This manual is written for Industrial LCD Microscope NYMCS-342. For safety and for exerting the best performance, making you familiar with the instrument entirely, it is strongly recommended that you read this manual carefully before using the microscope.
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NYMCS-342 LCD microscopes have renovated the traditional way of microscopic observation and adopted a modern way of electronic imaging. Options for accurate 10X-80X magnification range. This patented microscope makes the observation more comfortable and thoroughly resolves the fatigue caused by using a traditional microscope at work for a long time. It features high resolution of LCD display to preview genuine images. This unit integrates magnification, imaging, display and built-in LED illumination functions. It can be conveniently applied to testing and inspecting in product assembly, research and teaching fields.

Safety note

1. Carefully open the box, avoid the accessories, dropping to ground and being damaged.
2. Do keep the instrument out of direct sunlight, high temperature or humidity, dusty and easy shaking environment. Make sure the stage is smooth, horizontal and firm enough.
3. When moving the instrument, please use two hands to grip with the two sides of the microscope body.
4. Make sure the instrument is earthed, to avoid lighting strike.
5. Check the input voltage: be sure the input voltage which signed in the below of the microscope is consistent with the power supply voltage, or it will bring a serious damage to the instrument.
1. **Base**
2. Focus adjusting hand wheel
3. Continual zooming
4. LED Ring lamp
5. Operation button layout
6. LCD Screen

Based on the model you have purchased, some of the features shown above may change.
2. ADJUSTMENT & OPERATION

2.1. Operation buttons and function

2.1.1. Buttons and functions

1. Crosshair & Coordinate
2. Color: White, Black, Red, Purple, Green
3. Direction key
4. Menu: Setting & Exit
5. Display button: Only display image and remove kinds of characters, symbols
6. Confirm Button
7. Snapshot & Video Playback View
8. Start Videos
9. Snapshot Pictures
2.1.2. Power on

A. Before power on, please take out the SD card from the card reader firstly. Insert SD card into SD slot in the right of the microscope head completely until it is locked. Push softly the inserted SD card, it will eject out, then take it out. (When the card is under reading or writing, do not pull it out. Better power off first before pulling out the SD card).

B. Connect the DC plug of the power adapter to the “DC” jack on the microscope. Press the power switch on microscope base, “WELCOME” should appear on the LCD screen. After 3 seconds, the microscope system will be in the preview in the real time automatically when you can snap.

C. Adjust microscope’s definition: according to its imaging focal length, make images sharp from LCD display screen, and then the adjustment is done.

2.1.3. Introduction of display on the LCD screen

Icons of upper left corner of Fig. 1 and Fig. 2 (📷 & 🎥) indicate snap (photo) mode and video mode.

On the snap mode:
Shown on the below left corner is the number of photos that can be taken or the video recording time.

(“766” means in the current setup mode, it still can shoot 766pcs photos). Fig. 1.

(“00 : 00 : 00” means in current setup mode it still can record 00min 00sec) Fig. 2.

When you insert SD card, the below right corner will show this mark 📄.
2.1.4. **Function menu control**

With the help of the button, it is able to carry out the setting of the whole system. The direction key allows you to choose the following functions:

A. Resolution  
B. Camera function setting  
C. Display setting  

On the snap model, press menu button to enter menu interface. Use direction key to select a setting from the above 3 items.

![Figure 3](image)

**A. Photo Resolution**

![Figure 4](image)
Select photo resolution

On snap model, press MENU button as shown the “Resolution:12M”(12M means the pixels has selected now), then press the OK key to select the pixels for photo taken base on 2M/3M/5M/12M use by up & down keys (Fig. 11). Press OK button to save your selection, the model comes back to Fig. 10, then you press MENU button again, the model comes back to snap model.

B. Video Resolution

Select video resolution

On video model, press MENU button as shown the “Resolution: 1080P30” (1080P30 means the pixels has selected now), then press the OK key to select the pixels for video taken base on 1080P30/1080P30_2/720P30/WVGA60/WVGA P30 use by up & down keys (Fig. 6). Press OK button to save your selection, the model comes back to Fig. 5, then you press MENU button again, the model comes back to video model.
C. Camera function setting

Camera function setting: Setting up each item.

On snap model, press the MENU button as shown the “Resolution”, then press the left & right key to enter the “Camera Function Setting” (Fig. 7). Then press up & down key to select as Scene/ WB/ DE/ Contrast/ Sharpness/ AE Meter/ AE ISO/ AE Bias. (Fig. 7 & 8). For example: Fig. 7 you can press the OK key to enter the Scene setting and choose by up & down keys (Fig. 9). Press OK button again to save your selection or exit by MENU button. Once confirmed, the model comes back to Fig. 7, press MENU again, you can come back to snap model. Operation is the same on video model.

D. Display setting

Figure 7
Figure 8
Figure 9

Figure 10
Figure 11
Figure 12
Display Setting: Setting up each item.

On snap model, press **MENU** button as show the “Resolution”, then press the left & right key to enter the “Display Setting” (Fig 10). Then press up & down key to select as Date/Time, Display, Format, Default settings, Auto power off, Language, Beep, USB, Version. (Fig. 10 & 11). For example: Fig. 17 You can press the **OK** key to enter the Date/Time setting and change by direction keys (Fig. 12). Press **OK** button again to save your selection or exit by **MENU** button. Once confirmed, the model comes back to Fig 10, press **MENU** again, you can come back to snap model. On video model, the operation is same.

2.1.5. Camera function setting details

A. Scene

You can choose different Scene by **MENU** button according to the objects observed so that help you to get perfect performance.
B. WB (White Balance)

WB will help you to obtain superb color when observing.

C. DE (Color effects)

D. Sharpness
E. AE Meter

AE Meter

AE Meter: Center
AE Meter: Average
AE Meter: Spot

OK  SET  MENU  EXIT

F. AE ISO

AE ISO

AE ISO: Auto
AE ISO: 100
AE ISO: 200
AE ISO: 400

OK  SET  MENU  EXIT

G. AE Bias

AE ISO

AE ISO  0.0EV

OK  SET  MENU  EXIT
2.1.6. Display setting details

A. Date/Time

You can use left and right keys of direction button to change the time. After fixed, you can save the time.

B. Display

Date and time information can be stored together with photo taken in SD card. File names also contain date and time information. Before using this camera, please set the date and time properly. You can choose what display you want. If you want to display “Date”, you can choose the second option.
C. Format

Select “Yes” can format all the SD card inserted. (Attention: Even the protected content will be deleted when formatting, cannot be resumed again.) Select “No” and press menu button, the model comes back to the snap mode.

D. Reset system settings to default values?

E. Auto power off
F. Language

We developed 9 languages according to your demand.

G. Beep

Beep: Off
Beep: On

H. USB Selection

USB: Mass storage
USB: USB camera
2.1.7. Snapshot & Record
A. **Snapshot**: On the snap model, press button to snapshot pictures and meantime icon of upper left of LCD screen will show. The pictures automatically stored in SD card. When the card is full, the LCD screen will show “Card full”

B. **Record**: On the snap model, you can enter video model by pressing button. Meantime the image will show full screen and you can press button to start recording and will show on the LCD screen. Press button again, the video is over and automatically stored in SD card. When the card is full, the LCD screen will show “Card full”

C. **Playback**: Press button to select playback model.

Press up & down keys to browse every photo and video which is taken and stored in the SD card.

Press left key, the screen will display multi photos and videos. Index display helps to find target photo or video quickly in many pictures and videos.

On the snap model, you can review pictures but can’t review videos.

On the video model, you can review videos but can’t review pictures.