

GXCAM HiChrome-S HDMI Camera User Guide

Chapter 1: Introduction

Advanced Design

We have released our new generation of scientific color cameras, the GXCAM HiChrome-S. With amazing color reproduction, the GXCAM HiChrome-S provides a perfect solution for high definition scientific photography. To meet your individual requirements, the flexible parameter settings allow you to get superb quality live images simply and freeze the screen when required to observe the details.

To realise the camera's maximum potential, please read this document completely.

Chapter 2: System Standard Items

Included in the kit should be:

One GXCAM HiChrome-S camera

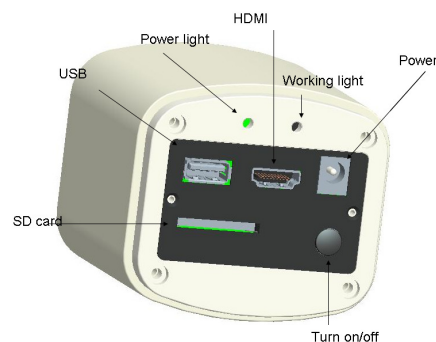
One 12V2A power adapter

One HDMI cable (2-meters length)

One SD card (8G capacity, class 10)

One mouse (with 1.5-meters cable)

One USB2.0 cable (gold plated connector)



1. USB interface:

A: Connect a mouse to the USB port. Use the mouse to control the camera directly.

B: Connect the USB port to PC to make the camera work as a **Driver-Free** camera. Use GXCAPTURE 8 software to control it.

Note: No driver installation is needed when connecting the GXCAM HiChrome-S to a PC via USB port.

2. HDMI interface:

Use the HDMI cable to connect the GXCAM HiChrome-S to the monitor. Image data is transferred and displayed on the monitor according to the HDMI protocol.

3. Power interface:

Please use the provided 12V2A power supply. When the power is plugged in, the red light should glow. When you then switch on the camera, the blue light should glow. **If connecting to a PC ensure that the camera is first plugged into the mains before connecting to the PC. Wait for the blue light to glow, then plug into the PC.**

4.ON/OFF key:

Press and hold ON/OFF key until the blue light is on or off to switch the GXCAM HiChrome-S on/off.

5.SD card:

For faster and more stable data transfer, we recommend using a **Class10** SD card.

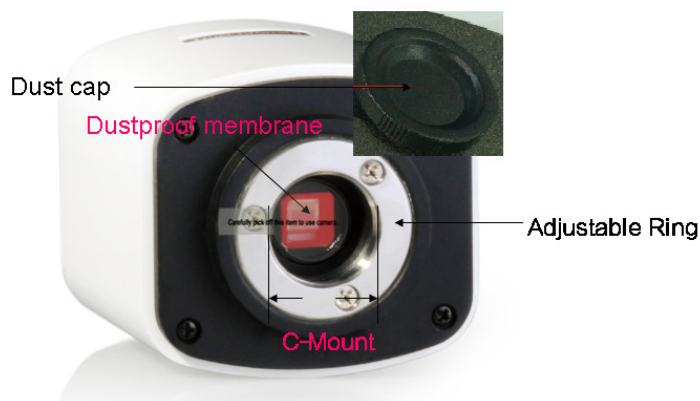
6.C mount:

Standard C-mount optical port.

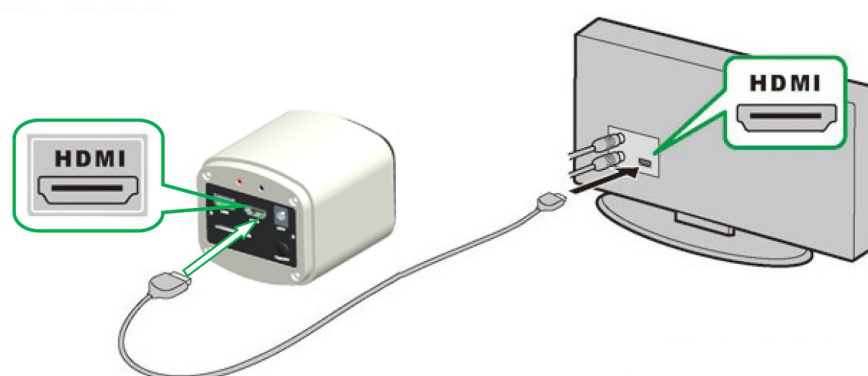
7. Anti-dust seal:

Please remove the seal the first time that you use the camera.

The seal is positioned on the camera optical port when it left the factory. This is to avoid dust accumulating during transportation.



Chapter 3: HDMI Operation



Step 1. Connect the camera.

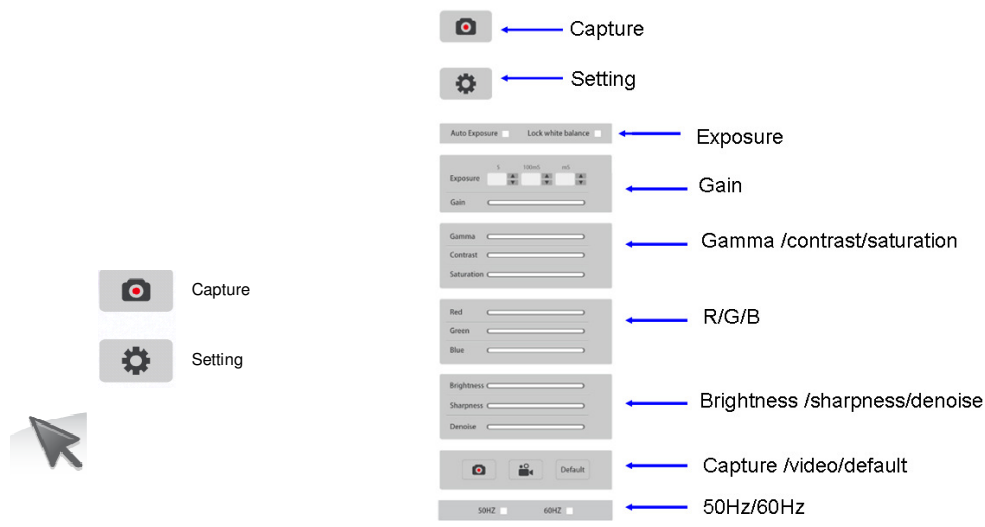
1. Plug in the 12V2A power supply. Use the HDMI cable to connect the camera to the monitor. Press and hold ON/OFF key until blue light is on.

2. Connect the mouse to the USB port. Move the cursor to get the settings on the screen.

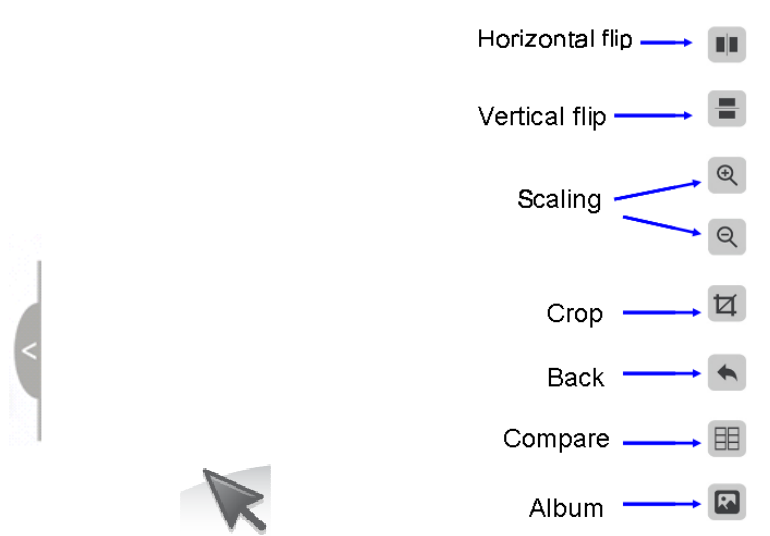
3. Insert the SD card. Capture images or videos to the SD card.

Step 2. Move the cursor to the left of the screen.

When you move the cursor to the left of the screen, the 'Capture' and 'Setting' icons will appear (See image below on the left hand side). Click 'Setting' to get the parameters setting menu (See image below on the right).

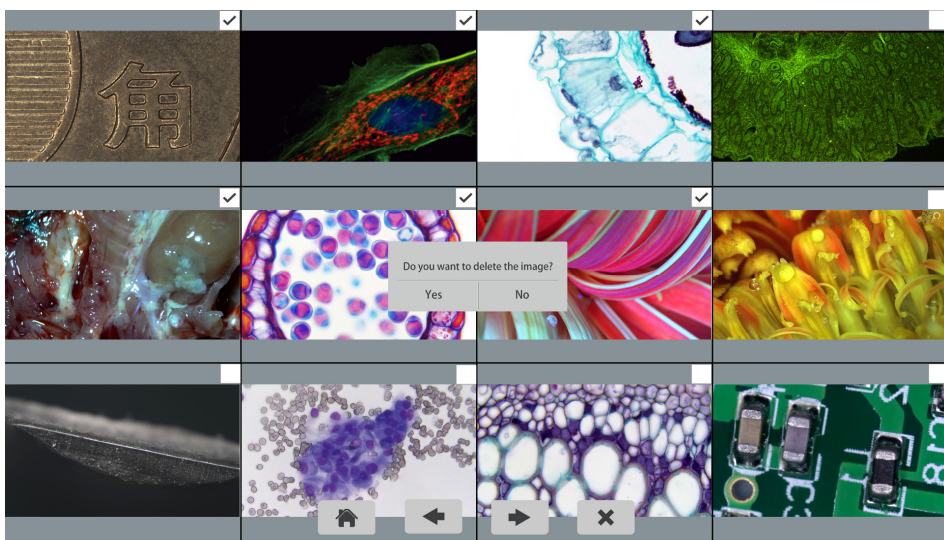
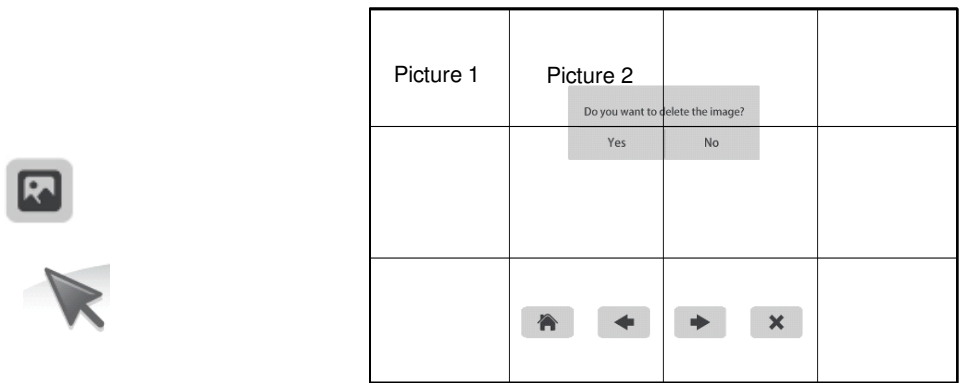


Step 3. Move the cursor to the right of the screen.

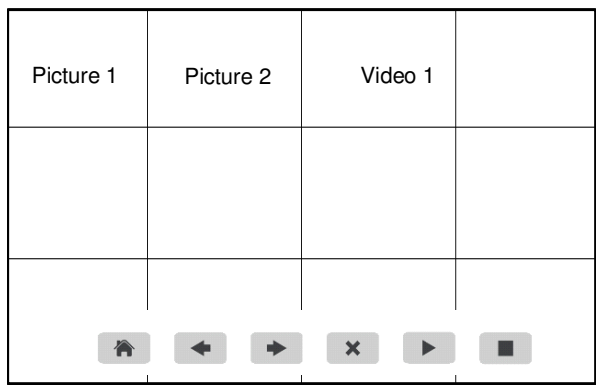


Step 4. Check the photo album and videos

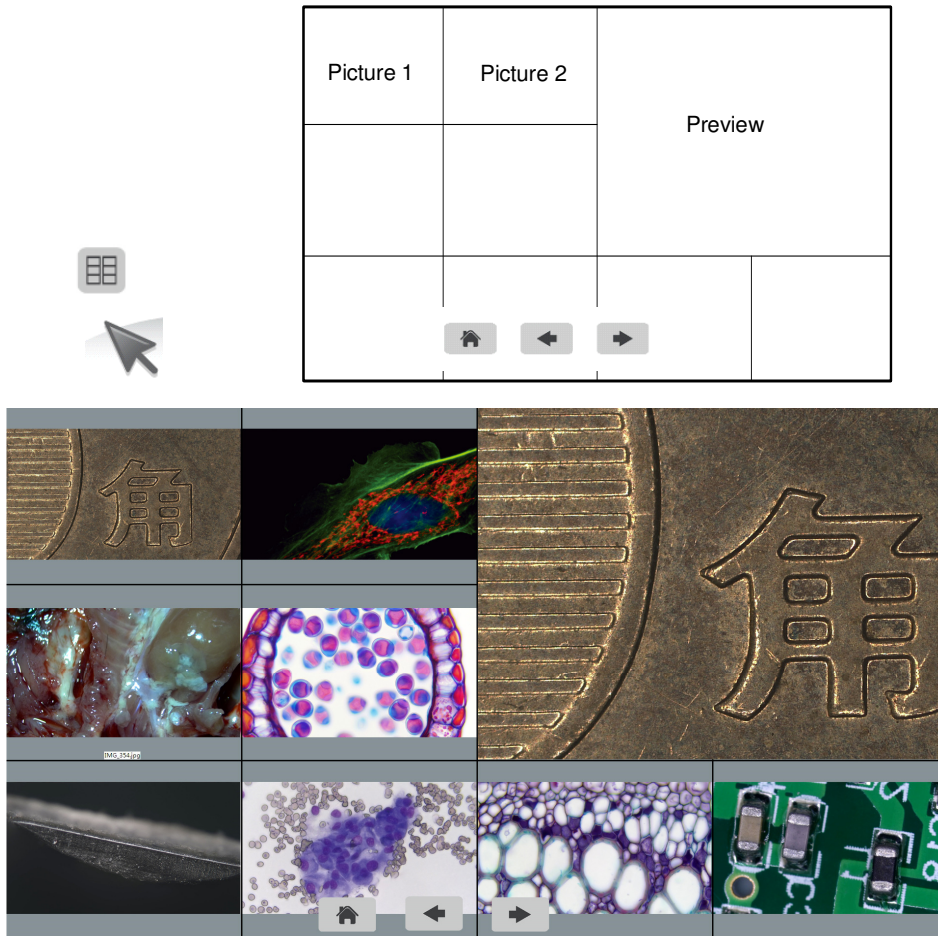
1. Check the album and delete the pictures.



2. Check the video and delete the video. To delete the video successfully, be sure this video is not in use.



Step 5. Compare preview with the captured images.



Chapter 4 Connecting the GXCAM HiChrome-S to a PC

- (1) Use the USB cable to connect the GXCAM HiChrome-S to the PC.
- (2) Plug in the 12V2A power supply. Press and hold the ON/OFF key until blue light is on to turn on the camera.
- (3) No driver installation is needed when connected to PC. Install GXCAPTURE 8.1 to adjust parameters and acquire images.

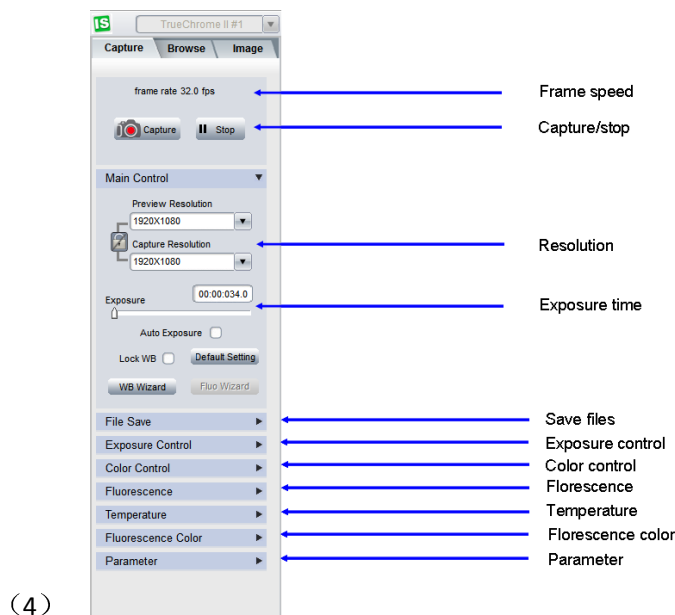


Fig.4-1. The left side of GX Capture 8.1

- (1) Start GX Capture 8.1. The parameter settings are shown on the left side of the software. See Fig.4-1.

Note: When using 'Lock WB' , it takes 3 seconds for the camera finish the initialization.

- (2) Switch the **Frame Speed** Normal High in 'Exposure Control' tab to get different frame rate. In Normal mode, the image quality is better than High mode. To get faster frame rate, please select High mode.
- (3) Functions 'Fluorescence', 'Temperature Control' and 'Fluorescence Color' are not available for GXCAM HiChrome-S. These functions are greyed out when GXCAM HiChrome-S camera is attached.

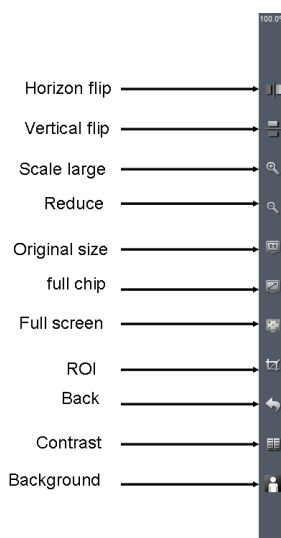


Fig.4-2. Function shortcuts on the right side of GXCAPTURE 8

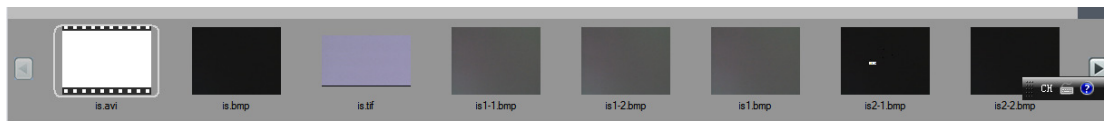


Fig.4-3. Captured image thumbnails

- (1) Users can double click on one image thumbnail to display it. Click on the arrow button to get more captured image thumbnails.
- (1) Further more, you also can select one or more images and delete them.

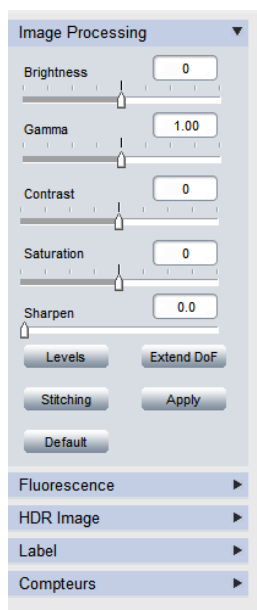


Fig.4-4. Imaging processing

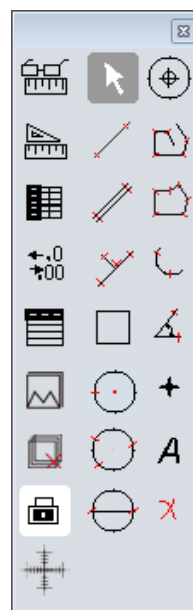


Fig.4-5. measurement

- (1) Click on **Image** tab to get the image processing functions (Fig.4-4).
- (2) This provides Focus stacking, HDR, Fluorescence Combination functions etc.

Note: When the camera is disconnected, all the image processing functions will be greyed out.

- (3) Click on **Measure** tab to get the measurement functions (Fig.4-5).
- (4) Measurements can be applied to both the live and still images. For more details about measurement, please read the GXCAPTURE 8 software manual.