



Capture Express

For  Windows

User Manual, Reference and FAQ

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Getting Started

Introducing Capture Express

Capture Express is a lightweight live video production software designed specifically for Magewell capture devices. It supports 4K Ultra-HD and SD video encoding, and provides a series of functions such as snapshot, recording, video cropping and color adjustment to help you easily create snapshots and video clips.

Supported Product Families

💡 The product families supported by Capture Express may change. Please refer to [this web page](#) for the latest information.

- Pro Capture
- USB Capture
- USB Capture Plus
- Eco Capture
- Gen 1

System Requirements

Operating System

- Windows 7, 8, 8.1, 10 (x86)
- Windows 7, 8, 8.1, 10, Server 2008 R2, Server 2012, Server 2016 (x64)

Processor

- Minimum: i3 dual-core @ 3.30GHz
- Recommended: i7 quad-core @ 2.66GHz+

Memory

- Minimum: 2GB RAM
- Recommended: 8GB+ RAM

Graphics Card

- Minimum: OpenGL 2.0
- Recommended: OpenGL 3.0+

NOTE: Nvidia or Intel Graphics Cards required for 4K video encoding

Installation



Figure 1. Magewell Capture Express Setup Wizard

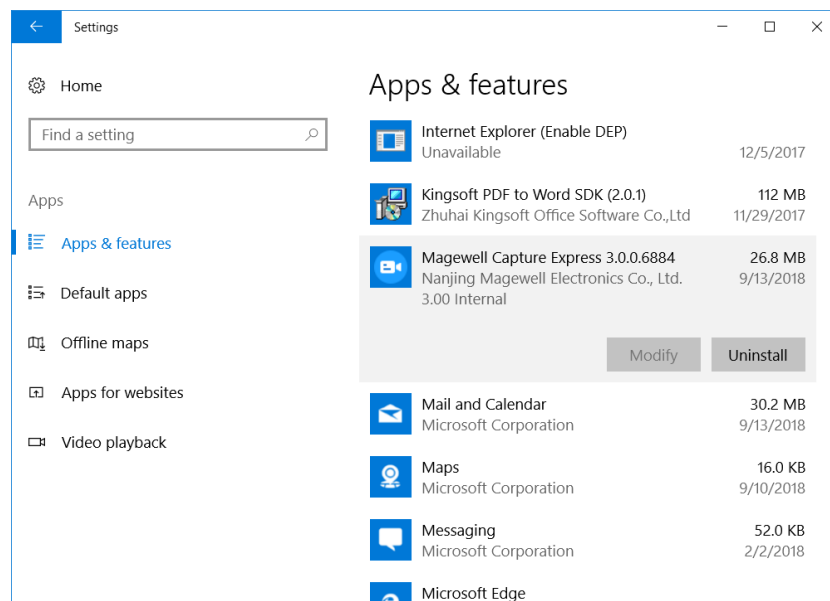


Figure 2. Uninstall Capture Express in the Windows "Apps & features" page

Introduction

This chapter guides you through installing Capture Express.


Installing

To install Capture Express, follow these steps:

1. Download the installer from [this web page](#).
2. Run the installer program (see figure 1) and follow the instructions provided.

Uninstalling

To uninstall Capture Express, follow these steps:

1. In the Windows *Start* menu, click *Settings*  > *Apps* to enter the *Apps & features* page. (See figure 2)
2. Select *Magewell Capture Express* and then click *Uninstall* to run the uninstaller.
3. The installer asks if you want to remove Capture Express and all its components. Select *Yes* to uninstall them.

Tutorials

Introduction

The best way to get started using Capture Express is quickly working through all its main features. We provide you with a series of three tutorials to help you understand how to use this software to capture and record video.

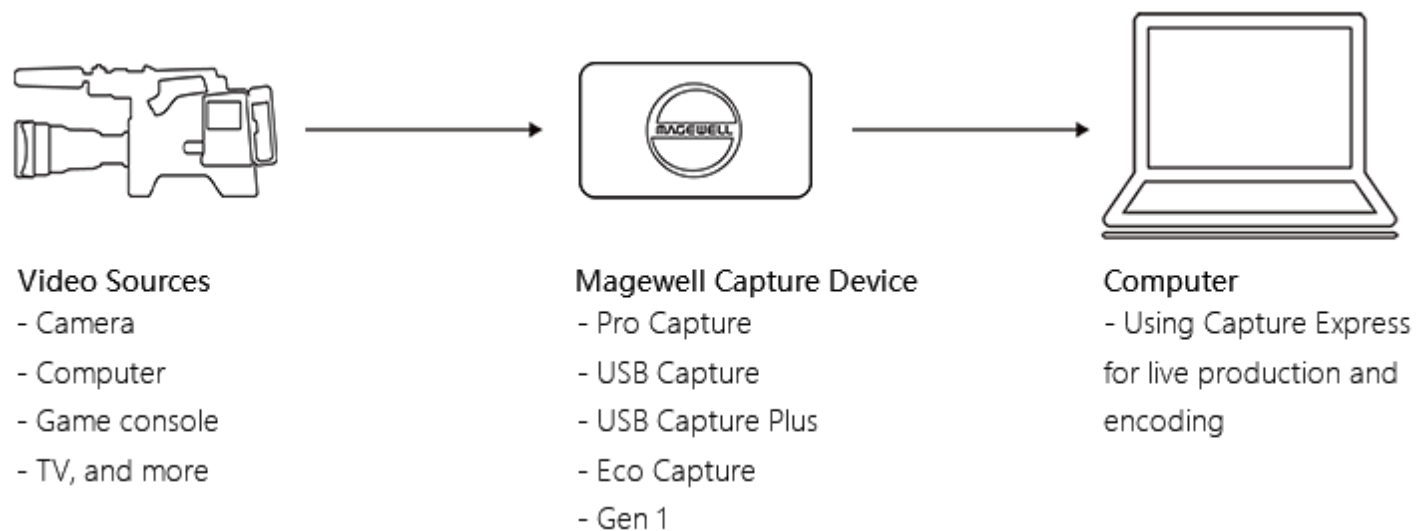
Since each tutorial builds on the skills and knowledge you've learned from the previous tutorials, it is recommended that you take the tutorials in order.

As you gain hands-on experience through inputting, capturing and outputting the video, you'll gain a deeper knowledge of Capture Express's organizational structure and working methods, thereby enhancing the proficiency in using it.

Tutorial 1: Basic Concepts

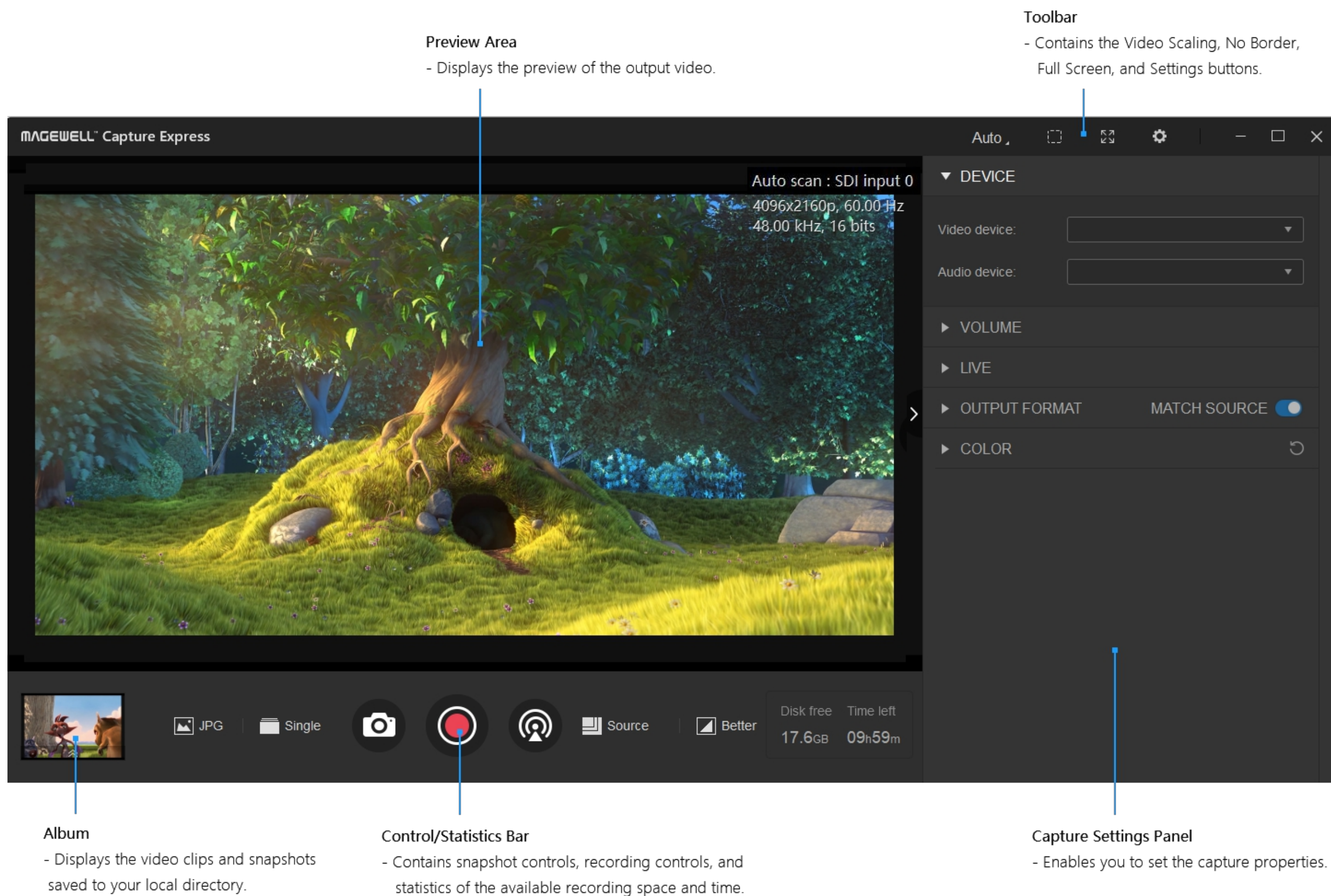
Tutorial Preparation

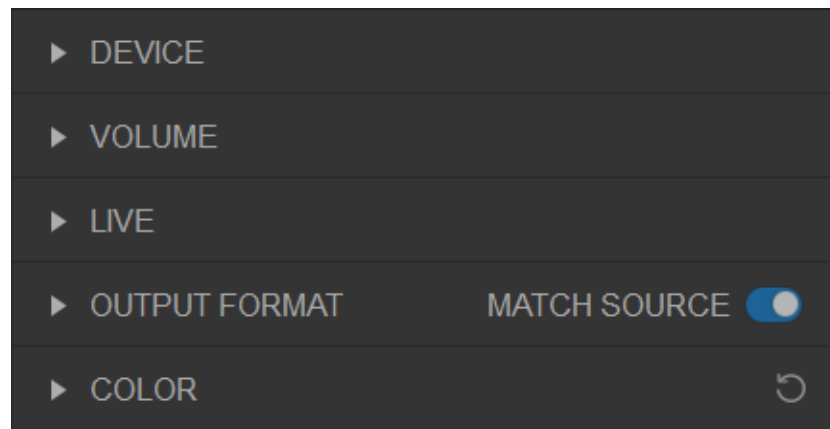
Before using Capture Express, you should connect the hardware according to the diagram below and turn on the video source and the computer.



Layout

The layout of the main window of Capture Express is shown in the following figure.





Capture Settings Panel

Tutorial 2: Setting Capture Properties

To set capture properties, click the arrow at the right of the main window to expand the Capture Settings Panel.

The Capture Settings Panel consists of these tabs: DEVICE, VOLUME, LIVE, OUTPUT FORMAT, and COLOR.


- **DEVICE tab:** Select the video capture device and audio capture device.
- **VOLUME tab:** Adjust the volume and monitor the audio level.
- **LIVE tab:** Configure live stream servers.
- **OUTPUT FORMAT tab:** Set the format of the output video, including resolution, frame rate, video bitrate, audio bitrate, aspect ratio, and video cropping range.
- **COLOR tab:** Set the color properties of the video, including brightness, contrast, hue, and saturation.

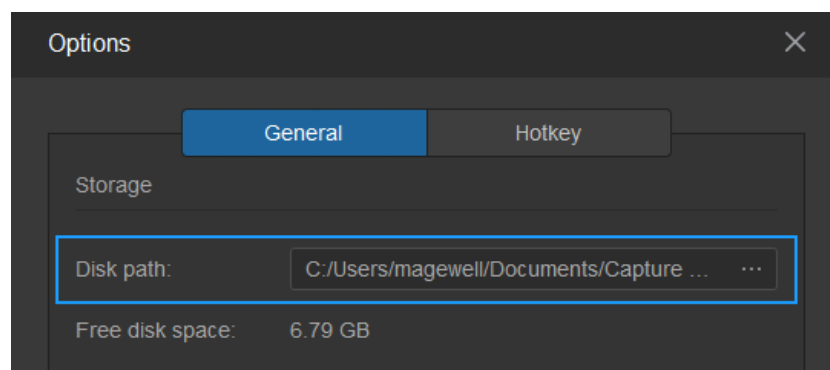
For details on how to use the Capture Settings Panel, see [Capture Settings Panel](#).

Tutorial 3: Recording & Streaming

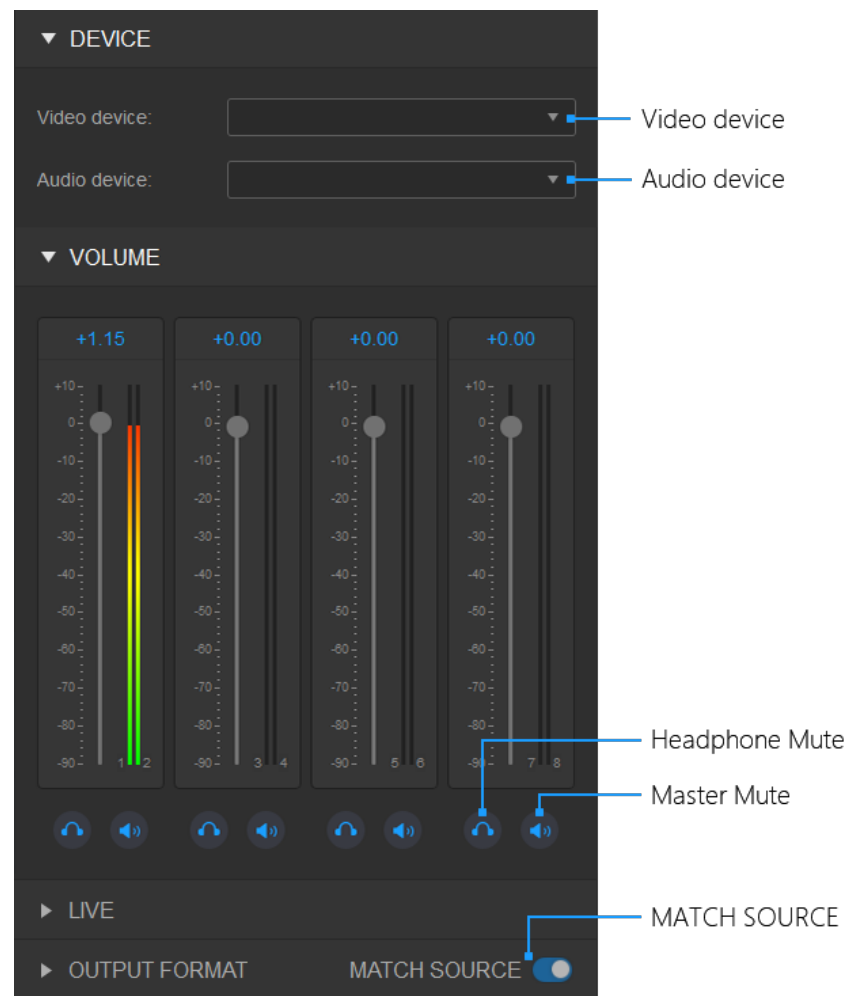
This tutorial demonstrates how to quickly capture snapshots and video clips using Magewell's capture device.

Step 1. Select storage disk path

1. In the *Toolbar*, click *Settings*  and then select *Options*.
2. When the *Options* dialog box displays, enter the *General* tab, and then select the *Disk path* where the output video will be stored.



Select storage disk path in the Options dialog box

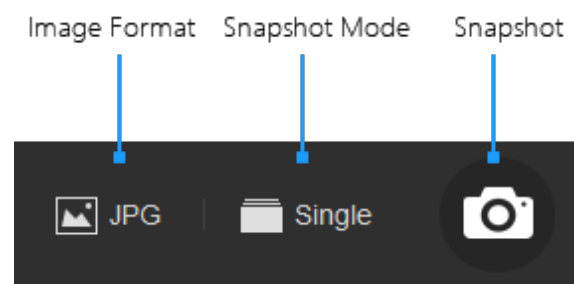


Set Capture Properties in the Capture Settings Panel

Step 2. Set capture properties

In the *Capture Settings Panel*,

1. expand the *DEVICE* tab, and then select the *Video device* and *Audio device*;
2. expand the *VOLUME* tab, light up the *Headphone Mute* and *Master Mute* buttons, and then adjust the volumes to appropriate levels;
3. expand the *OUTPUT FORMAT* tab, and then enable *MATCH SOURCE*.

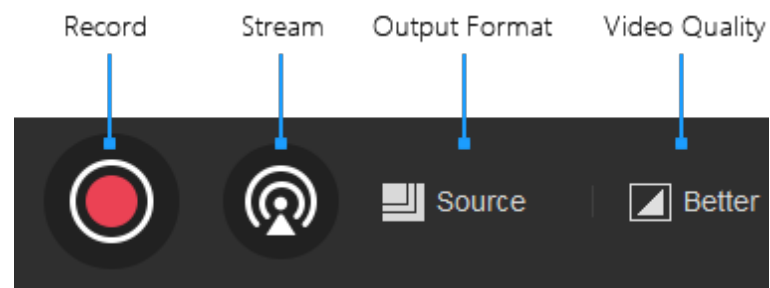


Snapshot controls in the Control/Statistics Bar

Step 3. Capture video snapshots

In the *Control/Statistics Bar*,

1. click the *Image Format* button and select *JPG*;
2. click the *Snapshot Mode* button and select *Single-Frame Mode*;
3. click the *Snapshot* button to capture the current video frame.

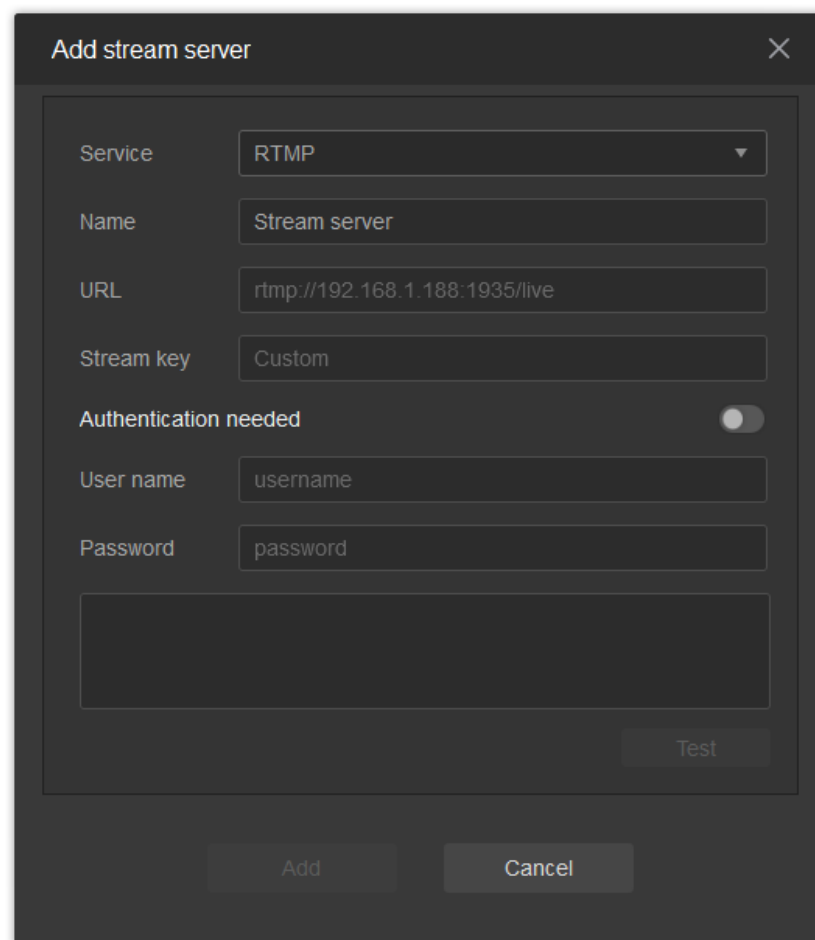


Recording controls in the Control/Statistics Bar

Step 4. Record video clips

In the *Control/Statistics Bar*,

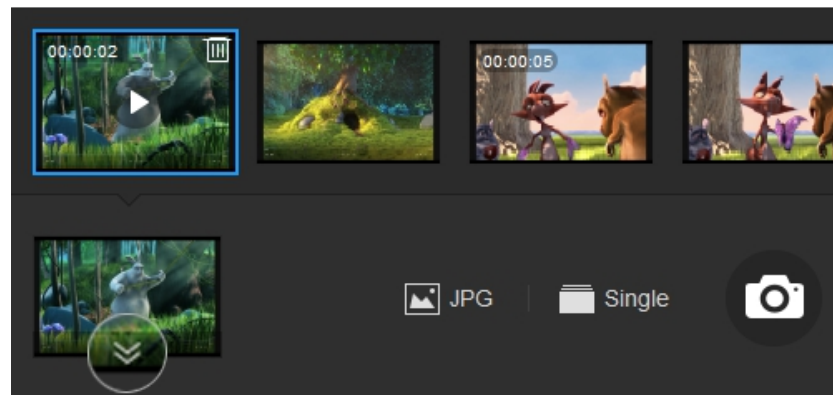
1. click the *Output Format* button and select *Match Source*;
2. click the *Video Quality* button and select *Better*;
3. click the *Record* button to start video recording;
4. click the *Record* button again to stop the video recording.



在采集设置面板中配置直播服务器

Step 5. Broadcast video streams

1. In the *Capture Settings Panel*, click *Add stream server*.
2. In the *Add stream server* dialog box, set the following properties:
 - Service: Select RTMP.
 - Name: Enter the name of this server, which will be shown in the LIVE tab page.
 - URL: Enter the RTMP address that you obtained from the live stream platform.
 - Stream key: Enter the stream key that you obtained from the live stream platform.
3. Click *Test* to test whether the video can be successfully streamed to the live streaming platform.
4. If the test is successful, click *Add* to add this server to the LIVE tab page.
5. In the *Control/Statistics Bar*, click the *Stream* button to start video streaming.
6. Click the *Stream* button again to stop the video streaming.



Album

Step 6. View the snapshots and video clips

1. Click the double-arrow button on the icon at the left bottom of the main window to open the *Album*.
2. View the snapshots and video clips you've saved in the *Album*.

Tutorial 4: Running Multiple Instances of Capture Express

This tutorial demonstrates how to run multiple instances of Capture Express simultaneously to perform independent video processing tasks.

Task

Opening two Capture Express windows to let them work in parallel and using "Capture device A" and "Capture device B" to capture video respectively.

Procedure

Step 1. Create the first window to use "Capture device A"

1. Double-click the startup icon of Capture Express to open the first window.
2. In the *Capture Settings Panel* of the first window, expand the DEVICE tab, and then select "Capture device A" as the *Video device*.
3. Use "Capture device A" to capture video. (See [Tutorial 3: Capturing Video](#))

Step 2. Create the second window to use "Capture device B"

1. Double-click the startup icon of Capture Express to open the second window. Then the name of the first window automatically displays the index "#1", and the name of the second window automatically displays "#2".
2. In the *Capture Settings Panel* of the second window, expand the DEVICE tab, and then select "Capture device B" as the *Video device*.
3. Use "Capture device B" to capture video. (See [Tutorial 3: Capturing Video](#))

Tutorial 5: Setting Up Work Views

Capture Express supports three modes of working views: Normal, No Border, and Full Screen. This tutorial demonstrates how to set up Capture Express's work view.



Introducing Work Views

- **Normal:** This view displays the toolbar, preview area, capture settings panel, album, and control/statistics bar.
- **No Border:** This view hides the capture settings panel, album, and control/statistics bar, and displays the preview area. In the toolbar, the *No Border* button is the only displayed component. The toolbar will be hidden after a few seconds of user inactivity, and be displayed when you move the mouse.
- **Full Screen:** This view hides the capture settings panel and displays the preview area in full screen. When you enter this view, it displays the album, control/statistics

bar, and toolbar. These components will be hidden after a few seconds of user inactivity, and be displayed when you move the mouse.

Switching Work Views


To switch Capture Express's work view from the Normal view to others,

- click  in the toolbar to enter the *No Border* view, or click this button again or press Esc to exit;
- click  in the toolbar to enter the *Full Screen* view, or click this button again or press Esc to exit;

Setting Up the Default Work View

By default, Capture Express is started in normal view. But you can also make Capture Express start in full screen view.

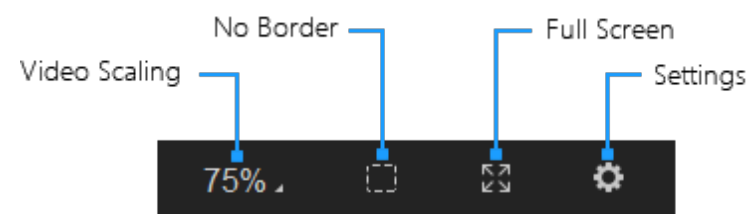
To start Capture Express in full screen view,

1. in the toolbar at the top of the main window, click *Settings*  > *Options* to open the *Options* window;
2. Enter the *General* tab page of the *Options* window, and then select *Open in full screen mode on startup*.

Main Window

Introduction

This chapter gives an orientation on the user interface of the main window, providing a quick tour of what tools are available, where to find them, and how these tools work together to help you capture snapshots or video clips.



Toolbar

The *Toolbar* is located at the top of the main window and contains four buttons: *Video Scaling*, *No Border*, *Full Screen*, and *Settings*.

Video Scaling

Click to select a scaling ratio to apply to the preview video. You can select *Auto-Adaption* to automatically fill the overall image to the available dimensions of the *Preview Area*.

No Border

Click to display the preview video in no border mode. When the no border mode is in use, you can click this button again or press Esc to exit.

Full Screen

Click to display the preview video in full screen mode. When the full screen mode is in use, you can click this button again or press Esc to exit.

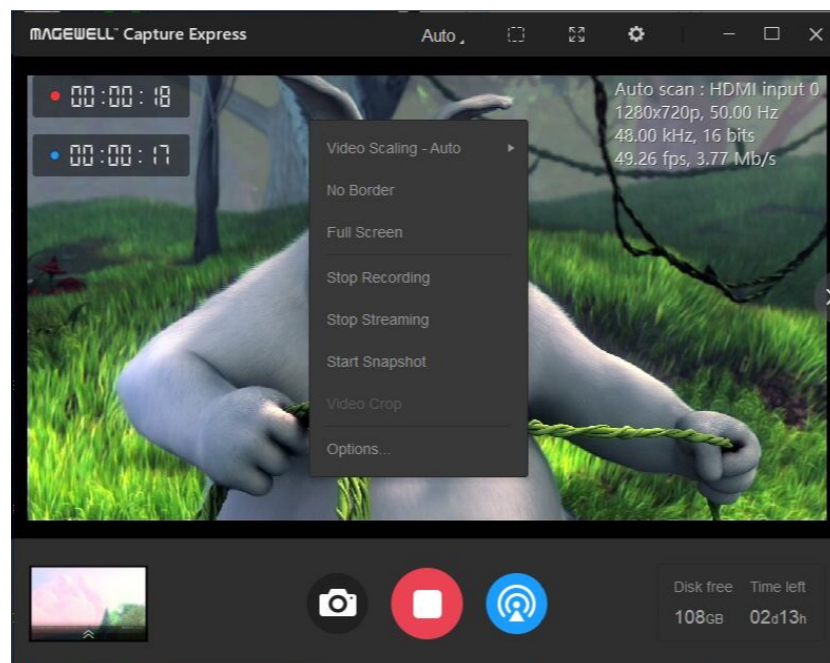
Settings

Click to open the *Settings* menu, which contains the following options:

- **Options:** Open the *Options* dialog to set file storage formats, software startup mode, and hotkeys.

(See [Options](#))

- **Official Website:** Open the official website of Magewell.
- **Software Update:** Open the *Software Update* dialog box to update Capture Express. (See [Software Update](#))
- **About:** Open the *About* dialog box to view version and copyright information about Capture Express.



Preview Area

In the central part of the main window, the *Preview Area* displays the preview video before the video signal is encoded and compressed. All changes related to the capture settings will immediately appear on the preview video.

After the video recording begins, the following information will be displayed at the top of the *Preview Area*:

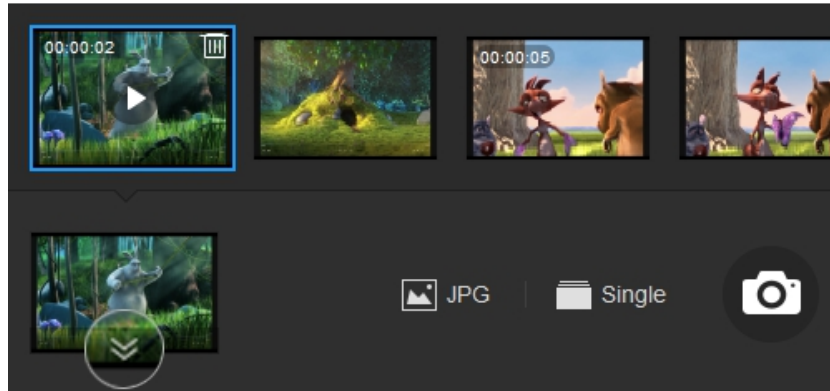
- The recording and live streaming duration, shown in the top left corner.
- The video and audio signal formats, shown in the top right corner, include three lines of information as follows:
 - Line 1: Displays the currently used video input channel. You can press the shortcut keys "Alt+S" to switch between video sources.
 - Line 2: Displays the resolution and refresh rate of the input video.
 - Line 3: Displays the sampling rate and bit depth of the input audio, and whether the audio is LPCM-encoded or not.
 - Line 4: Displays the frame rate and bitrate of video encoding.

You can determine whether to display these input signal formats through the hotkey. (See [Hotkey](#))

Shortcut Menu in the Preview Area

Right-clicking anywhere in the *Preview Area* opens a shortcut menu with the following options:


- **Video Scaling:** Click the *Video Scaling* triangle to open the video scaling menu, and then select a scaling ratio to apply to the preview video. You can select *Auto-Adaption* to automatically fill the overall image to the available dimensions of the *Preview Area*.
- **No Border:** Click to display the preview video in no border mode. When the no border mode is in use, you can click this menu option again or press Esc to exit.
- **Full Screen:** Click to display the preview video in full screen mode. When the full screen mode is in use, you can click this menu option again or press Esc to exit.
- **Start Recording:** Click to start the video recording. Once the recording begins, the text of this menu option will change to *Stop Recording*. You can click *Stop Recording* to stop recording.
- **Start Streaming:** Click to start the video streaming. Once the streaming begins, the text of this menu option will change to *Stop Streaming*. You can click *Stop Streaming* to stop streaming.
- **Start Snapshot:** Click to start take snapshots of the video. When the *Snapshot Mode* is *Periodic Mode* (see [Snapshot Controls](#)), you can click *Stop Snapshot* to stop the periodically take snapshots.
- **Snapshot:** Click to capture the current video frame.
- **Video Crop:** Click to open the cropping toolbar to crop the video. (See [Crop](#))
- **Options:** Click to open the *Options* dialog box. (See [Options](#))



Album

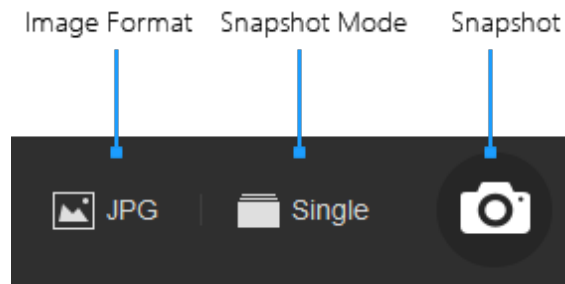
Hidden by default, the *Album* can be opened by clicking the double-arrow button on the icon at the left bottom of the main window, and appears beneath the *Preview Area* when it's open. The *Album* shows you every clip you have saved, giving you a way to play clips, delete unwanted clips and view the basic file details.

To manage the clips (or snapshots) in the *Album*:

- **To open a clip:** Click the icon of a clip, or right-click the icon and then select *Open* in the context menu.
- **To open the storage folder:** Right-click the icon of a clip and then select *Open Folder Location* in the context menu.
- **To delete a clip:** Hover the pointer over the icon of a clip, then click the delete button  that appears at the upper right corner of the icon; or right-click the icon and then select *Delete* in the context menu.
- **To delete all clips:** Right-click the icon of a clip and then select *Empty the Folder* in the context menu.
- **To view file details:** Hover the pointer over the icon of a clip, then file details, including *Name*, *Size*, *Duration* (for video clips only), and *Date created*, appears in a tooltip a moment later. Or right-click the icon and then select *Properties* in the context menu to open the *Properties* dialog box of the chosen clip.

Control/Statistics Bar

The *Control/Statistics Bar* lies at the bottom of the main window. It consists of the snapshot controls, recording controls, and statistics of the available recording space and time.



Snapshot Controls

Image Format

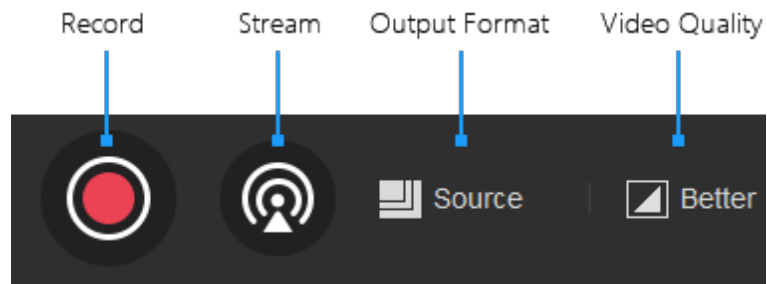
Click to select the storage format of the snapshot, including JPG, PNG, and BMP.

Snapshot Mode

Click to select the capture mode of the snapshot, including the *Single-Frame Mode*, *Burst Mode* and *Periodic Mode*. In the Burst Mode, five video frames are continuously captured. In the Periodic Mode, the snapshot is taken every 10 seconds by default. If you want to change the time interval of the Periodic Mode, see [Snapshot](#).

Snapshot

Click to select this button to take frame snapshots.



Recording Controls

Video Quality

Click to select the video quality, including *Normal*, *Better*, *Best*, and *Custom*. If you want to change the *Custom* video quality, open the OUTPUT FORMAT tab of the *Capture Settings Panel* and then modify the *Video bit rate* and *Audio bit rate*.

Output Format

Click to select the output format of the video, including 4 recommended formats (720p30, 720p60, 1080p30, 1080p60), *Match Source* and *Custom*. When *Match Source* is selected, the resolution and frame rate of the output video are consistent with those of the input video. When *Custom* is selected, you can go to *Capture Settings Panel* > OUTPUT FORMAT tab to customize your output format.

💡 Note that changes you make in the OUTPUT FORMAT tab of the *Capture Settings Panel* also affect the properties of the *Video Quality* and *Output Format* controls.

- If the output format in the *Capture Settings Panel* matches any of the above recommended formats, the corresponding recommended format will be assigned to these controls.
- If you turn on the MATCH SOURCE function in the *Capture Settings Panel*, *Match Source* will be assigned to the *Output Format* control.
- If you use a custom output format in the *Capture Settings Panel*, *Custom* will be assigned to these controls.

Recording

Click to start or stop the video recording.

Streaming

Click to start or stop video streaming. Note that you need to add a stream server to the *Capture Settings Panel* before you start streaming. See [LIVE Tab](#).

Statistics

Disk free

Displays the remaining space of your storage disk. You can specify the storage disk in the *Options* dialog box. (See [Disk path](#))

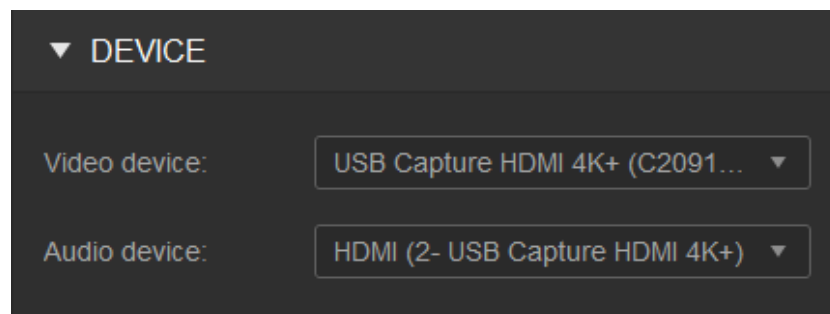
Time left

Displays the time available to record video before the storage disk is filled up. To increase the *Time left*, you can lower the *Video Quality* and *Output Format* in the Recording Controls, or clean up the storage disk to expand the free disk space.

| | |
|-----------|-----------|
| Disk free | Time left |
| 7.43GB | 02h06m |

Capture Settings Panel

The Capture Settings Panel is used to set capture properties related to device, volume, signal output format, and color. You can decide whether to show or hide the panel by default through clicking the arrow at the right of the main window. When set to be hidden by default, the panel appears when the mouse cursor moves to the right of the Capture Express main window and automatically disappears when the cursor leaves.



DEVICE Tab

The DEVICE tab is used to select video and audio capture devices.

Video device

Click to select the video input device.

Audio device

Click to select the audio input device.

💡 When the USB Capture (Plus) device is chosen as the video input device, the audio source for different audio devices are as follows:

- **HDMI, SDI:** Embedded audio from the HDMI/SDI video source.
- **Computer:** System audio from the computer.
- **Mic, Line In:** Audio from the microphone or line input device.

VOLUME Tab

The VOLUME tab is used to adjust the volume and monitor the audio level.

Level Control

Adjusts the audio level of the audio output.

Level Display

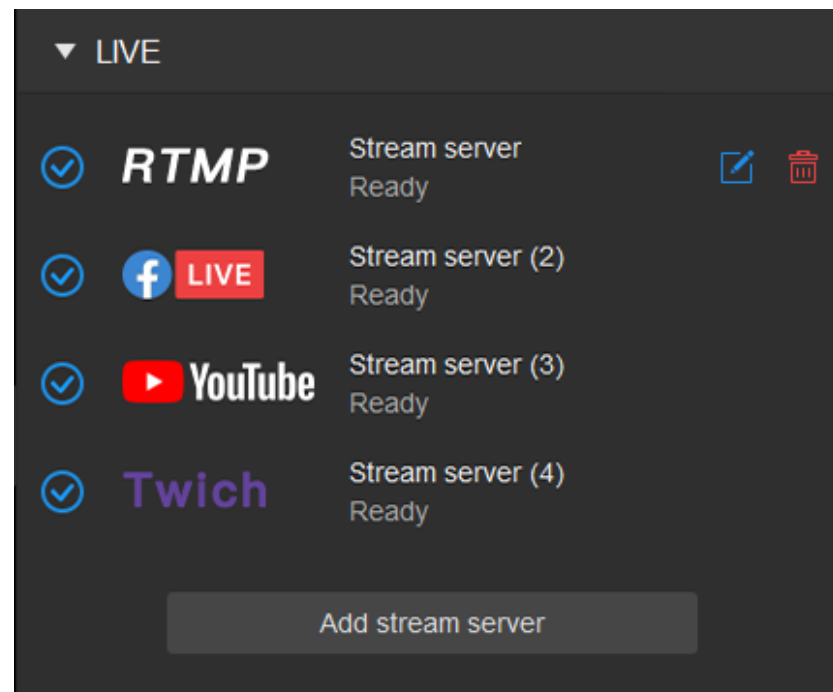
Displays the levels (left and right) of the audio outputs. The number below each level bar stands for the channel index.

Headphone Mute

Toggles the monitor audio output in the headphones without affecting the recording or streaming audio output.

Master Mute

Mutes the recording audio output.



LIVE Tab

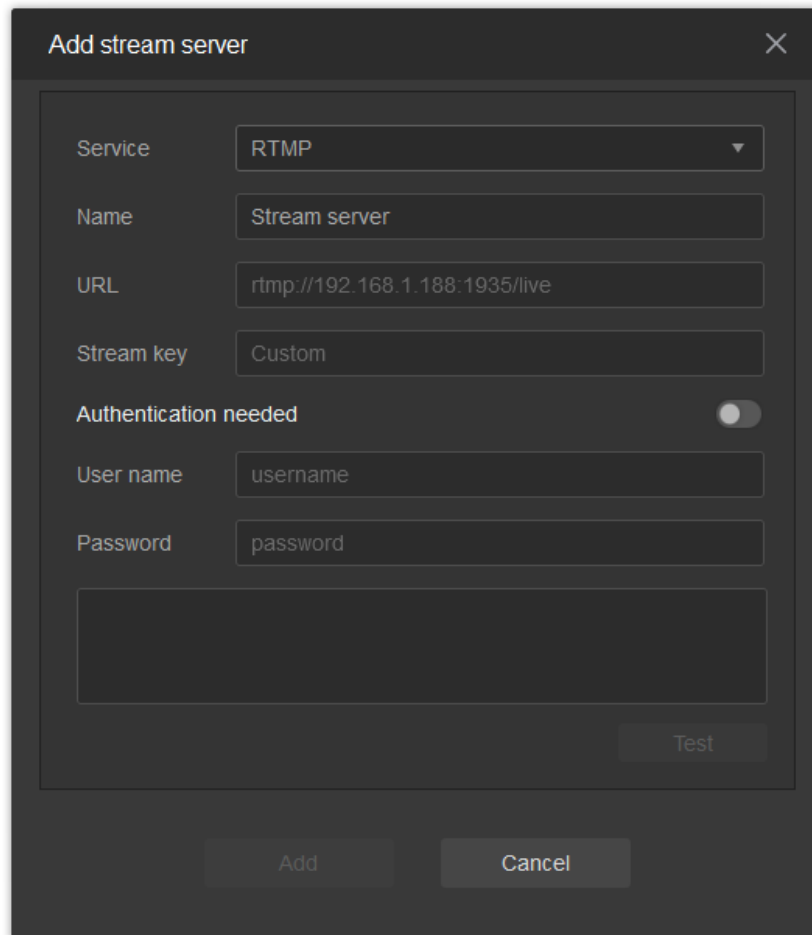
Click the *Add stream server* button to open a window with the same name. The properties in this window are described below.

In most cases, you only need to set the following properties:

- **Service:** Select a live stream platform for the server.
- **Name:** Enter the server's name, which will be displayed on the LIVE tab.
- **Server/URL:** Select a server.
- **Stream key:** Enter the stream key you obtained from the live stream platform.

If you have selected *RTMP* for the *Service* property and you need to authorize your account on the live streaming platform, turn on *Authentication needed*, and then set the following properties:

- **User name:** Enter your user name on the live stream platform.





The screenshot shows a dark-themed dialog box titled "Add stream server" with a close button (X) in the top right corner. The dialog contains several input fields and a toggle switch:

- Service:** A dropdown menu with "RTMP" selected.
- Name:** A text input field containing "Stream server".
- URL:** A text input field containing "rtmp://192.168.1.188:1935/live".
- Stream key:** A text input field containing "Custom".
- Authentication needed:** A toggle switch that is currently turned off.
- User name:** A text input field containing "username".
- Password:** A text input field containing "password".
- Test:** A button located at the bottom right of the input fields.

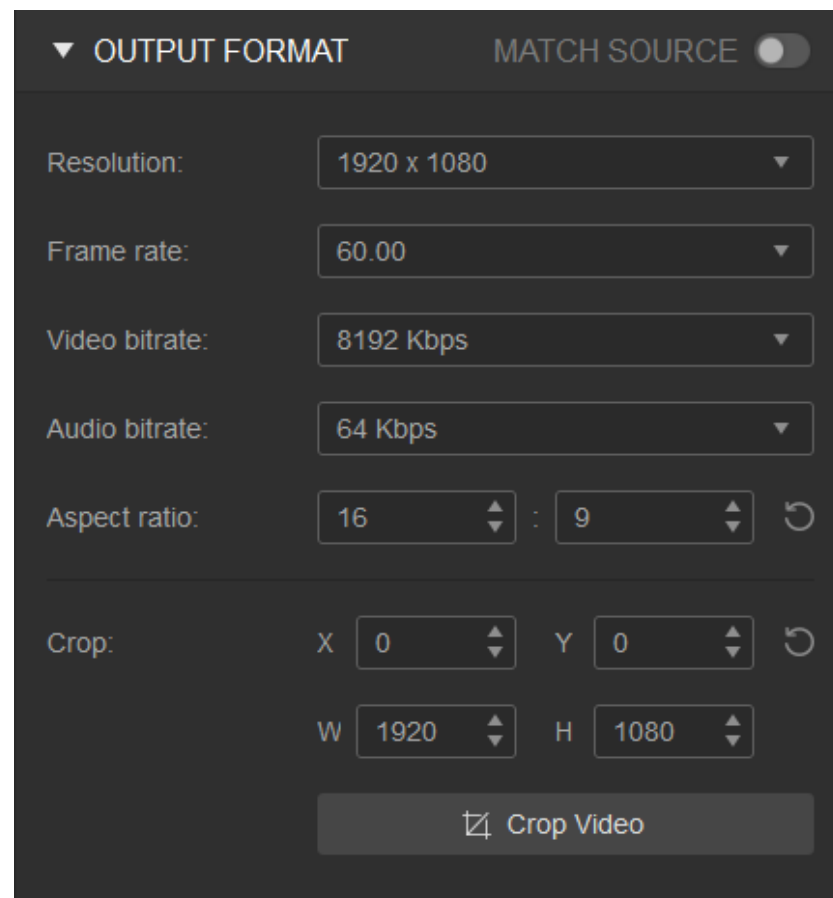
At the bottom of the dialog, there are two buttons: "Add" and "Cancel".

- **Password:** Enter your password on the live stream platform.

After completing the above configurations, add the server to the LIVE tab page by following these steps:

1. Click *Test* to test whether the video can be successfully streamed to the live streaming platform.
2. If the test is successful, click *Add* to add the server to the LIVE tab page.
3. If you want to modify or delete the server in the LIVE tab page, hover over the server, and then click  to edit the server's properties, or click  to delete the server.

💡 You can add up to 8 stream servers to the LIVE tab page, and stream up to 4 channels of video streams simultaneously.



OUTPUT FORMAT Tab

The OUTPUT FORMAT tab is used to set the output signal format, including resolution, frame rate, video bitrate, audio bitrate, aspect ratio, and video cropping range.

MATCH SOURCE

Toggles the MATCH SOURCE function on or off. When MATCH SOURCE is turned on, the output resolution and frame rate are automatically set according to the input signal format. When turned off, you can manually set the output resolution and frame rate.

Resolution

Select the resolution of the video output.

Frame rate

Select the frame rate of the video output. When using a high output frame rate, you can turn on *Optimize video preview* in the *Options* dialog to display images with faster rendering speed. (See [Optimize video preview](#))


Video bitrate

Select the video bitrate of the video output.

Audio bitrate

Select the audio bitrate of the audio output.

Aspect ratio

Click the arrows next to the input boxes to adjust the aspect ratio of the video output. You can click  to reset the output aspect ratio to the default value.




Crop

Crop the output video to a rectangular range that is determined by four values: X, Y, W, and H.


- **X**: The distance from the left edge of the original video to the top left point of the cropping range.
- **Y**: The distance from the top edge of the original video to the top left point of the cropping range.
- **W**: The width of the cropping range.
- **H**: The height of the cropping range.



Crop video

Click to open the cropping toolbar in the *Preview Area*. The cropping toolbar contains a rectangular marquee tool, a cropping ratio menu, four cropping range input boxes (X, Y, W, H), a reset button , a confirm button , and a cancel button .

To use the cropping toolbar to crop video, follow these steps:

1. Select a cropping ratio. When the cropping ratio is a fixed value, the width and height of the crop range will be locked at this ratio; when the cropping ratio is set as *Free crop*, the width and height of the cropping range can be set without any ratio limits.
2. Drag the rectangle marquee to adjust the cropping range; or input the values of X, Y, W, and H to set the cropping range.
3. Click  to confirm the cropping.



COLOR Tab

The COLOR tab is used to set the color properties of the video output, including brightness, contrast, hue, and saturation.

Brightness

Adjust the brightness of the video output.

Contrast

Adjust the contrast of the video output.

Hue

Adjust the tint of the video output.

Saturation

Adjust the saturation of the video output.

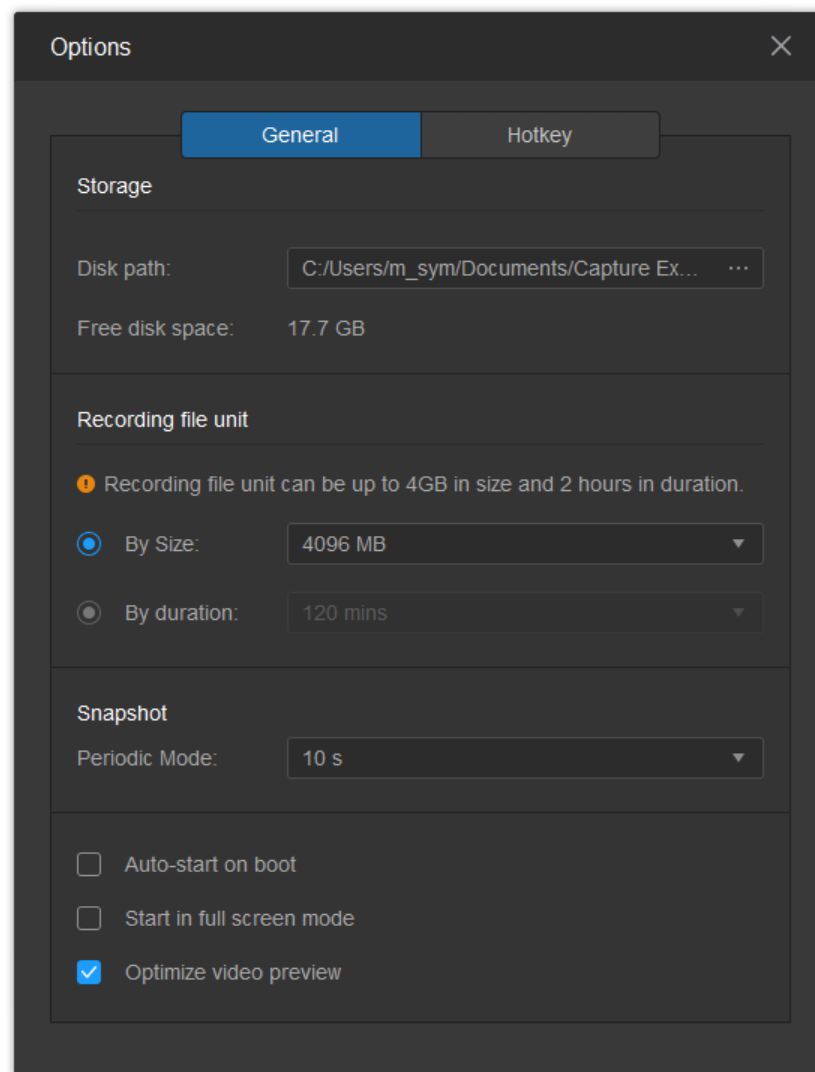
You can click  to reset the brightness, contrast, hue, and saturation to their default values.

Options

Introduction

The *Options* window is used to set the file storage options, software startup options, and hotkeys. This chapter introduces how to use the *Options* window.

To open the *Options* window, select *Options* from the Settings  menu.



General

Storage

Disk path

Select the disk path to store the video clips and snapshots.

Free disk space

Displays the free space of the storage disk.

Recording file unit

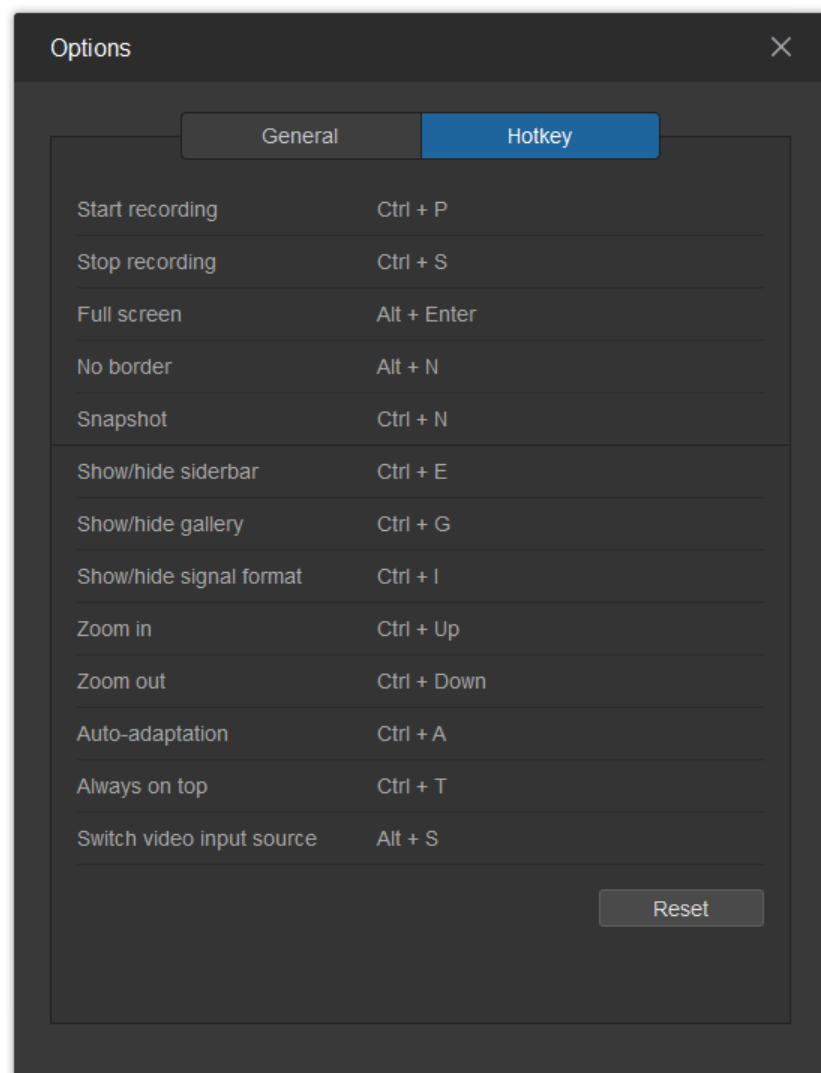
The recording file unit limits the maximum size of a recording file. Once the size of a recording file reaches this recording file unit, the video will be automatically split and saved, after which a new recording process of the same source video will start from the split point.

By size

Select the recording file unit by size.

By duration

Select the recording file unit by duration.



Snapshot

Periodic Mode

Select a time interval for the periodic mode of the snapshot function.

Software Startup Options

Auto-start on boot

When *Auto-start on boot* is selected, Capture Express will start automatically after you log into the operating system.

Open in full screen mode on startup


When *Open in full screen mode on startup* is selected, Capture Express will start in full screen mode.

Optimize video preview

Enables you to either display images with faster interactivity or at full render quality. When *Optimize video preview* is selected, Capture Express will render the video at a lower rendering rate to increase the processing speed when the frame rate of the output video is high. Unselecting this option forces a full quality render to the preview area.

Hotkey

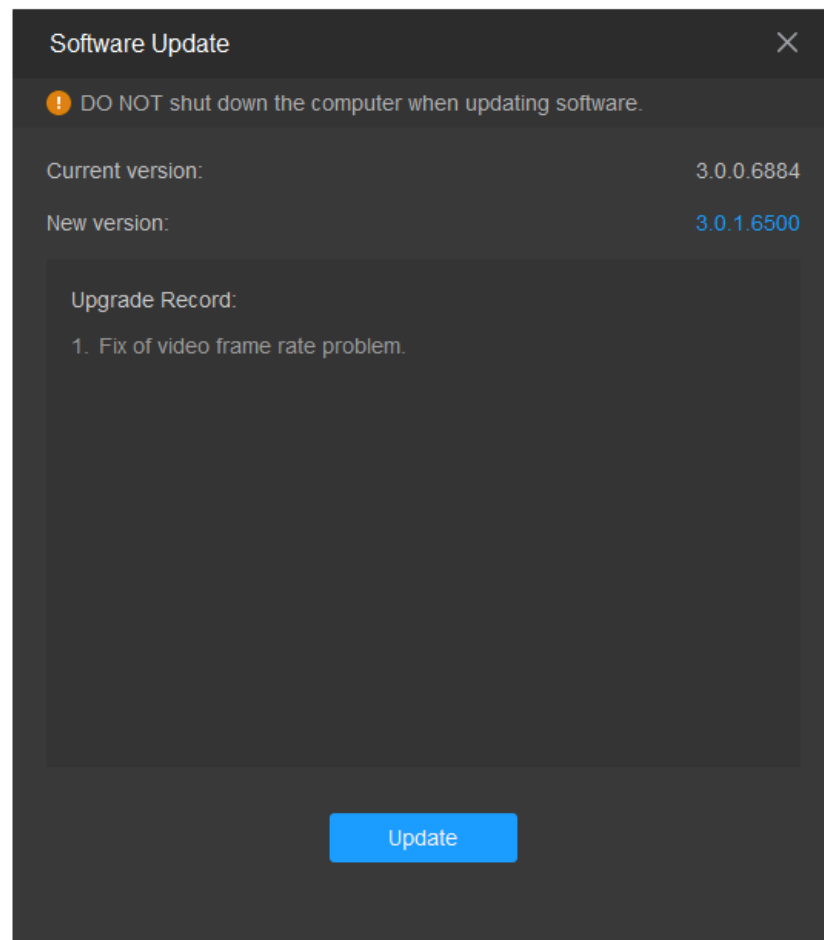
Hotkeys for common functions are listed in the *Hotkey* tab. Methods of resetting the hotkeys are as follows:

- **To reassign a hotkey:** Click the hotkey to enter the edit mode, then press and hold the new key combination on the keyboard.
- **To remove a hotkey:** Click the hotkey to enter the edit mode, then click  at the right of the input box.
- **To reset all hotkeys:** Click *Reset* at the bottom of the *Hotkey* tab.

Software Update

Introduction


This chapter guides you through updating Capture Express.



Update Procedure

In the *Settings* menu, if a red badge appears next to the *Software Update* option, a new version of Capture Express is available.

To update Capture Express, follow these steps:

1. In the *Settings*  menu, click *Software Update* to check for updates.
2. In the *Software Update* window, if a new version is found, the release notes for the new version will be displayed. Click *Update* to start downloading the new version.
3. In the *Uninstall* dialog box, click *Yes* to uninstall the old version.
4. The update program automatically installs the new version.

Support

Getting Latest Materials

The latest materials, including brief introduction, user manual and installation package, can be found at the Magewell website's introduction page of [Capture Express](#).

Getting Technical Support

You can get technical support in the following two ways:

- The [Knowledge Base](#) on Magewell official website is a helpful resource where you can visit for more information and troubleshooting. If existed answers can't help you address the issue, please click *No. Report a Problem* at the bottom of the page to send a support request to us.
- Contact [Magewell support team](#) (support@magewell.net) for help.