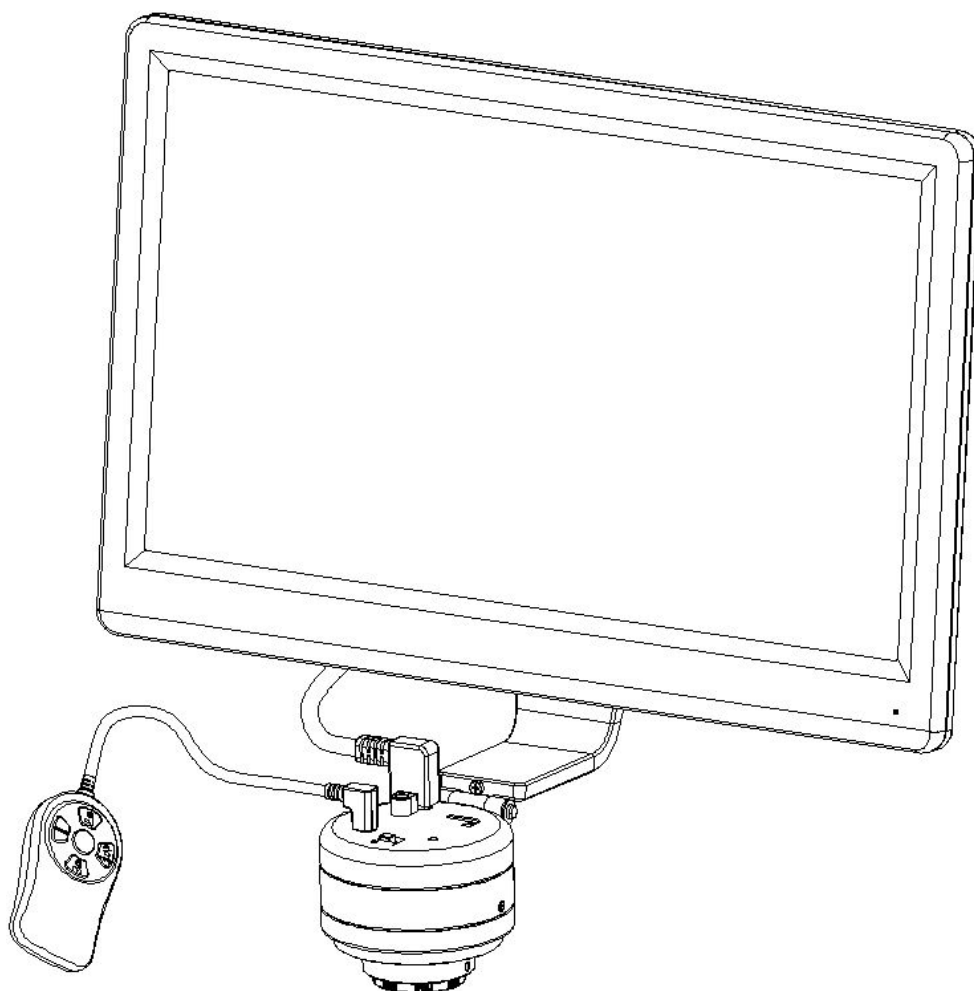


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Omano CX-3

# User Manual



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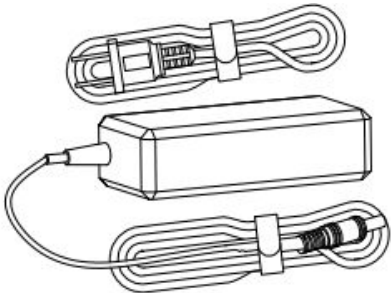
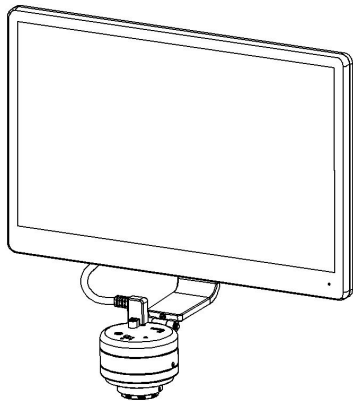
## Chapter 1 Notes and Safety Requirements

### 1.1 Cautions and Notes

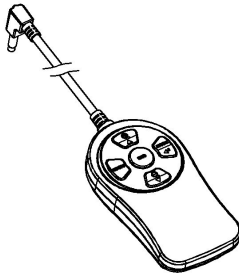
- (1) To avoid incurring damage to the lens, do not touch the lens or sensor directly with your fingers.
- (2) To avoid failure or electric shock hazard, do not disassemble or modify the internal structure of the device.
- (3) Do not plug in or unplug the power connection port when hands are wet.
- (4) Do not use alcohol and other organic solvents to clean.
- (5) If the lens or sensor is dirty or damp, use dry and non-linen fabric or professional lens tissue to wipe. To avoid scratches on the surface, do not touch the lens with your fingers. Wipe the lens or sensor lightly.
- (6) The products are not designed for outdoor use. Do not expose it to outdoor environment without any protection. Excessive temperature and humidity will damage the lens. Please avoid using the product in the following environments: high temperature or high humidity environment, places with direct sunlight, dirt or vibration and places near heat source.
- (7) Please use and store in the following environment:  
Operating temperature : 0°C~ 40°C  
Storage temperature : -20°C~ 60°C  
Operating Humidity : 30~60%RH  
Storage Humidity : 10~80%RH
- (8) If any foreign matter, water or liquid enter into the device by accident, disconnect the power line immediately. Please contact us for further instructions. Do not use the hair dryer to dry it by yourself.
- (9) To prevent the camera from being tripped over or dropped, please put away the connection cable when not in use or in standby.
- (10) To avoid electric shock, please power off the camera before you move your display or equipment.
- (11) The cleanliness of the device lens will directly affect the clarity of the image. Problems like circles or spots on the screen may mostly be the result of dirt on the lens. When cleaning, please use professional lens tissue or other professional detergent to clean the dirt from the lens.

# Chapter 2 Packing List

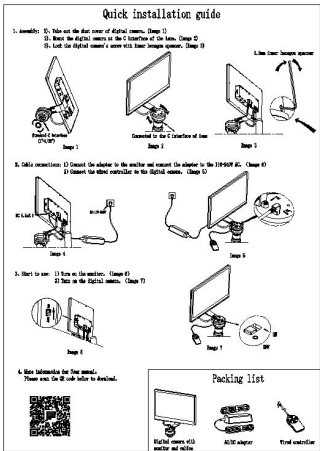
- 1、Digital camera with monitor and cables
- 2、AC/DC adapter



- 3、Wired controller

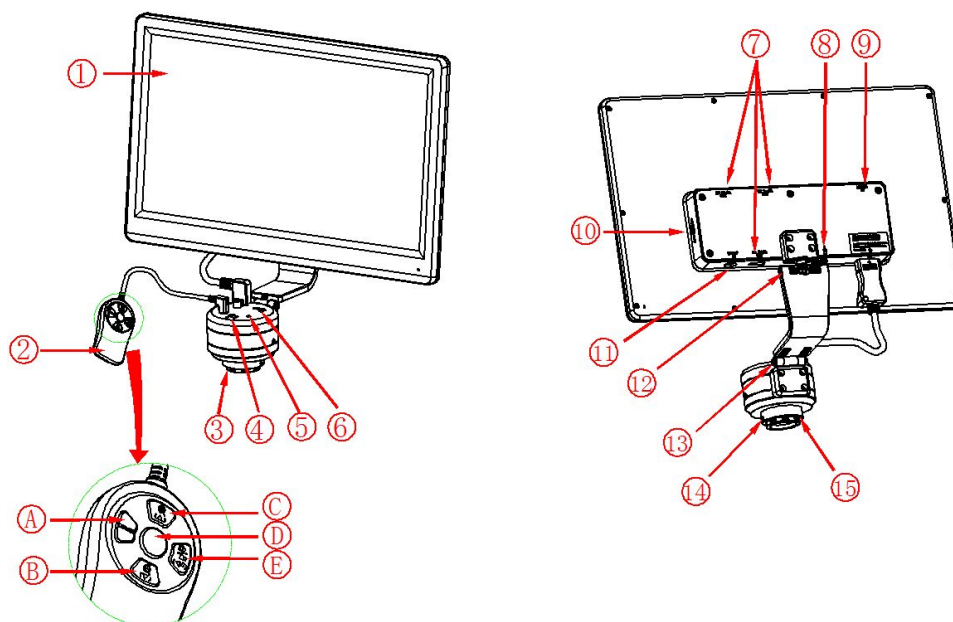


- 4、Quick installation guide



## Chapter 3 Parts and Functions

### 3.1 Name and Function for Each Part of the Omano CX-3



①Monitor : 12.5" monitor, For image display and USB power supply interface.

②Wired controller : 5 buttons achieve different functions:

**Left button** : Menu/return/frozen (hot key) function. “Menu” function is active when in photographing, playing back or recording modes. When in photographing and recording mods, a two second press will trigger the “frozen” function. After entering the menu, “return” function will be on.

**Bottom button** : Zoom out/downward/video fast forward function. “Reduction” function is active when in photographing and recording modes. “Downward” function is on after entering the menu or in playback mode. Video playing will “fast rewind” in the playback mode.

**Top button** : Zoom in/upward/speed retreat function. “Magnification” function is active when in photographing and recording modes. “Upward” function is active after entering the menu or during browsing. Video playback will “fast forward” when in playback mode.

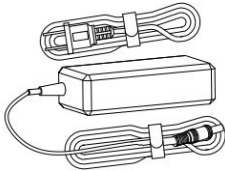
**Middle button** : Record/camera/play back function. “Recording” function is active when in recording mode. “Photographing” function is active when in photographing mode. “Playback” function is active when in Playback mode.

**Right button** : Mode/sure/crosshair (hot key) function. This function is active in the “camera”, “play back” and “record” modes. Without entering the menu, “Mode switch” function will be activated and can be switched successively among three modes, namely photographing, playing back and recording. “Confirm” function will be on after entering the menu. Long press in the mode of photographing and recording activates the mode of “cross line” shortcut key.

- ③Dust cover : Dust cover protects against dust accumulation.
- ④Digital camera Switch : Put the switch to right: Turn on the digital camera; put the switch to left: Turn off the digital camera.
- ⑤Work indicator : (1) Red light = power is coming to the camera but it is not turned on.  
(2) Green light = camera is on.  
(3) Flashing Green light = camera is recording.
- ⑥TF card slot : The location of TF card, photos and videos can be stored on a TF card.
- ⑦USB power supply interface : 5V 2A power output interface.
- ⑧Wired controller interface : The wired controller allows you to adjust parameters of the monitor.
- ⑨HDMI interface : HDMI input.
- ⑩Monitor switch : When the switch is in the “up” position, the monitor is turned on; when the switch is in the “down” position, the monitor is turned off (the digital camera stops working after the monitor is turned off)
- ⑪Power interface : Power supply to the monitor.
- ⑫Multifunctional Rotary Shaft : Allows left and right rotation of the monitor.
- ⑬Rotating shaft : Allows the display to tilt forward or backward.
- ⑭Fixed camera eyepiece : Fastens camera eyepiece to microscope through the inner hexagonal screws in the hole.

- ⑮ Port C thread : C Port thread can be directly connected with C port microscope and telescope. Connected with eyepiece (accessories), the C port thread allows connection to microscopes with different ports.

## 3.2 Accessory Introduction



AC/DC adapter: : Connects to, and supplies power to, the monitor.



Wired controller: : Allows you to adjust the parameters of the electronic eyepiece or monitor.

## Chapter 4 Installation Guide

### 4.1 Installation and Assembly

#### 1. Assembly:

- 1) Take out the dust cover of digital camera. (Image 1)
- 2) Mount the digital camera at the C interface of the lens. (Image 2)
- 3) Lock the digital camera's screw with inner hexagon spanner. (Image 3)

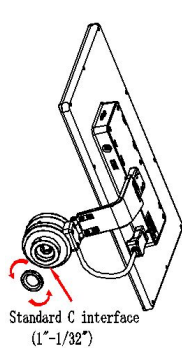


Image 1

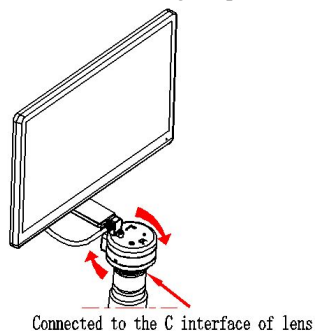


Image 2

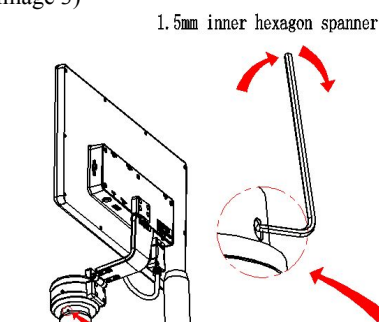


Image 3

#### 2. Cable connections :

- 1) Connect the adapter to the monitor and connect the adapter to 110-240V AC. (Image 4)
- 2) Connect the wired controller to the digital camera. (Image 5)

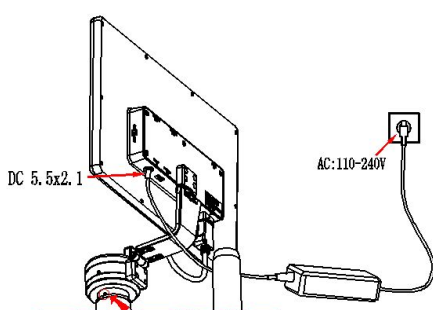


Image 4

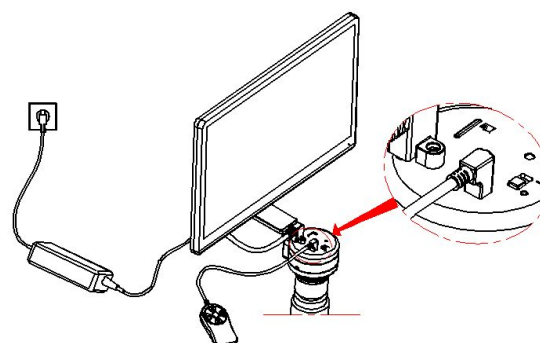


Image 5

#### 3. Use:

- 1) Turn on the monitor. (Image 6)
- 2) Turn on the digital camera. (Image 7)

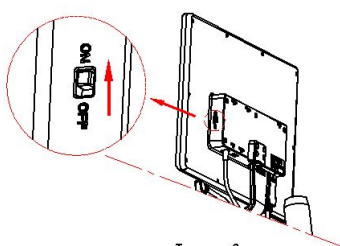


Image 6

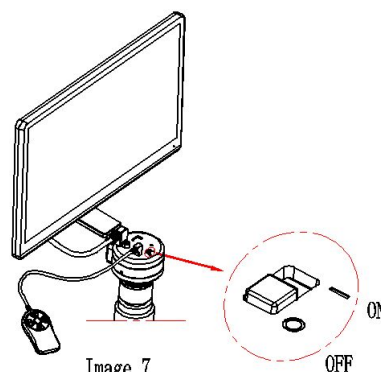


Image 7



## Chapter 5 Operation

### 5.1 Start-up Settings

#### 1) Application field

Press the "left button" of the wired controller to enter menu and select "Microscope", and then press the "right button" of the wired controller to enter the sub-menu.

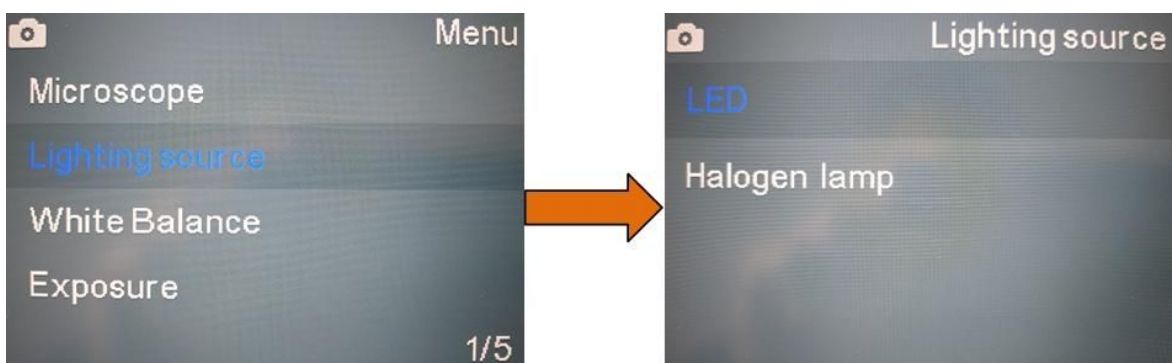
Depending on which type of microscope you are using, press the up button or down button to select biological or industrial, and press the left key to confirm and exit.



#### 2) Lighting source

Press the "left button" of the wired controller to enter main menu→Light source→ and press the "right button" of the wired controller to enter the sub-menu.

Depending on which light source you are using, press the up button or down button of the wired controller to select LED or halogen, and press the left button to confirm and exit.




If the correct microscope type and lighting source is not selected, color reduction deviation may occur.


## 5.2 Additional Functions

- a) Short press refers to press time 0.2s~1s. Long press refers to press time more than 2s. (Unless “Long press” is indicated, “press” means short press).
- b) After 10 seconds without operation, the system will automatically hide the icon on the screen for better viewing. The icon can be awakened by pressing any button.
- c) The maximum magnification ratio of the zoom function is 4X.
- d) The highest resolution of photography is:1920x1080 pixels.
- e) Shutdown save parameter: Each time the camera eyepiece is started, the parameter is the parameter of the last shutdown. To initialize the parameter, you can restore the factory settings by using the "Restore de faults" in the menu.

### 1) Photography


The top right corner icon “” displays when in photography mode. Press “middle button” to take pictures. If using a TF card, pictures will be automatically saved into the Photo file under TF card file Microscope. File name format: "Photo\_00001.jpg", "Photo\_00002.jpg”.

### 2) Record

The icon “” on the top right corner of the screen displays when in recording mode. Press “middle button” to begin recording and press “middle button” again to stop recording. When using a TF card recordings will be automatically saved into the video file under TF card file Microscope. File name format "Video\_0001.mov", "Video\_0002. Mov”.

Note: The maximum capacity of recording file is 4G. When 4G capacity is reached, a new recording file will be started.



### 3) Playback

The top right corner icon “” displays when in Playback mode.

View images or videos by pressing “Top Button” or “Bottom button”. Pressing button “Left button” enters the file attributes interface, which includes three operation functions such as delete, protect and slide show.

- “Photo\_XXXX.JPG” on the top right corner means the image is a photo.
- “Video\_XXX.MOV” on the top right corner means the image is a video. Press “Middle button” to play/pause recording.
- Press “Top Button” or “Bottom button” to fast forward or fast backward during playing. Press “Right button” to exit playing.

### 4) Screen Freeze

When in camera or recording mode, long press the “left button” to freeze the screen. The right side of the desk will display the icon , which is the frozen screen. You can long press “the left button” or short press any button to de-freeze the screen and the icon  disappears.

### 5) Menu Setup

Press “Left Button” to enter the menu bar interface. “Top Button” and “Bottom Button” move the cursor up and down for selecting the required function. Press “Right Button” to enter into setup. After setup, press “Left Button” to exit menu bar.

Note: common functions are set up on the menu bar, namely exposure compensation, white balancing, 3 sequence, image quality, HDR, resolution, sharpness, shooting ways, color, quick preview, button press sound, auto power off, language, frequency, image rotation, frozen and date/time.

### 6) Exposure setup

When in camera or recording more, press the “left button” to enter the menu bar. Press

the “top button” or the “bottom button” to select the menu bar “exposure EV” and then press the “right button” to enter the exposure setup interface.

A  
S

The screen will show the icon M. (Note: Flashing font = the cursor is located in current position. Red font = status of been selected. )

Press the “top button” or “bottom button” to move the cursor. Press the “right button” to select the current status and the font color will turn red. Press the “left button” to exit the exposure setup interface.

- (1) The cursor points to A, the real-time automatic exposure function will be started by pressing the “right button” and the color of the letter A will turn red.
- (2) The cursor points to S, the single real-time automatic exposure function will be started by pressing the “right button” and the color of the letter S will turn red.
- (3) The cursor points to M, the manual exposure can be started by pressing the “right button” and the color of the letter M will turn red and a flashing red number 0 will also appear on the right side. Press the “top button” or “bottom button” to change the current number value (the valid adjustment range is -10~+10 and the default value is 0). Press the “right button” to save the number value and the number value will be covered simultaneously.

## 7) White balance adjustment

When in camera or recording mode, press the “left button” to enter the menu bar. Press the “top button” or the “bottom button” to select the menu bar “white balance WB” and then press the “right button” to enter the interface of the white balance setup.

A  
S

Now the screen will display the icon M.

Press the “top button” or the “bottom button” to move the cursor. Press the “right

button” to select the current status and the font color will turn red. Press the “left button” to exit the White balance setup interface.

- (1) The cursor points to A, the real-time automatic white balance function will be started by pressing the “right button” and the color of the letter **A** will turn red.
- (2) The cursor points to S, the single automatic white balance function will be started by pressing the “right button” and the color of the letter **S** will turn red.
- (3) The cursor points to M, the manual white balance can be started by pressing the “right button” and the color of the letter **M** will turn red and a group of  

**R 128**  
**G 128**  
**B 128**

will also appear on the right side. The flashing red number is the value currently been selected. Press the “top button” or “bottom button” to change the current number value (the valid adjustment range is 1-255). Press the “right button” to switch the value R, G and B consequently.

Whichever value letter (R/G/B) is selected, as long as the “left button” is pressed, RGB current number value will be saved.

Note: From automatic white balance to manual white balance: the value of manual white balance is the white balance under the current background. From single automatic white balance to manual white balance: the value of manual white balance is the previous single automatic white balance.

## 8) Crosshair mark

When in camera or recording mode, long press the “right button” to activate the crosshair mark and then long press the “right button” to de-activate the crosshair mark. The default cross line invoked by shortcut key is the first kind. If either of the other two shortcut keys of the cross line is needed, other cross lines will be firstly invoked via menu and current cross line is controlled by shortcut key.

There are three kinds of crosshair marks (“crosshair mark” menu can be found in the menu bar) :

1. Cross (default)
2. Grid
3. Concentric circles