

# CapturePlay User Manual

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## Version 2.8

CapturePlay is a macOS application designed to display video and audio from USB capture devices (such as the USB Camlink 4K) connected to gaming consoles like the PlayStation 5 or Nintendo Switch in a dock. The application provides real-time video display, audio routing, image capture, and video recording capabilities.

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## Introduction

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CapturePlay enables you to:

- **Display video** from USB capture devices in real-time
  - **Route audio** from capture devices to any output device
  - **Capture images** during gameplay or video viewing
  - **Record video** with audio in QuickTime-compatible MOV format
  - **Transform video** with mirroring, rotation, and aspect ratio controls
  - **Customize the window** with borderless mode and full-screen support
  - **Prevent display sleep** during full-screen viewing or recording
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## System Requirements

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- **macOS:** 12.4 (Sierra) or later
  - **Hardware:** USB capture device (e.g., Elgato Camlink 4K, generic USB capture cards)
  - **Permissions:**
    - Camera access (for video capture devices)
    - Microphone access (for audio capture)
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## Getting Started

### First Launch

1. **Launch CapturePlay** from your Applications folder or Dock.
2. **Grant permissions** when macOS prompts for:
  - Camera access (required for video display)
  - Microphone access (required for audio capture)
3. **Connect your USB capture device** before or after launching the app.

### Device Detection

- CapturePlay automatically detects connected USB video capture devices on startup.
- If no devices are found, the app will display an error and close.
- USB devices are monitored: connecting or disconnecting a device will automatically update the device list.

### Initial Setup

1. **Select your video source:** Go to **Video > Select Source** and choose your capture device.
  2. **Configure audio** (optional):
    - Choose an audio input: **Audio > Select Source**
    - Choose an audio output: **Audio > Select Output**
  3. **Set capture directory:** Go to **CapturePlay > Preferences** and set where captured images and videos should be saved.
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## Menu Structure

### CapturePlay Menu (Application Menu)

- **About CapturePlay:** Displays version information and copyright
- **Preferences... (⌘,):** Opens the preferences dialog

- **Hide CapturePlay** (⌘H): Hides the application window
- **Hide Others** (⌥⌘H): Hides all other applications
- **Show All**: Shows all hidden applications
- **Quit CapturePlay** (⌘Q): Exits the application

## File Menu

- **Open Capture Folder** (⌘O): Opens the folder where captured images and videos are saved in Finder
- **Save Image...** (⌘S): Saves the current video frame to a location of your choice
- **Capture Image** (⌘↑S): Captures an image and saves it to the capture directory with automatic filename
- **Capture Video** (⌘↑V): Starts or stops video recording
- **Save Settings**: Saves the current window position and size to preferences
- **Clear Settings**: Resets all preferences to default values
- **Close** (⌘W): Closes the application window

## Edit Menu

Standard macOS text editing commands (Undo, Redo, Cut, Copy, Paste, Select All, Find, etc.)

## Video Menu

- **Select Source**: Choose which video capture device to use (submenu lists all available devices)
- **Mirror Image**:
  - **Mirror Horizontally** (⌘M): Flips the video horizontally (left-right)
  - **Mirror Vertically** (⌘↑M): Flips the video vertically (top-bottom)
- **Rotate Image**:
  - **Rotate Left** (⌘L): Rotates video 90° counter-clockwise
  - **Rotate Right** (⌘R): Rotates video 90° clockwise
- **Borderless Mode** (⌘B): Toggles window border on/off
- **Fix Aspect Ratio** (⌘A): Locks/unlocks the window aspect ratio to match video
- **Fit to Actual Size** (^⌘A): Resizes window to match the video's native resolution
- **Enter Full Screen** (^⌘F): Enters full-screen mode
- **Display Sleep** (⌘D): Toggles display sleep prevention on/off

## Audio Menu

- **Select Source**: Choose audio input device (submenu lists all available audio capture devices)
- **Select Output**: Choose audio output device (submenu lists all available audio output devices)

- **Mute** (⌘M): Toggles audio muting on/off
- **Volume**: Adjust audio volume using the slider (submenu item)

## Window Menu

- **Minimize** (⌘M): Minimizes the window to the Dock
- **Zoom**: Maximizes the window
- **Bring All to Front**: Brings all CapturePlay windows to the front

## Help Menu

- **CapturePlay Help** (⌘?): Opens the help system (if available)
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# Video Features

## Selecting a Video Source

1. Connect your USB capture device.
2. Go to **Video > Select Source**.
3. Choose your device from the list.
4. The video feed will start automatically.

**Note:** CapturePlay monitors USB connections. If you connect or disconnect a device, the device list will update automatically.

## Mirroring

Mirroring flips the video display:

- **Mirror Horizontally** (⌘M): Flips left and right (useful for webcam-style "mirror mode")
- **Mirror Vertically** (⌘⇧M): Flips top and bottom (useful for upside-down cameras)

Both mirroring options can be combined. The mirroring state is saved in preferences.

## Rotation

Rotate the video to match your camera orientation:

- **Rotate Left** (⌘L): 90° counter-clockwise
- **Rotate Right** (⌘R): 90° clockwise

Rotation position is saved in preferences and applied automatically on startup.

## Borderless Mode

**Borderless Mode** (⌘B) removes the window title bar and borders:

- **Enabled:** Window has no border, is always on top, and is movable by dragging anywhere
- **Disabled:** Standard macOS window with title bar

**Note:** Borderless mode is automatically disabled when entering full-screen mode.

## Aspect Ratio Control

- **Fix Aspect Ratio** (⌘A): When enabled, the window maintains the video's aspect ratio when resizing
- **Fit to Actual Size** (^⌘A): Resizes the window to match the video's native resolution

## Full Screen Mode

**Enter Full Screen** (^⌘F) or click the green traffic light button:

- Video fills the entire screen
- Cursor is automatically hidden
- Display sleep prevention is automatically enabled (if configured in preferences)
- Press Escape or move mouse to top to exit

**Note:** Some features (like "Save Image") are not available in full-screen mode.

## Display Sleep Prevention

**Display Sleep** (⌘D) prevents your Mac's display from sleeping:

- Useful during long recording sessions
- Can be enabled/disabled manually via menu
- Automatically enabled in full-screen mode (if configured in preferences)

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# Audio Features

## Selecting Audio Input

The audio input comes from your capture device:

1. Go to **Audio > Select Source**.
2. Choose your audio capture device from the list.
3. Audio will route to the selected output device.

**Note:** If no audio input is selected, videos will be recorded without audio.

## Selecting Audio Output

Choose where audio is played:

1. Go to **Audio > Select Output**.
2. Choose your output device (speakers, headphones, etc.).

**Note:** Audio settings are saved in preferences.

## Mute

**Mute** (⌘M in Audio menu) temporarily disables audio output without changing volume settings.

**Note:** The mute keyboard shortcut (⌘M) is shared with "Mirror Horizontally" in the Video menu. Use the menu item if there's a conflict.

## Volume Control

Adjust volume using the slider in **Audio > Volume**:

- Drag the slider to adjust output volume
- Changes apply immediately
- Volume setting is saved in preferences

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# Capture Features

## Image Capture

Two methods for capturing images:

### Method 1: Quick Capture (⌘↑S)

- Captures current frame instantly
- Saves to capture directory with automatic filename
- Filename format: `CapturePlay Image YYYY-MM-DD at HH.mm.ss.png`
- Shows notification when saved

### Method 2: Save Image (⌘S)

- Opens a save dialog to choose location
- Allows you to name the file
- Useful when you want to save to a specific location

**Image Format:** PNG (highest quality)

**Note:** Image capture temporarily removes the window border (if present) to capture a clean image, then restores it.

# Video Recording

**Capture Video** (⌘⇧V) toggles video recording:

- **Start Recording:** Creates a new video file in the capture directory
- **Stop Recording:** Finalizes the video file
- **File Format:** QuickTime MOV (compatible with macOS, Windows, and most video players)
- **Audio:** Included if an audio input is selected
- **Filename Format:** `CapturePlay Video YYYY-MM-DD at HH.mm.ss.mov`
- **Notifications:** Shows notifications when recording starts and stops

## Video Recording Details:

- Video resolution matches the source device's native resolution
- Frame rate matches the device's configured frame rate (typically 60fps or 59.94fps)
- Audio is encoded as AAC at 256 Kbps (QuickTime-compatible)
- Videos are saved with timestamps to avoid filename conflicts

## Recording Status:

- The "Capture Video" menu item shows a checkmark (✓) when recording is active
- A notification appears when recording starts and stops
- Recording can be stopped by pressing ⌘⇧V again

**Note:** Ensure you have sufficient disk space. Video files can be large, especially at high resolutions and frame rates.

## Opening Capture Folder

**Open Capture Folder** (⌘O) opens the capture directory in Finder, where all captured images and videos are saved.

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# Settings and Preferences

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## Preferences Dialog

Open **CapturePlay > Preferences...** (⌘,)

### Capture Image Directory

- **Default Location:** `~/Pictures/CapturePlay`
- **Browse...:** Click to select a different folder
- **Path Field:** Displays current directory path (supports tilde notation, e.g., `~/Documents`)

**Note:** If you select a folder outside your home directory, CapturePlay will request permission to access it. macOS will prompt you to grant access.

## Display Sleep in Full Screen

- **Checkbox:** "Automatically prevent display sleep during full screen"
- When enabled, display sleep prevention is automatically activated when entering full-screen mode
- When disabled, you must manually toggle display sleep prevention

## Saving Preferences

- Click **OK** to save changes
- Click **Cancel** to discard changes
- Preferences are saved immediately when you click OK

## Save Settings

**File > Save Settings** saves the current window state:

- Window position (X, Y coordinates)
- Window size (width, height)
- These settings are restored when you launch CapturePlay

## Clear Settings

**File > Clear Settings** resets all preferences to default values:

- Window position and size
- Video settings (rotation, mirroring, borderless, aspect ratio)
- Audio input/output selections
- Capture directory
- Display sleep preferences

**Warning:** This action cannot be undone. All your preferences will be lost.

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## Keyboard Shortcuts

### Global Shortcuts

<b>Shortcut</b>	<b>Action</b>	<b>Menu Location</b>
⌘,	Preferences	CapturePlay > Preferences...
⌘H	Hide App	CapturePlay > Hide CapturePlay
⌥⌘H	Hide Others	CapturePlay > Hide Others
⌘Q	Quit	CapturePlay > Quit CapturePlay
⌘O	Open Capture Folder	File > Open Capture Folder
⌘S	Save Image	File > Save Image...
⌘⇧S	Capture Image	File > Capture Image
⌘⇧V	Capture Video	File > Capture Video
⌘W	Close Window	File > Close
⌘M	Mirror Horizontally	Video > Mirror Image > Mirror Horizontally
⌘⇧M	Mirror Vertically	Video > Mirror Image > Mirror Vertically
⌘L	Rotate Left	Video > Rotate Image > Rotate Left
⌘R	Rotate Right	Video > Rotate Image > Rotate Right
⌘B	Borderless Mode	Video > Borderless Mode
⌘A	Fix Aspect Ratio	Video > Fix Aspect Ratio
⌃⌘A	Fit to Actual Size	Video > Fit to Actual Size
⌃⌘F	Enter Full Screen	Video > Enter Full Screen
⌘D	Display Sleep	Video > Display Sleep

## Menu-Specific Shortcuts

- **Audio > Mute** (⌘M): May conflict with "Mirror Horizontally" — use the menu item directly
- **Window > Minimize** (⌘M): May conflict — use the menu item directly

**Note:** Some keyboard shortcuts may conflict. Use menu items directly if a shortcut doesn't work as expected.

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## Notifications

CapturePlay can send notifications for key events:

- **Image Captured:** When an image is saved to the capture directory
- **Video Recording Started:** When video recording begins
- **Video Recording Stopped:** When video recording ends and the file is saved
- **Display Sleep Prevention:** When display sleep prevention is enabled or disabled

## Notification Permissions

On first launch, macOS will ask for notification permissions. Grant permission to receive notifications about captures and recordings.

**To enable/disable notifications later:**

1. Open **System Preferences > Notifications & Focus**
  2. Find "CapturePlay" in the list
  3. Adjust notification settings as desired
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## Troubleshooting

### No Video Display

**Problem:** Video window is black or shows no image.

**Solutions:**

1. **Check device connection:** Ensure your USB capture device is connected
2. **Select correct source:** Go to **Video > Select Source** and verify the correct device is selected
3. **Check device permissions:** Ensure CapturePlay has camera access (System Preferences > Security & Privacy > Privacy > Camera)
4. **Try a different USB port:** Some USB ports may not provide sufficient power
5. **Restart CapturePlay:** Quit and relaunch the application
6. **Check device compatibility:** Ensure your capture device is recognized by macOS (check System Information > USB)

### No Audio

**Problem:** No audio is heard during playback or recording.

**Solutions:**

1. **Select audio input:** Go to **Audio > Select Source** and choose an audio device
2. **Select audio output:** Go to **Audio > Select Output** and choose speakers or headphones
3. **Check mute status:** Ensure audio is not muted (Audio > Mute should be unchecked)

4. **Check volume:** Adjust volume in **Audio > Volume**
5. **Check microphone permissions:** Ensure CapturePlay has microphone access (System Preferences > Security & Privacy > Privacy > Microphone)
6. **Verify audio source:** Some capture devices have separate audio inputs — ensure audio is connected to the correct input

## Audio Stops Working After Changing Video Source

**Problem:** Audio works initially but stops after switching video devices.

**Solution:** This is a known behavior when switching devices. The audio manager should automatically reconnect. If it doesn't:

1. Go to **Audio > Select Source** and re-select your audio input
2. Restart CapturePlay if the issue persists

## Image Capture Not Working

**Problem:** Image capture fails or shows an error.

**Solutions:**

1. **Check macOS version:** Image capture requires macOS 10.12 (Sierra) or later
2. **Check capture directory:** Ensure the capture directory exists and is writable (Preferences > Browse...)
3. **Check disk space:** Ensure you have sufficient free disk space
4. **Check permissions:** If using a custom directory, grant CapturePlay permission to access it (macOS will prompt)

## Video Recording Not Working

**Problem:** Video recording doesn't start or fails.

**Solutions:**

1. **Check capture directory:** Ensure the capture directory exists and is writable
2. **Check disk space:** Video files can be large — ensure sufficient free space
3. **Check permissions:** Ensure CapturePlay can write to the capture directory
4. **Verify device supports recording:** Some devices may have limitations
5. **Try stopping and restarting:** Use ⌘+V to stop, then start again

## Window Won't Resize or Position Incorrectly

**Problem:** Window size or position is not as expected.

**Solutions:**

1. **Clear settings:** Go to **File > Clear Settings** to reset window state
2. **Disable aspect ratio lock:** Uncheck **Video > Fix Aspect Ratio**
3. **Fit to actual size:** Use **Video > Fit to Actual Size** (^⌘A) to match video resolution

## Display Sleep Still Occurs

**Problem:** Display sleeps despite enabling prevention.

**Solutions:**

1. **Check menu state:** Ensure **Video > Display Sleep** shows a checkmark (✓)
2. **Check System Preferences:** macOS power settings may override app settings
3. **Try toggling:** Disable and re-enable display sleep prevention
4. **Full-screen mode:** Display sleep prevention works more reliably in full-screen mode

## Preferences Not Saving

**Problem:** Settings don't persist between launches.

**Solutions:**

1. **Manually save settings:** Use **File > Save Settings** after making changes
2. **Check permissions:** Ensure CapturePlay can write to the preferences location (usually `~/Library/Preferences/`)
3. **Clear and reconfigure:** Use **File > Clear Settings**, then reconfigure preferences

## Device Not Detected

**Problem:** USB capture device is not listed in "Select Source".

**Solutions:**

1. **Check USB connection:** Unplug and reconnect the device
2. **Try different USB port:** Use a USB 3.0 port if available
3. **Check System Information:** Open System Information > USB and verify the device appears
4. **Install drivers:** Some devices require manufacturer drivers
5. **Restart CapturePlay:** The app detects devices on launch
6. **Check device compatibility:** Ensure the device is compatible with macOS

## App Crashes or Freezes

**Problem:** CapturePlay crashes or becomes unresponsive.

**Solutions:**

1. **Check macOS version:** Ensure you're running macOS 12.4 or later
2. **Check device compatibility:** Some devices may cause issues
3. **Clear settings:** Use **File > Clear Settings** to reset state
4. **Check Console:** Open Console.app and check for error messages
5. **Reinstall:** Delete the app and reinstall from a fresh build

## Performance Issues

**Problem:** Video is choppy or laggy.

**Solutions:**

1. **Close other applications:** Free up CPU and memory resources
  2. **Check device resolution:** High-resolution devices require more processing power
  3. **Lower frame rate:** Some devices allow frame rate adjustment (device-specific)
  4. **Check USB bandwidth:** Use USB 3.0 ports for high-resolution devices
  5. **Disable other video apps:** Close other apps using video capture devices
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## Technical Details

### Video Format

- **Container:** MOV (QuickTime)
- **Video Codec:** H.264 (device-dependent)
- **Audio Codec:** AAC at 256 Kbps
- **Frame Rate:** Matches device configuration (typically 60fps or 59.94fps)
- **Resolution:** Native device resolution

### Image Format

- **Format:** PNG
- **Color Space:** RGB
- **Resolution:** Window resolution at time of capture

### File Naming

- **Images:** CapturePlay Image YYYY-MM-DD at HH.mm.ss.png
- **Videos:** CapturePlay Video YYYY-MM-DD at HH.mm.ss.mov

Both use 24-hour time format (HH.mm.ss).

# Preferences Storage

Preferences are stored in macOS UserDefaults, typically at:

```
~/Library/Preferences/org.windholm.captureplay.plist
```

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## Credits

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### **CapturePlay**

Version 2.8

Copyright © 2025 Harald Striepe

### **Original Quick Camera Code**

Copyright © 2025 Simon Guest

Licensed under Apache License 2.0

[GitHub: quick-camera](#)

### **Acknowledgments**

CapturePlay includes code from Simon Guest's Quick Camera project, which provided the foundation for video capture and display functionality.

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## License

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This manual and the CapturePlay application are provided as-is. Please refer to the application's license for usage terms.

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## Support

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For issues, feature requests, or contributions, please refer to the project repository or contact the maintainer.

**Last Updated:** 2025