



# Capture Express

For **■** Windows

User Manual, Reference and FAQ

## TABLE OF CONTENTS

03	Getting Started			Introduction	13
	Introducing Capture Express	03		Toolbar	13
	Supported Product Families	03		Preview Area	14
	System Requirements	03		Album	15
				Control/Statistics Bar	16
05	Installation			Capture Settings Panel	19
	Introduction	05			
	Installing	05	23	Options	
	Uninstalling	05		Introduction	23
				General	23
06	Tutorials			Hotkey	24
	Introduction	06			
	Tutorial 1: Basic Concepts	06	25	Software Update	
	Tutorial 2: Setting Capture Properties	08		Introduction	25
	Tutorial 3: Capturing Video	08		Update Procedure	25
	Tutorial 4: Run Multiple Instances of Capture Express	10			
			26	Support	
13	Main Window			Getting Latest Materials	26

## **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

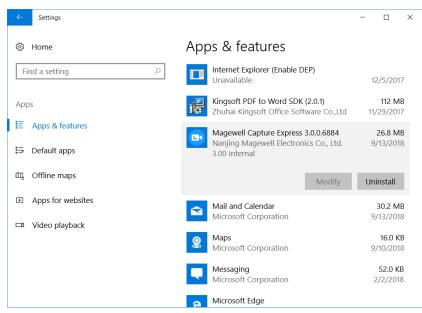


Figure 2. Uninstall Capture Express in the Windows "Apps & features" page

#### 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 (Magewell\_CaptureExpress\_v3.0.0.7044\_installer.exe, 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.

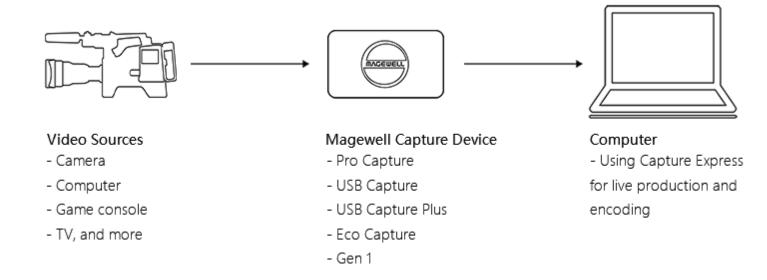
Since each tutorial builds on the skills and knowledge you've learned from the previous tutorials, it is recommended that you take the tutorials in order.

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

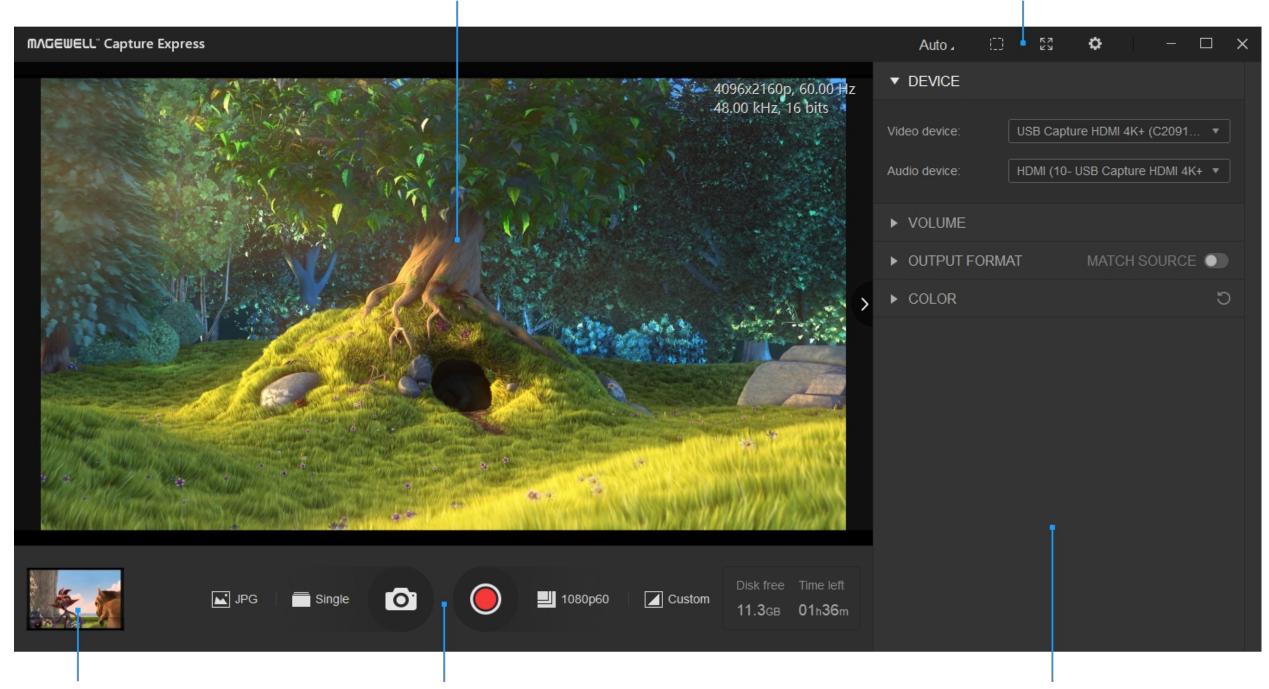
The layout of the main window of Capture Express is shown in the following figure.

#### Preview Area

- Displays the preview of the output video.

#### Toolbar

- Contains the Video Scaling, No Border, Full Screen, and Settings buttons.



#### Album

- Displays the video clips and snapshots saved to your local directory.

#### Control/Statistics Bar

- Contains snapshot controls, recording controls, and statistics of the available recording space and time.

#### **Capture Settings Panel**

- Enables you to set the capture properties.

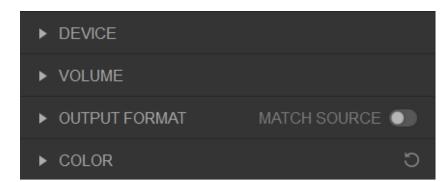


Figure 3. Capture Settings Panel

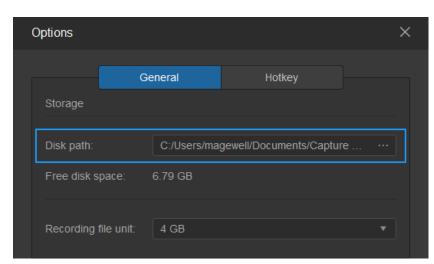


Figure 4. Select storage disk path in the Options dialog box

## **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 has four tabs: DEVICE, VOLUME, OUTPUT FORMAT, and COLOR. (See figure 3)

- **DEVICE tab:** Select the video capture device and audio capture device.
- VOLUME tab: Adjust the volume and monitor the audio level.
- 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: Capturing Video**

This tutorial demonstrates how to quickly capture snapshots and video clips using the capture device "USB Capture HDMI Plus".

#### **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. (See figure 4)

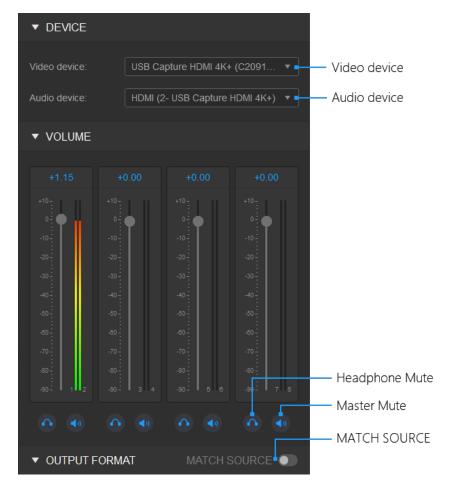


Figure 5. Set Capture Properties in the Capture Settings Panel

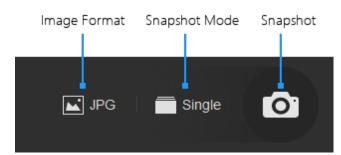


Figure 6. Snapshot controls in the Control/Statistics Bar

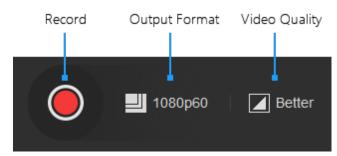


Figure 7. Recording controls in the Control/Statistics Bar

#### **Step 2.** Set Capture Properties

In the Capture Settings Panel (see figure 5),

- 1. expand the DEVICE tab, and then select *USB Capture HDMI*+ as the *Video device* and *HDMI (USB Capture HDMI*+) as the *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.

#### **Step 3.** Capture video snapshots

In the Control/Statistics Bar (see figure 6),

- 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.

#### **Step 4.** Record video clips

In the Control/Statistics Bar (see figure 7),

- 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.

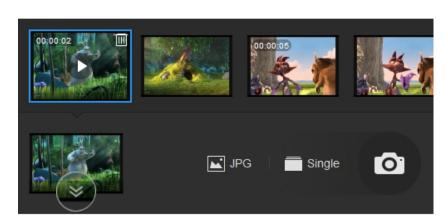


Figure 8. Album

#### **Step 5.** 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*. (See figure 8)
- 2. View the snapshots and video clips you've saved in the Album.

## Tutorial 4: Run 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)

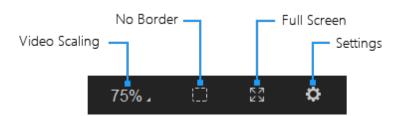
#### **Step 2.** Create the second window to use "Capture device B"

- 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)

## 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*:

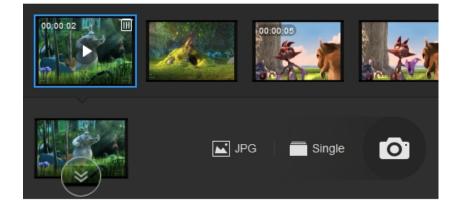
- The recording duration, shown in the top left corner.
- The video and audio signal formats, shown in the top right corner, include three lines of information as follows:
  - Line 1: Displays the resolution and refresh rate of the input video.
  - Line 2: Displays the sampling rate and bit depth of the input audio, and whether the audio is LPCM-encoded or not.
  - Line 3: 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.
- 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)

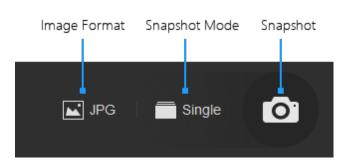


#### **Album**

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**

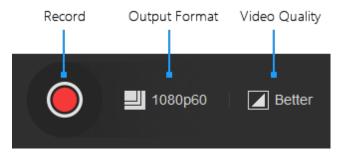
Click to select the storage format of the snapshot, including JPG, PNG, and BMP.

### **Snapshot Mode**

Click to select the capture mode of the snapshot, including the *Single-Frame Mode* and *Burst Mode*. In the *Burst Mode*, five video frames are continuously captured.

#### 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.

- You 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.

Disk free Time left 7.43gB 02h06m

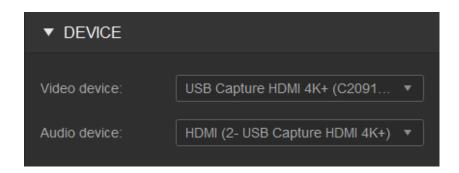
### **Statistics**

#### 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.



## **Capture Settings Panel**

The Capture Settings Panel is used to set capture properties related to device, volume, signal output format, and color. You can click the arrow at the right of the main window to show or hide the panel.

#### **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.

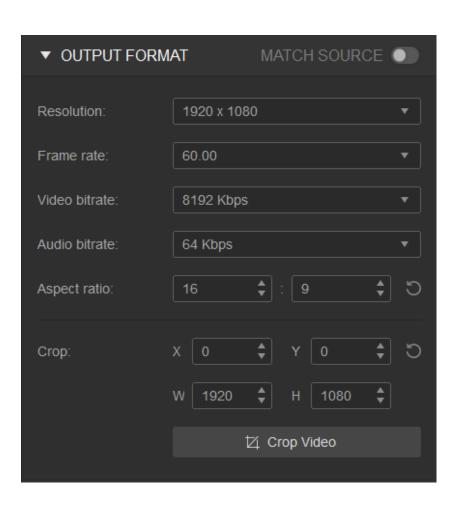
- ₩ When the USB Capture (Plus) device is chosen as the video input device, the audio source for different audio devices are as follows:
  - HDMI, SDI: Embedded audio from the HDMI/SDI video source.
  - Computer: System audio from the computer.
  - Mic, Line In: Audio from the microphone or line input 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 audio output.

#### Master Mute

Mutes the recording audio output.

#### **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  $\square$ , a confirm button  $\square$ , and a cancel button  $\square$ .

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 **v** 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.

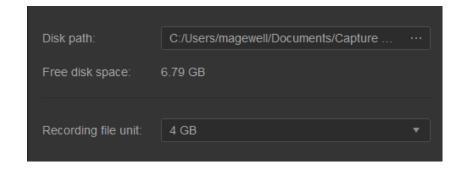
You can click to reset the brightness, contrast, hue, and saturation to their default values.

## **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 of menu.



#### General

#### Storage

#### Disk path

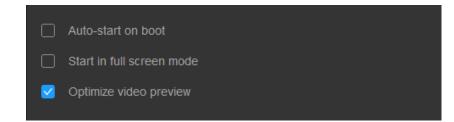
Select the disk path to store the video clips and snapshots.

#### Free disk space

Displays the free space of the storage disk.

#### Recording file unit

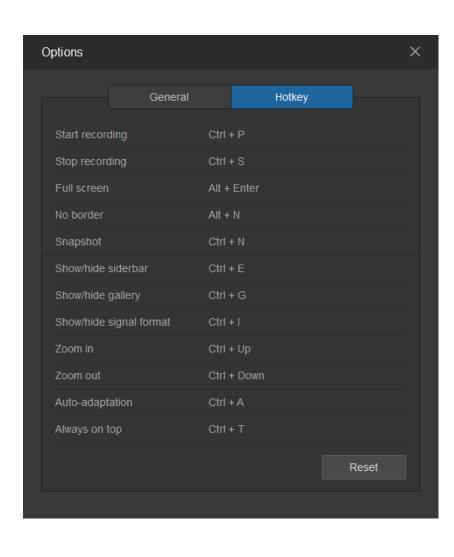
Select the recording file unit that limits the maximum size of a recording file. Once the size of a recording file reaches this *Recording file unit*, the video will be automatically split and saved, after which a new recording process of the same source video will start from the split point.



#### **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

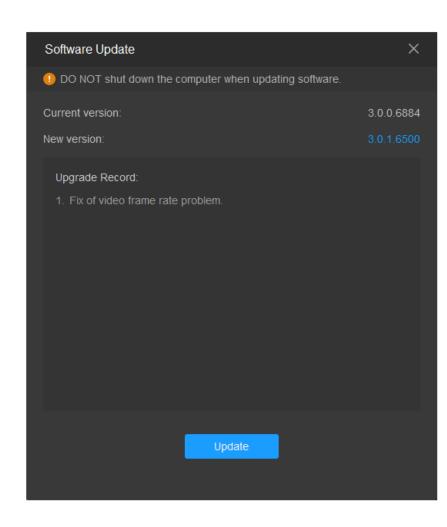
Hotkeys for common functions are listed in the *Hotkey* tab. Methods of resetting the hotkeys are as follows:

- 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.