (1 h 25 min)

#### High Quality FH:
- [Dual Video REC] is set to [On]: 1 h 40 min (1 h 40 min)
- [Dual Video REC] is set to [Off]: 2 h (2 h)

#### Standard HQ:
- [Dual Video REC] is set to [On]: 2 h 40 min (2 h 5 min)
- [Dual Video REC] is set to [Off]: 3 h 30 min (2 h 40 min)

#### Long Time LP:
- [Dual Video REC] is set to [On]: 3 h 50 min (3 h 25 min)
- [Dual Video REC] is set to [Off]: 6 h 10 min (5 h)

### 32 GB

#### 60p Quality PS (*)/50p Quality PS (**):
- [Dual Video REC] is set to [Off]: 2 h 30 min (2 h 30 min)

#### Highest Quality FX:
- [Dual Video REC] is set to [On]: 2 h 35 min (2 h 35 min)
- [Dual Video REC] is set to [Off]: 3 h (3 h)

#### High Quality FH:
- [Dual Video REC] is set to [On]: 3 h 25 min (3 h 25 min)
- [Dual Video REC] is set to [Off]: 4 h 5 min (4 h 5 min)

#### Standard HQ:
- [Dual Video REC] is set to [On]: 5 h 20 min (4 h 20 min)
- [Dual Video REC] is set to [Off]: 7 h 10 min (5 h 25 min)
**Long Time LP:**
[Dual Video REC] is set to [On]: 7 h 50 min (6 h 50 min)
[Dual Video REC] is set to [Off]: 12 h 20 min (10 h 10 min)

**64 GB**

**60p Quality** **PS (*/)/50p Quality** **PS (**)**:
[Dual Video REC] is set to [Off]: 5 h 5 min (5 h 5 min)

**Highest Quality** **FX**: 
[Dual Video REC] is set to [On]: 5 h 15 min (5 h 15 min)
[Dual Video REC] is set to [Off]: 6 h (6 h)

**High Quality** **FH**: 
[Dual Video REC] is set to [On]: 6 h 50 min (6 h 50 min)
[Dual Video REC] is set to [Off]: 8 h 10 min (8 h 10 min)

**Standard** **HQ**: 
[Dual Video REC] is set to [On]: 10 h 45 min (8 h 40 min)
[Dual Video REC] is set to [Off]: 14 h 25 min (10 h 55 min)

**Long Time** **LP**: 
[Dual Video REC] is set to [On]: 15 h 40 min (13 h 50 min)
[Dual Video REC] is set to [Off]: 24 h 50 min (20 h 25 min)

*Models with the NTSC color system
**Models with the PAL color system

**Note**
- When using a Sony memory card.
- The number in ( ) is the minimum recordable time.

**Related Topic**

- Notes on recording movies

**Notes on use**

4-889-505-11(1)
Copyright 2014 Sony Corporation
Expected number of recordable photos

The expected number of images you can save on a memory card is shown as follows.

**When recording 24.5 M size of images**

**16 GB:**
1,550 images

**32 GB:**
3,100 images

**64 GB:**
6,100 images

**Note**
- When using a Sony memory card.
- The number of recordable photos of memory card shown is for the maximum image size of this product. The actual number of recordable photos is displayed on the LCD monitor during recording.
- The number of recordable photos of memory card may vary depending on the recording conditions.
- The unique pixel array of Sony’s ClearVid and the image processing system (BIONZ X) allow still image resolution equivalent to the sizes described.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
Bit-rate and recording pixels

The following list shows the bit-rate, pixels and aspect ratio of each recording mode for movies (movie + audio, etc.).

**AVCHD:**
PS: Max. 28 Mbps 1,920 x 1,080 pixels/60p(*) or 1,920 x 1,080 pixels/50p(**), AVC HD 28 M (PS), 16:9
FX: Max. 24 Mbps 1,920 x 1,080 pixels/60i(*), 1,920 x 1,080 pixels/50i(**), 1,920 x 1,080 pixels/24p(*) or 1,920 x 1,080 pixels/25p(**), AVC HD 24 M (FX), 16:9
FH: Approx. 17 Mbps (average) 1,920 x 1,080 pixels/60i(*), 1,920 x 1,080 pixels/50i(**), 1,920 x 1,080 pixels/24p(*) or 1,920 x 1,080 pixels/25p(**), AVC HD 17 M (FH), 16:9
HQ: Approx. 9 Mbps (average) 1,440 x 1,080 pixels/60i(*) or 1,440 x 1,080 pixels/50i(**), AVC HD 9 M (HQ), 16:9
LP: Approx. 5 Mbps (average) 1,440 x 1,080 pixels/60i(*) or 1,440 x 1,080 pixels/50i(**), AVC HD 5 M (LP), 16:9

**MP4:**
Approx. 3 Mbps (average) 1,280 x 720 pixels/30p(*), 1,280 x 720 pixels/24p(*) or 1,280 x 720 pixels/25p(**), 16:9

*Models with the NTSC color system
**Models with the PAL color system

---

**Related Topic**

- [Notes on recording movies](#)
Recording pixels and aspect ratio

The photo recording pixels and the aspect ratio.

**Photo recording mode, Dual capture:**

- 6,592 × 3,712 dots/16:9
- 4,960 × 3,712 dots/4:3
- 4,672 × 2,632 dots/16:9
- 3,504 × 2,632 dots/4:3
- 1,920 × 1,080 dots/16:9
- 640 × 480 dots/4:3

**Capturing a photo from a movie:**

- 1,920 × 1,080 dots/16:9

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

About the AVCHD format

**What is the AVCHD format?**

The AVCHD format is a high definition digital video camera format used to record a high definition (HD) signal using efficient data compression coding technology. The MPEG-4 AVC/H.264 format is adopted to compress video data, and the Dolby Digital or Linear PCM system is used to compress audio data. The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compressing format.

**Hint**

- As the AVCHD format uses a compression coding technology, the picture may be disturbed in scenes where picture, field angles or brightness, etc. change drastically, but this is not a malfunction.

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

About the memory card

- A memory card formatted by a computer (Windows OS/Mac OS) is not guaranteed to be compatible with this product.
- Data read/write speed may vary depending on the combination of the memory card and memory card compliant product you use.
- Data may be damaged or lost in the following cases (the data will not be compensated for):
  - If you eject the memory card, or turn off this product while this product is reading or writing image files on the memory card (while the access lamp is lit or flashing)
  - If you use the memory card near magnets or magnetic fields
- It is recommended that you make a back-up of important data on the hard disk of a computer.
- Do not attach a label or the like on memory card or memory card adaptor.
- Do not touch, or allow metallic objects to come into contact with the terminals.
- Do not bend, drop or apply strong force to the memory card.
- Do not disassemble or modify the memory card.
- Do not allow the memory card to get wet.
- Keep the memory card out of the reach of small children. There is danger that a child might swallow it.
- Do not insert anything other than the compliant size of memory card into the memory card slot. Doing so may cause a malfunction.
- Do not use or keep the memory card in the following locations:
  - Places subject to extremely high temperature, such as a car parked outside in the sun
  - Places under direct sunlight
  - Places with extremely high humidity or subject to corrosive gases

On types of memory card you can use with this product

- You can use only Memory Stick PRO Duo media which is half as large as that of Memory Stick media or a standard sized SD card.

On the memory card adaptor

- If using the memory card adaptor to allow use of a memory card in a device compatible with memory cards, make sure that the memory card is inserted facing in the correct direction. If the memory card is not inserted to the end, it may not work correctly.

On image data compatibility

- Image data files recorded on memory card by this product conform to the “Design rule for Camera File system” universal standard established by the JEITA (Japan Electronics and Information Technology Industries Association).
If you cannot use memory cards that have been used with another device, format it with this product. Note that formatting erases all information on the memory card.

- You may not be able to play back images with this product:
  - When playing back image data modified on your computer
  - When playing back image data recorded with other devices

### About the Memory Stick media

**Memory Stick Duo media (with MagicGate):**
Recording/Playback: not supported

**Memory Stick PRO Duo media (Mark2):**
Recording/Playback: supported

**Memory Stick PRO-HG Duo media:**
Recording/Playback: supported

**Memory Stick XC-HG Duo media:**
Recording/Playback: supported

- This product does not support 8-bit parallel data transfer but it supports 4-bit parallel data transfer the same as with Memory Stick PRO Duo media.
- This product cannot record or play back data that uses MagicGate technology. MagicGate is a copyright protection technology that records and transfers the contents in an encrypted format.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
About the InfoLITHIUM battery pack

This product operates only with an InfoLITHIUM V series battery packs. InfoLITHIUM V series battery packs have the mark.

What is an InfoLITHIUM battery pack?

- An InfoLITHIUM battery pack is a lithium-ion battery pack that has functions for communicating information related to operating conditions between this product and an AC Adaptor/charger (sold separately).
- The InfoLITHIUM battery pack calculates the power consumption according to the operating conditions of this product, and displays the remaining battery capacity in minutes.

To charge the battery pack

- Be sure to charge the battery pack before you start using this product.
- We recommend that you charge the battery pack in an ambient temperature range of 10 °C to 30 °C (50 °F to 86 °F) until the POWER/CHG (charge) lamp turns off. If you charge the battery pack outside of this temperature range, you may not be able to charge it efficiently.
- The POWER/CHG (charge) lamp flashes during charging under the following conditions.
  - The battery pack is not inserted correctly.
  - The battery pack is damaged.
  - The temperature of the battery pack is low.
    - Remove the battery pack from this product and put it in a warm place.
  - The temperature of the battery pack is high.
    - Remove the battery pack from this product and put it in a cool place.

To use the battery pack effectively

- Battery pack performance decreases when the ambient temperature is 10 °C (50 °F) or below, and the length of time you can use the battery pack becomes shorter. If that happens, one of the following is recommended to enable longer use of the battery pack:
  - Put the battery pack in a pocket to warm it up, and install it on this product immediately before you start shooting.
  - Use a large capacity battery pack: NP-FV70/NP-FV100 (sold separately).
- Frequent use of the LCD monitor or a frequent playback, fast forward or reverse operation wears out the battery pack faster.
- Be sure to close the LCD monitor when not recording or playing back on this product. The battery pack is also consumed when this product is in recording standby or playback pause.
- Have spare battery packs ready for 2 or 3 times the expected recording time, and make trial recordings before making
the actual recording.

- Do not expose the battery pack to water. The battery pack is not water resistant.

**About the remaining battery power indicator**

- When the power goes off even though the remaining battery power indicator indicates that the battery pack has enough power to operate, charge the battery pack fully again. Remaining battery power will be indicated correctly. Note, however, that the battery indication will not be restored if it is used in high temperatures for a long time, or if left in a fully charged state, or when the battery pack is frequently used.
- Depending on the operating conditions or ambient temperature, the 📈 icon that indicates a low battery may flash even if there are still 20 minutes of power remaining.

**About storage of the battery pack**

- If the battery pack is not used for a long time, fully charge the battery pack and use it up on this product once a year to maintain proper function. To store the battery pack, remove it from this product and put it in a dry, cool place.
- To discharge the battery pack on this product completely, select **[MENU]** - [Setup] - [General Settings] - [Power Save] - [Off], and leave this product in recording standby until the power goes off.

**About battery life**

- Battery capacity decreases over time and through repeated use. If the interval between charges becomes significantly short, the battery pack may need to be replaced with a new one.
- Each battery's life depends on storage, operating and environmental conditions.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Save</strong></td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
On use and care

**On recording**
- Before starting to record, test the recording function to make sure the image and sound are recorded without any problems.
- Compensation for the contents of recordings cannot be provided, even if recording or playback is not possible due to a malfunction of this product, recording media, etc.
- TV color systems differ depending on the country/region. To view your recordings on a TV, you need a TV that supports the signal format for this product.
- Television programs, films, video tapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the copyright laws.

**LCD monitor**
- The LCD monitor is manufactured using extremely high-precision technology, so over 99.99% of the pixels are operational for effective use. However, there may be some tiny black points and/or bright points (white, red, blue, or green in color) that appear constantly on the LCD monitor. These points are normal results of the manufacturing process and do not affect the shooting in any way.

![A: White, red, blue or green points](image)

![B: Black points](image)

**About this Help Guide, illustrations and on-screen displays**
- The example images used in this Help Guide for illustration purposes are captured using a digital still camera, and therefore may appear different from images and screen indicators that actually appear on this product. And, the illustrations of this product and its screen indication are exaggerated or simplified for understandability.
- Design and specifications of this product and accessories are subject to change without notice.
- In this Help Guide, DVD discs recorded with high definition image quality (HD) are called AVCHD disc.
- In this Help Guide, the internal memory and memory card are called “recording media.”

**On use and storage place**
- This product is not dustproofed, dripproofed or waterproofed.
Do not hold this product by the following parts, and also do not hold this product by the jack covers.

A: LCD monitor  
B: Built-in USB Cable  
C: Battery pack  
D: Shoe cover

- Do not aim this product at the sun. Doing so might cause this product to malfunction. Take images of the sun only in low light conditions, such as at dusk.
- Do not use or store this product and accessories in the following locations:
  - Anywhere extremely hot, cold or humid. Never leave them exposed to temperatures above 60 °C (140 °F), such as under direct sunlight, near heaters or in a car parked in the sun. They may malfunction or become deformed.
  - Near strong magnetic fields or mechanical vibration. This product may malfunction.
  - Near strong radio waves or radiation. This product may not be able to record properly.
  - Near tuner devices such as TVs or radio. Noise may occur.
  - On a sandy beach or anywhere dusty. If sand or dust gets in this product, it may malfunction. Sometimes this malfunction cannot be repaired.
  - Near windows or outdoors, where the LCD monitor, the viewfinder, or the lens may be exposed to direct sunlight. This damages the inside of the LCD monitor or the viewfinder.
- For DC or AC operation, use the accessories recommended in these operating instructions.
- Do not let your product get wet, for example, from rain or sea water. If your product gets wet, it may malfunction. Sometimes this malfunction cannot be repaired.
- If any solid object or liquid gets inside the casing, unplug your product and have it checked by a Sony dealer before operating it any further.
- Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping or stepping on the product. Be particularly careful with the lens.
- Keep the LCD monitor closed and the viewfinder retracted when you are not using your product.
- Do not operate your product with it wrapped in an object such as a towel.
- When disconnecting the cable, pull it by the plug and not the cord.
- Do not damage the cable such as by placing anything heavy on it.
- Do not use a deformed or damaged battery pack.
- Keep metal contacts clean.
- If the battery electrolytic liquid has leaked:
  - Consult your local authorized Sony service facility.
  - Wash off any liquid that may have contacted your skin.
  - If any liquid gets in your eyes, wash with plenty of water and consult a doctor.

**When not using this product for a long time**

- To keep this product in optimum state for a long time, turn it on and let it run by recording and playing back images about once a month.
- Use up the battery pack completely before storing it.

**Note on this product/battery pack temperature**
• When the temperature of this product or battery pack becomes extremely high or extremely low, you may not be able to record or play back on this product, due to the protection features of this product being activated in such situations. In this case, an indicator appears on the LCD monitor or the viewfinder.

**Notes on charging through the Built-in USB Cable**

- Charging may not be possible with all computers.
- If you connect this product to a laptop computer that is not connected to a power source, the battery of the laptop computer will continue to use up its charge. Do not leave this product connected to a computer in this manner.
- Charging with a personally assembled computer, with a converted computer, or through a USB hub are not guaranteed. This product may not function correctly depending on the USB device which is used with the computer.

**LCD monitor**

- Do not apply excessive pressure on the LCD monitor, as it may cause uneven color and other damage.
- If this product is used in a cold place, a residual image may appear on the LCD monitor. This is not a malfunction.
- While using this product, the back of the LCD monitor may heat up. This is not a malfunction.

**Multi interface shoe**

- When using a dedicated microphone or portable speaker, their power turns on or off according to the power of this product.
- Refer to the operating instructions supplied with the accessory used for details.
- To attach an accessory, insert and fix the accessory to the Multi interface shoe by pressing down and sliding forward until it stops. Remove the accessory by pressing it down.
- When you are recording movies with an external flash (sold separately) connected to the Multi interface shoe, turn off the power of the external flash to prevent charging noise from being recorded.
- When an external microphone (sold separately) is connected, it takes precedence over the built-in microphone.

**On the pre-installed rechargeable battery**

- This product has a pre-installed rechargeable battery to retain the date, time, and other settings even when the LCD monitor is closed. The pre-installed rechargeable battery is always charged while this product is connected to a wall outlet (wall socket) via the AC Adaptor or while the battery pack is inserted. The rechargeable battery will be fully discharged in about 2 months if you do not use this product at all. Charge the pre-installed rechargeable battery before you start using this product. However, even if the pre-installed rechargeable battery is not charged, this product operation other than date recording will not be affected.

**How to charge the pre-installed rechargeable battery**

Connect this product to a wall outlet (wall socket) using the supplied AC Adaptor, and leave it with the LCD monitor closed for more than 24 hours.
On connecting to a computer or accessory etc.

- Do not try to format the recording media of this product with a computer. If you do so, this product may not operate correctly.
- When connecting this product to another device with communication cables, be sure to insert the connector plug in the correct way. Pushing the plug forcibly into the terminal will damage the terminal and may result in a malfunction of this product.
- When this product is connected to other devices through a USB connection and the power of this product is turned on, do not close the LCD monitor. The image data that has been recorded may be lost.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Notes on optional accessories

- We recommend using genuine Sony accessories.
- Genuine Sony accessories may not be available in some countries/regions.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
On moisture condensation

If this product is brought directly from a cold place to a warm place, moisture may condense inside this product. This may cause a malfunction to this product.

**If moisture condensation occurs**
Leave this product for about 1 hour without turning it on.

**Where moisture condensation frequently occurs**
Moisture may condense when you bring this product from a cold place into a warm place (or vice versa) or when you use this product in a humid place as follows:

- You bring this product from a ski slope into a place warmed up by a heating device.
- You bring this product from an air conditioned car or room into a hot place outside.
- You use this product after a squall or a rain.
- You use this product in a hot and humid place.

**How to prevent moisture condensation**
When you bring this product from a cold place into a warm place, put this product in a plastic bag and seal it tightly. Remove the bag when the air temperature inside the plastic bag has reached the surrounding temperature (after about 1 hour).
Notes on disposal/transfer the ownership of this product

Even if you delete all movies and still images, or perform [Format], data on the internal memory may not be completely erased. It is recommended that you perform [Empty] to prevent the recovery of your data.

Related Topic

Format

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Notes on the Wireless Remote Commander

Remove the insulation sheet before using the Wireless Remote Commander.

- Point the Wireless Remote Commander towards the remote sensor to operate this product.
- When no commands have been sent from the Wireless Remote Commander within a certain period, the light blue frame disappears. When you press any of ▲/▼/◄/►, or ENTER again, the frame appears at the position where it was last displayed.
- You cannot select some buttons on the LCD monitor or on the viewfinder using ▲/▼/◄/►.

To change the battery of the Wireless Remote Commander

1. While pressing on the tab, inset your fingernail into the slit to pull out the battery case.
2. Place a new battery with the + side facing up.
3. Insert the battery case back into the Wireless Remote Commander until it clicks.

- When the lithium battery becomes weak, the operating distance of the Wireless Remote Commander may shorten, or the Wireless Remote Commander may not function properly. In this case, replace the battery with a Sony CR2025 lithium battery. Use of another battery may present a risk of fire or explosion.
On handling the LCD monitor

- If you leave fingerprints, hand cream, etc. on the LCD monitor, the coating of the LCD monitor will come off easily. Wipe those off as soon as possible.
- If you wipe the LCD monitor strongly with a tissue, etc., the coating of the LCD monitor may be scratched.
- If the LCD monitor becomes dirty with fingerprints or dust, it is recommended that you gently remove those from the screen then clean it with a soft cloth, etc.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
To clean the casing and the projector lens surface

- Wipe the casing and the lens gently with a soft cloth such as a cleaning cloth or eyeglass cleaning cloth.
- If the casing and the projector lens are very dirty, clean the casing of this product and the lens with a soft cloth lightly moistened with water, and then wipe the casing and the projector lens with a dry soft cloth.
- Avoid the following so as not to deform the casing, damage the finish or scratch the lens:
  - Using chemicals such as thinner, benzine, alcohol, chemical cloths, insect repellent, insecticide and sunscreen
  - Handling this product with the above substances on your hands
  - Leaving this product in contact with rubber or vinyl objects for a long period of time

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
About care and storage of the lens

- Wipe the surface of the lens clean with a soft cloth in the following instances:
  - When there are fingerprints on the lens surface
  - In hot or humid locations
  - When the lens is exposed to salty air such as at the seaside
- Store in a well-ventilated location subject to little dirt or dust.
- To prevent mold, periodically clean and store the lens as described above.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Using this product abroad

**Power supply**

- You can use this product in any countries/regions using the AC Adaptor supplied with this product within the AC 100 V to 240 V, 50 Hz/60 Hz range. You can also charge the battery pack.

**Viewing images on a TV connected**

- To view images on a TV (or monitor), you need to connect this product to a TV (or monitor) using the HDMI cable (supplied) or AV cable (sold separately). Refer to “On TV color systems” for countries and regions where the playback signal format of this product is supported.

**Viewing high definition image quality (HD) movies**

- In countries/regions where high definition image quality (HD) broadcasts are supported, you can view recorded movies on a TV at the same high definition image quality (HD) as they were recorded with this product.
- To view images at the same high definition image quality (HD) as they were recorded with this product, you need the HDMI cable and a high definition TV (or monitor) that supports the signal format for this product and is equipped with an HDMI jack.

**On TV color systems**

- For signal formats supported by this product, refer to “Model Information.” To view images in this product on TV, use a TV (or monitor) that supports the signal format of this product.

**PAL:**
Australia, Austria, Belgium, China, Czech Republic, Denmark, Finland, Germany, Holland, Hong Kong, Hungary, Italy, Kuwait, Malaysia, New Zealand, Norway, Poland, Portugal, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Thailand, United Kingdom, etc.

**PAL-M:**
Brazil

**PAL-N:**
Argentina, Paraguay, Uruguay

**NTSC:**
Bahama Islands, Bolivia, Canada, Central America, Chile, Colombia, Ecuador, Guyana, Jamaica, Japan, Korea, Mexico,
Peru, Surinam, Taiwan, the Philippines, the USA, Venezuela, etc.

**SECAM:**
Bulgaria, France, Guiana, Iran, Iraq, Monaco, Russia, Ukraine, etc.

**Setting to the local time**

- You can easily set the clock to the local time by setting a time difference when using this product abroad. Select `MENU` - [Setup] - [Clock Settings] - [Daylight Savings] or [Summer Time], and `MENU` - [Setup] - [Clock Settings] - [Area Setting].

---

**Related Topic**

- Connecting this product to a high definition TV
- Connecting this product to a non-high-definition TV
- World time difference
- Area Setting
- Date & Time Setting

---

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
World time difference

The time difference for cities worldwide is shown as follows.

**GMT:**
Lisbon/London
+01:00:
Berlin/Paris
+02:00:
Helsinki/Cairo/Istanbul
+03:00:
Nairobi
+03:30:
Tehran
+04:00:
Moscow/Abu Dhabi/Baku
+04:30:
Kabul
+05:00:
Karachi/Islamabad
+05:30:
Kolkata/New Delhi
+06:00:
Almaty/Dhaka
+06:30:
Yangon
+07:00:
Bangkok/Jakarta
+08:00:
HongKong/Singapore/Beijing
+09:00:
Tokyo/Seoul
+09:30:
Adelaide/Darwin
<table>
<thead>
<tr>
<th>Time Zone</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10:00</td>
<td>Melbourne/Sydney</td>
</tr>
<tr>
<td>+11:00</td>
<td>Solomon Is</td>
</tr>
<tr>
<td>+12:00</td>
<td>Fiji/Wellington</td>
</tr>
<tr>
<td>-11:00</td>
<td>Midway Island</td>
</tr>
<tr>
<td>-10:00</td>
<td>Hawaii</td>
</tr>
<tr>
<td>-09:00</td>
<td>Alaska</td>
</tr>
<tr>
<td>-08:00</td>
<td>Los Angeles/Tijuana</td>
</tr>
<tr>
<td>-07:00</td>
<td>Denver/Arizona</td>
</tr>
<tr>
<td>-06:00</td>
<td>Chicago/Mexico City</td>
</tr>
<tr>
<td>-05:00</td>
<td>New York/Bogota</td>
</tr>
<tr>
<td>-04:00</td>
<td>Santiago</td>
</tr>
<tr>
<td>-03:30</td>
<td>St. John's</td>
</tr>
<tr>
<td>-03:00</td>
<td>Brasilia/Montevideo</td>
</tr>
<tr>
<td>-02:00</td>
<td>Fernando de Noronha</td>
</tr>
<tr>
<td>-01:00</td>
<td>Azores/Cape Verde Is.</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

On trademarks

- Handycam and *Handycam* are registered trademarks of Sony Corporation.
- AVCHD, AVCHD logotype, AVCHD Progressive and AVCHD Progressive logotype are trademarks of Panasonic Corporation and Sony Corporation.
- PlayMemories Home, the PlayMemories Home logo, PlayMemories Online, the PlayMemories Online logo, PlayMemories Mobile and the PlayMemories Mobile logo are trademarks of Sony Corporation.
- InfoLITHIUM is a trademark of Sony Corporation.
- BIONZ X is a trademark of Sony Corporation.
- BRAVIA and Photo TV HD are trademarks of Sony Corporation.
- Blu-ray Disc™ and Blu-ray™ are trademarks of the Blu-ray Disc Association.
- Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- Microsoft, Windows, Windows Vista, and DirectX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Mac and Mac OS are registered trademarks of Apple Inc. in the United States and other countries.
- iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.
- iOS is a registered trademark or trademark of Cisco Systems, Inc.
- Intel, Pentium and Intel Core are trademarks of Intel Corporation in the U.S. and/or other countries.
- Android and Google Play are trademarks of Google Inc.
- Wi-Fi, the Wi-Fi logo, Wi-Fi PROTECTED SET-UP, Wi-Fi Direct, WPA and WPA2 are registered trademarks of the Wi-Fi Alliance.
- DLNA and DLNA CERTIFIED are trademarks of Digital Living Network Alliance.
- The N mark is a trademark or registered trademark of NFC Forum, Inc. in the United States and in other countries.
- “*PlayStation*” and “PlayStation” are registered trademarks of Sony Computer Entertainment Inc.
- SDXC logo is a trademark of SD-3C, LLC.
- Facebook and the “f” logo are trademarks or registered trademarks of Facebook, Inc.
- YouTube and the YouTube logo are trademarks or registered trademarks of Google Inc.
- All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies. Furthermore, ™ and ® are not mentioned in each case in this Help Guide.
Add further enjoyment with your PlayStation 3 by downloading the application for PlayStation 3 from PlayStation Store (where available.) The application for PlayStation 3 requires PlayStation Network account and application download. Accessible in areas where the PlayStation Store is available.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Notes on the License

ANY USE OF THIS PRODUCT OTHER THAN CONSUMER PERSONAL USE IN ANY MANNER THAT COMPLIES WITH THE MPEG-2 STANDARD FOR ENCODING VIDEO INFORMATION FOR PACKAGED MEDIA IS EXPRESSLY PROHIBITED WITHOUT A LICENSE UNDER APPLICABLE PATENTS IN THE MPEG-2 PATENT PORTFOLIO, WHICH LICENSE IS AVAILABLE FROM MPEG LA, L.L.C., 250 STEELE STREET, SUITE 300, DENVER, COLORADO 80206. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO
(i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR
(ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO.

NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C.
SEE <HTTP://WWW.MPEGLA.COM>

We provide the software in this product based on license agreements with the owners of the respective copyrights. Based on requests by the owners of copyright of these software applications, we have an obligation to inform you of the following. Please read the following sections.

Copies of the licenses (in English) are stored in the internal memory of this product. Establish a Mass Storage connection between this product and a computer, and read the files in the “LICENSE” folder in “PMHOME.”

On GNU GPL/LGPL applied software

The software that is eligible for the following GNU General Public License (hereinafter referred to as “GPL”) or GNU Lesser General Public License (hereinafter referred to as “LGPL”) are included in this product. This informs you that you have a right to have access to, modify, and redistribute source code for these software programs under the conditions of the supplied GPL/LGPL.

Source code is provided on the web. Use the following URL to download it. When downloading the source code, select HDR-PJ800 as the model for this product.
http://www.sony.net/Products/Linux/

We would prefer you do not contact us about the contents of source code.

Copies of the licenses (in English) are stored in the internal memory of this product. Establish a Mass Storage connection between this product and a computer, and read the files in the “LICENSE” folder in “PMHOME.”
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Zoom magnifications

**When recording a movie with [SteadyShot] set to [Active]**
24 times

**When recording a movie or photo with [SteadyShot] set to [Standard] or [Off]**
12 times

**When [Digital Zoom] is set to [160x]**
160 times

**Related Topic**

- Zooming

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
If you have problems

If you run into any problems using this product, follow the steps below.

1. Check the items under “Troubleshooting,” and inspect this product.

2. Disconnect the power source, attach the power source again after about 1 minute, and turn this product on.

3. Perform [Initialize].
   - If you select [Initialize], all settings, including the clock setting, are reset.

4. Contact your Sony dealer or local authorized Sony service facility.

Warning
- You may need to initialize or change the current internal memory of this product depending on the problem.
  - If you do so, the data stored on the internal memory will be deleted. Be sure to save the data on the internal memory on other media (backup) before sending this product for repair. We will not compensate you for any loss of internal memory data.
  - During repair, we may check a minimum amount of data stored on the internal memory in order to investigate the problem. However, your Sony dealer will neither copy nor retain your data.

Related Topic

- Initialize

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The power does not turn on.

- Attach a charged battery pack to this product.
- The plug of the AC Adaptor has been disconnected from a wall outlet (wall socket). Connect it to a wall outlet (wall socket).

Related Topic

- Attaching the battery pack
- Charging the battery pack using the AC Adaptor

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

This product does not operate even when the power is set to on.

- Disconnect the AC Adaptor from a wall outlet (wall socket) or remove the battery pack, then reconnect it after about 1 minute.

Related Topic

- Attaching the battery pack
- Charging the battery pack using the AC Adaptor

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The menu settings have been changed automatically.

- While Intelligent Auto is active, some menu settings related to image quality will be changed automatically.
- The following menu items return to the default settings when you switch between movie recording, photo recording and playback modes.
  - [Fader]
  - [Self-Timer]

### Related Topic

- Fader
- Self-Timer

### Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

This product gets warm.

- This product may become warm during operation. This is not a malfunction.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
A rattling noise is heard when this product is shaken.

- If no noise is heard when this product is turned on and is in movie/photo recording mode, the noise is produced by the movement of the internal lens. This is not a malfunction.
Intelligent Auto is canceled.

- The Intelligent Auto setting is canceled if you change the following settings:
  - [Smth Slw REC]
  - [Golf Shot]
  - [White Balance]
  - [Spot Meter/Fcs]
  - [Spot Meter]
  - [Spot Focus]
  - [Exposure]
  - [Focus]
  - [IRIS]
  - [Shutter Speed]
  - [AGC Limit]
  - [AE Shift]
  - [White Balance Shift]
  - [Low Lux]
  - [Scene Selection]
  - [Cinematone]
  - [Auto Wind NR]
  - [SteadyShot]
  - [Auto Back Light]
  - [Face Detection]
Shutter Speed
AGC Limit
AE Shift
White Balance Shift
Low Lux
Scene Selection
Cinematone
Auto Wind NR
SteadyShot (Photo)
Auto Back Light
Face Detection

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The power abruptly turns off.

- Use the AC Adaptor.
- In the default setting, this product turns itself off when no operations are performed for more than about 2 minutes ([Power Save]). Change the setting of [Power Save], or turn on the power again.
- Charge the battery pack.

Related Topic

- Power Save
- Charging the battery pack using the AC Adaptor

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The POWER/CHG (charge) lamp does not light while the battery pack is being charged.

- Turn off this product.
- Attach the charged battery pack to this product correctly.
- Connect the power cord (mains lead) to a wall outlet (wall socket) properly.
- The battery charge is completed.

Related Topic

- Attaching the battery pack
- Charging the battery pack using the AC Adaptor

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The POWER/CHG (charge) lamp flashes while the battery pack is being charged.

- When the battery is being charged using the Built-in USB Cable, disconnect the Built-in USB Cable and connect it again.
- If the temperature of the battery pack is too high or too low, you may not be able to charge it.
- Attach the charged battery pack to this product correctly. If the problem persists, disconnect the AC Adaptor from a wall outlet (wall socket) and contact your Sony dealer. The battery pack may be damaged.

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
The remaining battery power is not displayed correctly.

- The ambient temperature is too high or too low. This is not a malfunction.
- The battery pack has not been charged enough. Fully charge the battery again. If the problem persists, replace the battery pack with a new one.
- The indicated remaining battery power may not be correct depending on the environment in which this product is used.
The battery pack is quickly discharged.

- The ambient temperature is too high or low. This is not a malfunction.
- The battery pack has not been charged enough. Fully charge the battery again. If the problem persists, replace the battery pack with a new one.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Menu items are grayed out.

- You cannot select grayed out items in the current recording/playback situation.
- There are some functions you cannot activate simultaneously.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

The buttons do not appear on the LCD monitor.

- Touch the LCD monitor lightly.
The buttons on the touch panel do not work correctly or do not work at all.

- Adjust the touch panel ([Calibration]).

## Related Topic

- Calibration

## Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The buttons on the LCD monitor quickly disappear.

- If you set [Display Setting] to [On], the buttons do not disappear from the LCD monitor while in recording mode.

Related Topic

Display Setting

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
There are dots in the shape of a grid on the monitor.

- These dots are a normal result of the manufacturing process of the monitor and do not affect the recording in any way.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The backlight of the LCD monitor turns off if you do not attempt to operate this product for a while.

- In the default setting, the backlight of the LCD monitor turns off automatically if you do not attempt to operate this product for more than about 1 minute ([Power Save]).

Related Topic

| Power Save |

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
The image in the viewfinder is not clear.

- Move the viewfinder lens adjustment lever until the image appears clearly.

**Related Topic**

- Adjusting the angle of the viewfinder for easier viewing

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
The image in the viewfinder is no-longer displayed.

- Close the LCD monitor. Even if the viewfinder is pulled out, no image is displayed in the viewfinder when the LCD monitor is open.

Related Topic

- Turning the power on

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Operations using the memory card cannot be performed.

- If you use the memory card formatted on a computer, format it again on this product.

Related Topic

Format

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Images stored on the memory card cannot be deleted.

- The maximum number of images that you can delete on the index screen at one time is 100.
- You cannot delete the protected images.

**Related Topic**

- Protect

---

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
The data file name is not indicated correctly or flashes.

- The file is damaged.
- The file format is not supported by this product.
Images cannot be played back or the memory card is not recognized.

- The playback device does not support playing back memory cards.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

The supplied Wireless Remote Commander does not function.

- Set [Remote Ctrl] to [On].
- Insert a battery into the battery holder with the +/- polarities correctly matching the +/- marks.
- Remove any obstructions between the Wireless Remote Commander and the remote sensor.
- Point the remote sensor away from strong light sources such as direct sunlight or overhead lighting. Otherwise, the Wireless Remote Commander may not function properly.

Related Topic

- Remote Ctrl
- Notes on the Wireless Remote Commander
Another DVD device operates when you use the supplied Wireless Remote Commander.

- Select a commander mode other than DVD 2 for your DVD device, or cover the sensor of your DVD device with black paper.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Pressing START/STOP or PHOTO does not record images.

- The playback screen is displayed. Stop playback, and select [MENU] - [Shooting Mode] - [Movie] or [Photo].
- This product is recording the image you have just shot on the recording media. You cannot make new recording during this period.
- The recording media is full. Delete unnecessary images.
- Total number of movie scenes or photos exceeds the recordable capacity of this product. Delete unnecessary images.

Related Topic

Delete
Photos cannot be recorded.

- You cannot record photos together with:
  - [Smth Slw REC]
  - [Golf Shot]
  - [Fader]
- This product cannot shoot photos while it is in movie recording mode, depending on the [REC Mode] or [Frame Rate] selected.
- When you select a [Picture Effect] item, you cannot record photos in the movie recording mode.

**Related Topic**
- Smth Slw REC
- Golf Shot
- Fader
- REC Mode
- Frame Rate
- Picture Effect

**Notes on use**

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

The access lamp remains lit or flashing even if recording has stopped.

- This product is recording the scene you have just shot on the memory card.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The imaging field looks different.

- The imaging field may look different depending on the condition of this product. This is not a malfunction.
The actual recording time for movies is less than the expected recording time of the recording media.

- Depending on the recording conditions, the time available for recording may be shorter, for example when recording a fast moving object, etc.
This product stops recording.

- If you keep applying vibration on this product, recording may stop.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
There is a slight time lag between the moment when START/STOP is pressed and the actual movie recording starts or stops.

- On this product, there may be a slight time difference between the moment when you press START/STOP and when the actual movie recording starts/stops. This is not a malfunction.
The auto focus does not function.

- Set [Focus] to [Auto].
- If the auto focus does not lock on the subject, adjust the focus manually.
SteadyShot does not function.

- Set 
  
  SteadyShot
  
  to [Active] or [Standard],

- Even if 
  
  SteadyShot
  
  is set to [Active] or [Standard],

this product may not be able to compensate for excessive vibrations.

Related Topic

- SteadyShot (Movie)
- SteadyShot (Photo)
Images cannot be recorded or played back correctly.

- If you record and delete images repeatedly for a long time, the files on the recording media may become fragmented and images cannot be recorded or played back correctly. After backing up the images on other media, perform [Format] of the recording media on this product.

**Related Topic**

- Format
The subjects passing across this product very fast appear crooked.

- This is called the focal plane phenomenon. This is not a malfunction. Because of the way the image device (CMOS sensor) reads out image signals, the subjects passing by the lens rapidly might appear crooked depending on the recording conditions.
Horizontal stripes appear on the images.

- This occurs when recording images under a fluorescent lamp, sodium lamp, or mercury lamp. This is not a malfunction.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

[Monitor Brightness] cannot be set.

- You cannot set [Monitor Brightness] when:
  - The LCD monitor is closed on this product with the LCD monitor facing out.
  - The power is supplied from the AC Adaptor.

Related Topic
Monitor Brightness

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Sound is not recorded correctly.

- If you connect or disconnect an external microphone, etc. while recording movies, the sound may not be recorded correctly. The sound will be recorded correctly by restoring the microphone connection at the start of movie recording.
- If you turn the volume down to the minimum level by adjusting in [Audio Rec Level], the sound of movies cannot be recorded.

Related Topic

Audio Rec Level
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Photos are recorded automatically.

- When [Smile Shutter] is set to [Dual Capture] or [Always On], photos are recorded automatically when this product detects a smile.

Related Topic

- Smile Shutter

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Images cannot be played back.

- Select the type of recording media you want to play back.
- Select the movie type (HD/MP4) you want to play with the movie format select button.
- Images recorded on other devices may not be played back. This is not a malfunction.

Related Topic

- Media Select
- Playing MP4 movies (HD movie) (switching the movie format)

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Photos cannot be played back.

- You may not be able to play back photos if you have changed file or folder names, or have edited the data on a computer. (The file name flashes in that case.) This is not a malfunction.
The movie freezes.

- Photos which were recorded while recording a movie are played back. In the default setting, movies and photos are played back continuously.
An icon appears on a thumbnail.

- The image data base file may be damaged. Check the data base file by selecting [MENU] - [Setup] - [Media Settings] - [Repair Img. DB F.] - the recording medium. If it still appears, delete the image with 
- ? may appear on an image recorded on other devices, edited on a computer, etc.
- You removed the AC Adaptor or the battery pack while the recording media icon at the top right corner of the screen is lit, or before the access lamp is turned off after recording. This may damage your image data and ? is displayed.

Related Topic
- Repair Img. DB F.
- Delete

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
No sound or only a quiet sound is heard during playback.

- Turn up the volume.
- If you turn the volume down to the minimum level by adjusting in [Audio Rec Level], the sound of movies cannot be recorded.
- Sounds are not recorded while shooting with [Smth Slw REC] or [Golf Shot].

Related Topic

- Volume
- Audio Rec Level
- Smth Slw REC
- Golf Shot

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Left and right sound is heard unbalanced when playing back movies on computers or other devices.

- Change the sound conversion type (downmix type) when playing back on 2ch stereo devices. Refer to the instruction manual supplied with your playback device for details.
- Change the sound to 2ch when creating a disc using the PlayMemories Home software.
- This happens when sound recorded in 5.1ch surround is converted to 2ch (normal stereo sound) by a computer or other device. This is not a malfunction.
- Record sound with [Audio Mode] set to [2ch Stereo].

Related Topic

- Using the PlayMemories Home software
- Audio Mode

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The wireless access point you want to connect to does not appear.

- Depending on the signal conditions, the wireless access point may not appear on this product. Move this product closer to the wireless access point.
- Depending on its setting, the wireless access point may not appear on this product. Refer to the instruction manual for the wireless access point for the correct settings.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

[WPS Push] does not work.

- Depending on the wireless access point setting, [WPS Push] may not be available. Confirm the password and SSID of the wireless access point to set [Access point settings].

Related Topic

Access point settings

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

[Ctrl with Smartphone], [Send to Smartphone], [Send to Computer] or [View on TV] terminates prematurely.

- If the battery level is low, [Ctrl with Smartphone], [Send to Smartphone], [Send to Computer] or [View on TV] may terminate prematurely. Charge the battery pack before use.
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Cannot transfer movies to your smartphone.

- To send a movie to your smartphone, be sure to record it in the MP4 format. Before shooting a movie to be transferred to a smartphone, set [Dual Video REC] to [On].

Related Topic

Dual Video REC

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

The shooting screen does not display smoothly. The connection is cut off.

- Depending on the signal conditions, communication between the smartphone and this product may not work correctly. Reduce the distance between this product and the smartphone.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The NFC connection does not work.

- Change the position of the compatible device to reduce the distance between ♦ (N mark) on the smartphone and ♦ (N mark) on this product.
  If this still does not solve the problem, move the smartphone a few millimeters, or move the smartphone away from this product and wait for 10 seconds or more before touching again.
- This product is in [Airplane Mode]. Set [Airplane Mode] to [Off].
- Make sure that the smartphone is ready for communication. Refer to the instruction manual of your smartphone for details.
- Do not put any metal products other than the smartphone close to ♦ (N mark) on this product.
- Do not touch ♦ (N mark) on this product with 2 or more smartphones at the same time.
- When running another application that uses the NFC function on your smartphone, close the application.

Related Topic

Airplane Mode

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Unable to edit.

- Unable to edit because of the condition of the image.
A movie cannot be divided.

- The following movies cannot be divided.
  - Movies that are too short
  - MP4 movies
- Release the protection, and then divide.

Related Topic

Protect

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

The demonstration movies cannot be deleted.

- Release the protection, and then delete them.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect</td>
</tr>
</tbody>
</table>

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Neither image nor sound is played on the connected TV.

- Images are not output from the HDMI OUT jack, if copyright protection signals are recorded in the images.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
The top, bottom, right, and left edges of images are trimmed slightly on a connected TV.

- The LCD monitor of this product can display recording images across the entire LCD monitor (full pixel display). However, this may cause slight trimming of the top, bottom, right, and left edges of images when played back on a TV which is not compatible with full pixel display.
- It is recommended you record images using the outer frame of [Grid Line] as a guide.

## Related Topic

- Grid Line

### Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
The image appears distorted on the 4:3 TV.

- This happens when viewing an image on a 4:3 TV. Set [TV Type] correctly and play back the image.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Digital HD Video Camera Recorder
HDR-PJ810/PJ810E/PJ820/PJ820E

Black bands appear at the top and bottom of the LCD monitor of the 4:3 TV.

- This happens when viewing an image on a 4:3 TV. This is not a malfunction.

Notes on use

4-489-505-11(1)
Copyright 2014 Sony Corporation
Images are not copied correctly.

- You cannot copy images using the HDMI cable.
- An AV cable (sold separately) is not connected properly. Make sure that the cable is connected to the input jack of the device.

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation
PlayMemories Home cannot be installed.

- An Internet connection is required to install PlayMemories Home.
- Check the computer environment or installation procedure required to install PlayMemories Home.

| Related Topic | Using the PlayMemories Home software |

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
PlayMemories Home does not work correctly.

- Quit PlayMemories Home and restart your computer.

Related Topic

- Using the PlayMemories Home software

Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
This product is not recognized by the computer.

- Disconnect all USB devices from the USB jack of your computer except the keyboard, mouse, and this product.
- Disconnect the Built-in USB Cable from the computer and restart the computer, then connect the computer and this product again in the correct order.
- When both the Built-in USB Cable and the Multi/Micro USB terminal of this product are connected to the external devices at the same time, disconnect the one that is not connected to a computer.
Self-diagnosis display

If indicators appear on the LCD monitor or in the viewfinder, check the following. If the problem persists even after you have tried to fix a couple of times, contact your Sony dealer or local authorized Sony service facility. When you contact them, give them the complete error code beginning with C or E displayed on the LCD monitor.

You may hear a melody when an important warning indicator appears on the LCD monitor.

**C:(or E:) □ □ : □ □ (Self-diagnosis display)**

**C:04:** □ □
You are not using the designated battery pack. Make sure to use the designated battery pack. Connect the AC Adaptor and the USB cable firmly.

**C:06:** □ □
The battery pack temperature is high. Change the battery pack or place it in a cool place.

**C:13:** □ □ / C:32: □ □
Remove the power source. Reconnect it and operate this product again.

**E:** □ □ : □ □
Follow the steps from 2 on "If you have problems."

**Battery level warning**

The battery pack is nearly used up.
Depending on the operating environment or battery conditions, □ may flash even with about 20 minutes of power remaining.

**Warning indicator pertaining to battery pack temperature**

The battery pack temperature is high. Change the battery pack or place it in a cool place.

**Warning indicator pertaining to memory card**

Slow flashing
Free spaces for recording images are running out.
No memory card is inserted.
Fast flashing
There is not enough free spaces for recording images. After storing the images on other media, delete unnecessary images, or format the memory card.

The image data base file may be damaged. Check the data base file by selecting [MENU] - [Setup] - [Media Settings] - [Repair Img. DB F.] - the recording medium.

The memory card is damaged.

⚠️ (Warning indicators pertaining to memory card formatting)
The memory card is damaged.
The memory card is not formatted correctly.

⚠️ (Warning indicator pertaining to incompatible memory card)
Incompatible memory card is inserted.

⚠️ (Warning indicator pertaining to the write-protect of the memory card)
The memory card is write-protected.
Access to the memory card was restricted on another device.

⚠️ (Warning indicator pertaining to the external device)
The image data base file may be damaged. Check the data base file by selecting [MENU] - [Setup] - [Media Settings] - [Repair Img. DB F.] - the recording medium.
The external device is damaged.

⚠️ (Warning indicators pertaining to external device formatting)
The external device is damaged.
The external device is not formatted correctly.

⚠️ (Warning indicator pertaining to camera-shake warning)
This product is unsteady, so camera-shake easily occurs. Hold this product steady with both hands and record the image. However, note that the camera shake warning indicator does not disappear.

⚠️ (Warning indicator pertaining to photo recording)
The recording media is full.
Photos cannot be recorded during processing. Wait for a while, then record.
You cannot capture photos while recording movies in the following situations:

- When [REC Mode] is set to [Highest Quality FX]
- When the [Frame Rate] is set to [60p] (models with NTSC color system) or [50p] (models with PAL color system)
- When an item of [Picture Effect] is selected

Related Topic

- If you have problems
- Inserting a memory card
- Format
- About the InfoLITHIUM battery pack
- Repair Img. DB F.
- REC Mode
- Frame Rate
Notes on use

4-489-505-11(1)

Copyright 2014 Sony Corporation
Warning Indicators

If messages appear on the LCD monitor, follow the instructions.

⚠️ Cannot recognize the internal memory. Format and use again.
- The internal memory of this product is set differently from the default format. Performing [Format] may enable you to use this product. Formatting will delete all data in the internal recording medium.

Data error.
- An error occurred during reading or writing the internal memory of this product.
- This may occur when you keep applying shock to this product.
- Movies recorded on other devices may not be played back.

The Image Database File is damaged. Do you want to create a new file?

HD movie management information is damaged. Create new information?
- The management file is damaged. When you select [Yes], a new management file is created. The old recorded images on the media cannot be played back (Image files are not damaged). If you execute [Repair Img. DB F.] after creating new information, playing back the old recorded images may become possible. If it does not work, copy the image using the PlayMemories Home software.

There is no Image Database File Movies cannot be recorded or played Create a new file?

There is no HD movie management information. Create new information?
- You cannot record or play back movies because no movie management information exists. If you select [Yes], new management information is created and you can record or play back movies.

Inconsistencies found in image database file. Do you want to repair the image database file?

The Image Database File is damaged. Do you want to repair the Image Database File?

Inconsistencies found in image database file. Cannot record or play HD movies. Do you want to repair the image database file?
- You cannot record or play back movies because no movie management information exists. If you select [OK], new management information is created and you can record or play back movies.

Inconsistencies found in the image database file. Back up and recover.

Recover, then import using the included PC software.
- Since the database information of high definition image quality (HD) movies has been damaged, there are inconsistencies between the information in the database and the information in the file. Select [OK] to back up the
high definition image quality (HD) movies and repair the database file. You cannot see the backed-up movies on this product. By connecting this product to a computer after repairing the database, you can import backed-up high definition image quality (HD) movies to the computer using the PlayMemories Home software installed on the computer. However, it is not guaranteed that all movies can be imported to the computer.

**Buffer overflow. Writing to the media was not completed in time.**
- You have performed recording and erasing operations repeatedly, or a memory card that has been formatted by other device is used. Copy and take data backup to other device (such as a computer), and then format the memory card on this product.
- The size of the inserted memory card is not sufficient for copying the movie(s). Use the recommended memory card.

**Restoring data...**
- Writing data onto the media of this product has failed. Attempts were made to recover the data, but they were unsuccessful.

**Cannot recover data.**
- Writing data onto the media of this product has failed. Attempts were made to recover the data, but they were unsuccessful.

**Reinsert the memory card.**
- Reinsert the memory card a few times. If the indicator continues to flash even after reinserting, the memory card could be damaged. Try with another memory card.

**Cannot recognize this memory card. Format and use again.**
- Format the memory card. Note that when you format the memory card, all the recorded movies and photos are deleted.

**The maximum number of still image folders has been reached. Cannot record still images.**
- You cannot create folders exceeding 999MSDCF. You cannot create or delete created folders using this product.
- Format the memory card, or delete folders using your computer.

This memory card may not be able to record or play movies.

This memory card may not be able to record or play images correctly.
- Use a memory card recommended for this product.

**Do not eject the memory card during writing. Data may be damaged.**
- Reinsert the memory card.

**External media cannot execute functions.**
- If even then the indicator flashes, format the external media using your computer, and then reconnect this product with the external media. Note that if you format the external media device, all the recorded movies and photos in it are deleted.
- If the same message still appears after formatting, the external media may not be supported by this product, or it may be damaged. Try with another external media.

**Unable to access external media.**
- Use the external media device in stable condition (the environment such as no vibration and room temperature, etc.).
- Make sure that the power source of the external media device is connected.
**Others**

**Maximum number of images already selected.**
- You can select only 100 images at one time for:
  - Deleting movies/photos
  - Protecting movies/photos, or releasing the protection
  - Copying movies/photos

**Data protected.**
- You tried to delete protected data. Release the protection of the data.

<table>
<thead>
<tr>
<th>Related Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair Img. DB F.</td>
</tr>
<tr>
<td>Format</td>
</tr>
<tr>
<td>Delete</td>
</tr>
<tr>
<td>Protect</td>
</tr>
<tr>
<td>Copy</td>
</tr>
</tbody>
</table>

**Notes on use**

4-489-505-11(1)
Copyright 2014 Sony Corporation