D-Moticam BTW8 Microscope Tablet / Camera Use and Care Manual



Moticam BTW8 Introduction

Introduction

Thank you for purchasing the D-Moticam BTW8 Tablet/Camera system.

The **BTW** provides an effective method of attaching a camera system to any c-mount trinocular microscope using a 0.5x c-mount adapter. The image from the microscope can be viewed on the provided tablet or via WiFi to any WiFi enabled device.

The camera portion of the BTW houses a **5MP CMOS live view sensor**, a USB output as well as a WiFi transmission antenna. The user may switch between either the USB output which can be connected to the Android tablet provided; or the user can switch the camera to WiFi transmission mode which allows any WiFi enabled device to view, measure and annotate the microscope image through the available MotiConnect application. The MotiConnect app can be downloaded through Google's PlayStore or Apple's AppStore.





BTW Diagram



Connecting Tablet to Camera

TABLET ACCESSORIES



Power Adapter	This 5V DC power adapter is for charging your tablet's battery. It is also used to power the camera in WiFi mode.
Calibration Slide	This slide will enable you to calibrate your tablet to your microscope, for accurate measurements.
4GB Micro-SD	This storage card can be used with your tablet to store images and then transfer them to your computer. This card is provided as a courtesy and cannot be replaced.
Mini USB to Micro USB	Provides power and feed connection between the tablet and camera. To operate the camera, move the switch to the camera position.
L-Wrench	Optional Wrench for mounting bracket to Motic branded trinocular microscopes
USB to Mini – DIN	This cable is used to power the camera in WiFi mode as well as charge the tablet in camera mode.
USB to Micro USB	This cable is used to charge and power the tablet.

Sample Trinocular Assembly



TABLET OPERATION



I	Volume adjustment - decrease
+	Volume adjustment - increase
ი	Hold for a few seconds to turn unit on
ţ	Micro USB Port for charging tablet and connecting to bracket camera
	Provides sound via earphone/speaker
нопі	Connects to HD ready device via HDMI cable
Micro SD	Micro SD Card Slot for storing images on Micro SD Card (4GB included)

Camera Switches and Ports – Limited Production

This feature is limited to a small production batch, not a standard feature of this camera. Placing the switch in the WiFi mode, turns the camera into a WiFi only camera. Connection to camera can only be made via WiFi connection. Power adapter must be connected to camera, in order to supply power to camera in WiFi mode. Placing the switch in the USB mode, allows camera to be accessed by tablet via micro USB to mini USB cable. The cable supplies connection and power to the camera.







Mini USB Camera / WiFi Power

WiFi Operation for BTW

- 1. Mount the BTW camera onto your trinocular microscope using a 0.5x c-mount adapter. The c-mount adapter is a specific part of your microscope and should be purchased from your microscope supplier.
- 2. Mount your own tablet up to 10" in diagonal size onto the spring loaded clamp situated on top of the camera part taking care not to drop the tablet. Ensure that the tablet is securely held on its diagonal corners so that there is no movement of the tablet within the clamp.
- 3. Connect the camera and the tablet to a power source.
- 4. Switch the camera to WiFi transmission mode.
- 5. Turn on your tablet and connect its WiFi system to the SSID provided with the BTW package,
- 6. Start the MotiConnect application and connect to the WiFi camera using the connection interface within the application.
- Ensure that your microscope is turned on, and if your microscope has a beamsplitter, ensure that it is switched to a trinocular position so that there is light passing to the camera on the trinocular tube.
- 8. You can now view the image live on the MotiConnect app as well as capture, measure and annotate the image using the tools provided.
- 9. You can connect up to 5 other tablets or other WiFi devices to the BTW signal at the same time in order to share the live image.

Using a WiFi device that operates with Android or IOS

- For best performance, we recommend to use WiFi devices, such as tablets, with a screen not smaller than 7 inches. For iOS devices we suggest using iOS 5 or higher while for Android Devices we suggest using Version 4.0 or higher.
- To operate and use the camera on your tablet, please download our free App called MotiConnect. For iPad you can find this on the AppStore, for Android devices you can find this on Google Play and Ipad
- 3. You can also use certain web browsers such as Chrome, Firefox, or Safari to view, measure, and capture without the need of the App. To view the camera stream on the browser, please type in the IP number also shown on the label on the camera. For example 192.168.1.151:8080 and you will be connected straight to the camera.

Use WiFi setting to connect to your WiFi enabled computer

The BTW camera can also be used with Motic Images Plus software for Windows computers. If you have a WiFi enabled laptop you can install Motic Images Plus from the CD provided. To view the camera in our product's MI Devices interface, simply log your computer onto the BTW camera signal, by selecting this WiFi connection and entering the password. Then open the MI Devices interface by clicking on the camera icon within Motic Images Plus and select Moticam X from the drop down menu. Then click on Open.

TABLET SOFTWARE

This android tablet comes equipped will all the necessary software needed to start using your equipment out of the box. Since it is an android tablet, you will be able to connect to your office/school Wi-Fi network to access the internet and download additional applications. The primary application for accessing your camera is MotiConnect T.

MOTICONNECT-T OVERVIEW - HELP MENU

MotiConnect is a dedicated image processing Android app for Motic cameras, which includes image preview, capture, recording, editing and measuring functions. Please refer to the Application Help guide for a complete description of the MotiConnect Application.



HELP BUTTON



Help Menu - Opens a new window which provides a complete description of all the features available with the MotiConnect Application



MOTICHUB CONNECTION GUIDE

Connecting to the hub with Motic Images Plus 2.0 on PC:

After you have connected to your network/hotspot, open Motic Images 2.0 software and click the capture button. After you've opened the Motic Live Imaging Module, the drop down box under "Video Device" should say Moticam X. Then you will need to click "Open" which is located beneath the drop down box that says Moticam X. A dialog box will appear, instructing you to input an IP address. Input the IP address you wrote down without the: 8080. Your image should appear.

Connecting to the hub with Android/iOS/Chromebook:

Download the MotiConnect app from the App Store, Google Play, or Chrome Store. After connecting to your network/hotspot via Wi-Fi, open the MotiConnect app. Select Live Camera on the left side. At the top right, click Options. Click Add (on iOS: Click Cameras→New Camera). Input the following for Android/Chromebook: Input the following for iOS: Name: MoticHub Name: MoticHub IP Address (IP address you wrote down without the: 8080) URL: (IP you wrote down) Port Number: 8080 Click OK (on iOS: Click Save). Click options and make sure there is a check mark by the camera you just added. You should have a picture.

Connecting to the hub with a web browser:

Open your web browser and type the IP address you wrote down exactly as it appears (with: 8080) into the address bar, then hit enter.

Connecting to the hub on a Mac:

Open Motic Images Plus 2.0. At the top of the screen, click Tools, and then click MotiConnect setting from the drop down menu. The IP Address is the same as you wrote down without: 8080, and the Port should be 8080. Click "OK" after making sure settings are correct. Then, click File at the top, and then click Capture or New. Click OK, and a live video from your camera should appear.

MOTIC IMAGES SOFTWARE

Full Help Menu

The full software manual for Motic Images is accessible within the software's main page.

- To begin, open the Motic Images Software.
- At the top of main screen find the menu tab labeled Help:

Motic Images Plus	2.0 ML					
File Edit	Image Measure	Option	Help			
New Pave Save	capture	Image Comparison	Album	Report	Settings	Exit

• Click on Help and then select the help option:

C) Motic	Images Plu	ıs 2.0 ML			
	File	Edit	Image	Measure	Option	Help
ſ		2				
	About	Help				

• This will open the Motic Images help file contents, containing the full help menu:



Motic Live Imaging Module

Full Help Menu

- The full Live Imaging Module manual is accessible within the live Imaging main page.
- To begin, open the Motic Images Software.
- At the top of main screen find the menu tab labeled File and click on Capture:

Motic Im	ages Plus 2	2.0 ML					
File	Edit	Image Mea	sure Option	Help			
New Open	Save Save	Capture	Image Comparison	Album	Report	Settings	Exit

• Once the Motic Live Imaging Module has opened, click on Help:

Motic Live Imaging Module					
0	Video Device	•			
۲	Open	Close			
	ROI Preview	Full			
~	Resolution				
61	•	Help			
-	Property	Language			
	-	English 💌			
	Fast Display				

• This will open the Motic Live Imaging Module help file, containing the full help menu:

울 HTML Help			
Hide Back Forward Sto	p Refresh Home	Print	ر الآل Options
Contents Index Search Favo	ites		Help > Motic Live Imaging
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(1) Control Panel (1) Sexic Adjust (1) Color Adjust (1) Advance Adjust (1) A	tent tent stment s tent EMub sticHub function swn Wifi hotspot Hub r Access Node application Acces	ss Mode	Motic Live imaging Module is a professional image adjustment and capture module which is used to improve, edit or change image quality before capturing the final picture. It provides powerful video adjustment, live image transmission and image capturing functions, enabling users to view and adjust the real-time image, capture a still image to the assigned directory or directly transfer a live image into the main software for further processing or analysis. Upon opening the program, the following interface displays:

