



ET0918 - BORESCOPE 5.5MM PROBE

User Manual



**Please read this manual before switching the unit on.
Important safety information inside.**

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1. Safety Tips

Before using the instrument, read below safety information and follow the specification:

- The probe of videoscope can't touch high voltage and insert into rotary gear, otherwise it will cause damage for the instrument or personal injury for the operator.
- The instrument approved CE.

2. Application

- Detect the invisible inside parts of a machinery(such as cars, heavy machine) to check whether it is working normally.
- Insert the gooseneck to underwater to check the object(Such as drainage works).
- Applied in special supervision cases and rearview mirror of the cars.
- Applied in wild adventure.

3. Maintenance and Cleaning

- Repair or maintenance should be operate by qualified professionals and can't only follow the manual.
- Please clean the camera after use, don't use solvents, detergents to clean the instrument.

4. Function Description

1-3.5 inch TFT screen

2-ON/OFF Button

3-Rotation Button

4-Back Button

5-Right Button

6-Down Button

7-Left Button

8-Video Button

9-Camera Button

10-Up Button

11-Enter Button

12-Probe Port

13-Rubber Plug

14-TV-OUT Port

15-SD Port

16-USB Port

17-Speaker hole

18-Headset jack

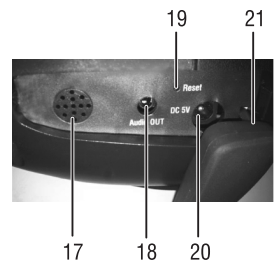
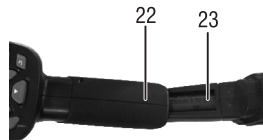
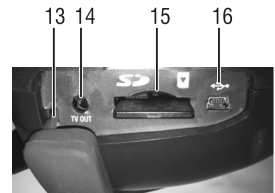
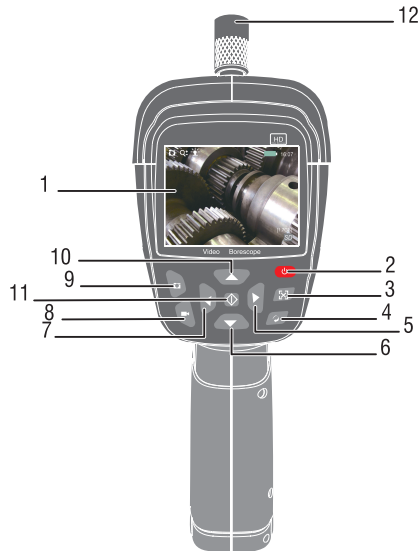
19-Reset hole

20-D C 5V/2A Battery Charging port

21-Rubber Plug

22-Handle

23-3.7V/2000mA Li battery



5. Performance Index

Screen Size:	3.5"TFT
Display Pixel:	320x240
Photosensitive Devices:	1/4"CMOS(1/13"CMOS selectable)
Sensor Pixel:	300,000 pixels
Max. Resolution:	640x480
Maximum Number of Frames(FPS):	30FPS/s
Camera Diainstrument:	17mm(5.5mm selectable)
Focusing Distance:	5~15CM
Visual Angle:	0~360° (5°/15°/30°/90°selectable)
Camera Format:	JPEG (640x480)
Video Format:	MP4(640x480)
SD Card:	Max.32GB
TV Output:	PAL/NTSC
Language:	Support English, French ,German and Spanish
Power:	Li battery 3.7V/2000mA
Charging current:	About 550mA

6. Operation

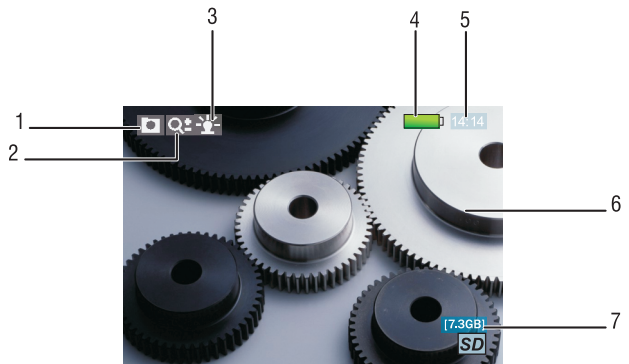
6-1. Power ON/OFF

Hold the power button for 2-3seconds for starting and come into video browser interface after 25 seconds. Hold the power button for 2-3 seconds again to close the instrument.

6-2. Browser interface

Come into browser interface directly after open instrument, as shown to the right:

- 1-Camera mode
- 2-Camera zooming indicator
- 3-LED indicator
- 4-Battery Level Indicator
- 5-Time
- 6-Camera
- 7-SD available capacity



Digital Zoom

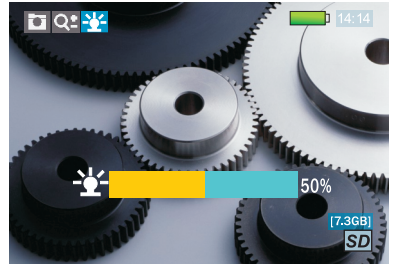
Press “Up/Down Button” for triple digital zoom in fifth browser interface, as shown to the right:



LED brightness control

Press “Right/Left Button” for brightness control in the fifth browser interface, as shown to the right.

10 level is brightest, 0 level is darkest and also close LED light. According to different environment to choose the related LED level, it makes the effect the best

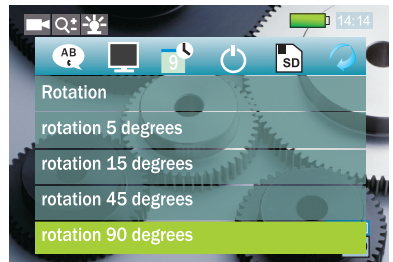


Camera rotation:

Press “Rotation Button” for Rotating in the fifth browser interface, as shown to the right



The adjustment of rotation angle has 5°/15°/30°/90°, Press “Enter Button” for choosing these angles and then press “Left/Right Button” after popping up main menu in the screen to choose the related rotation degree in the submenu of the “Rotation”, as shown to the right:



6-3. Camera Mode:

In the fifth browser interface, the system default for the current operating status is to be “Camerar mode”, press “Camerar button” to save the current screen Camera, meanwhile, it will pop up a file name to save the current Camera when saving Camera.



6-4. Video Mode:

In the first five of the browser interface, press the “Record” button for a long time to start recording, as shown to the right:

1-Video mode and flashing.

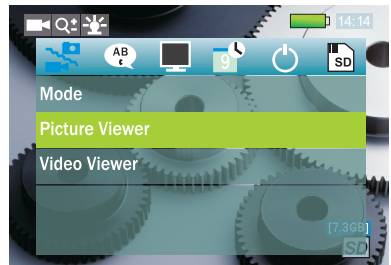
2-Progress indication of recording time and the video icon in the left corner is in flashing and the time progress is increasing.

Press again “video button” for a short time, the video will be saved. The storage of video pixel is 640*480.



6-5. Images Playback:

In the fifth browser interface, press in the “Enter Button” to pop up the main menu, in the submenu of “Mode”, press the “Up/Down Button” to select the “Photo”, as shown to the right:



Press “Enter Button” again to come into the submenu of “Photos”, as showed to the right:

On the right, you can press the “Left and Right Button” for page turning, but also can press the “Up and Down Button” to select the corresponding photo in the current interface.

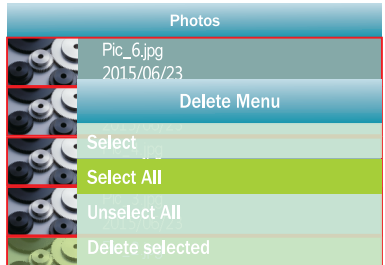


Deleting photo:

Click “Rotation Button” of the above interface, the interface will pop up “Delete Menu” submenu as the right:

In this menu, you can choose “Select All” to select all picture, then put the cursor to “Delete Selected” To delete all the photos. You can also move the cursor to “Select” and press the panel “Enter Button”, this “Delete Menu” menu will be closed and enter the “Photo” Sub-menu, move the cursor to the corresponding picture, then press “Enter Button” to confirm your selection, select an image for each

Press the “menu button” and select the picture you want to delete and then press “Rotation Button” and pop up “Delete Menu”, Move the cursor to “Delete selected” and press “Enter Button” again, will perform the deletion.



View Images:

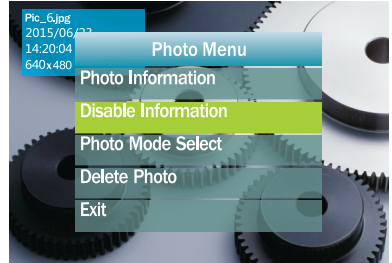
In the sub-menu of “Photos”, press the “Enter Button” to open the picture, as shown to the right:



Press “Rotation button” at the above photo, you can rotate the current photos, as shown to the right:



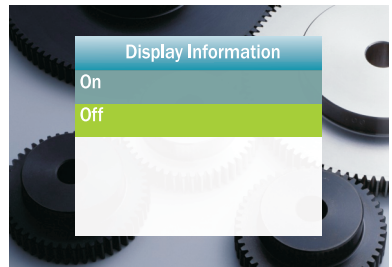
- Press “Up and Down Button” to zoom the current image.
- Press “Left” and Right Button” to review the next picture.
- Press “Enter button” screen again, will pop up “Photo Menu” dialog box ,as shown to the right:



In the above photo, select “Photo information” and press “Enter Button” will display the information of the image, as shown to the right:

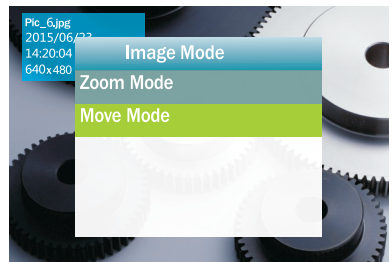


In the above photo, press “Back Button”, will return “Photo Menu” sub-menu, select “Disable information” option to set that whether the current picture show the related photo information or not, as shown to the right:



In the “Photo Menu”, remove cursor to the “Photo Mode Select” and press the “Enter Button” and will enter the “Camera mode” menu as shown to the right:

In the above photo, when selecting “Zoom Mode” mode, press “Left and Right Button” to browse photo, press “Up and Down Button” to zoom current picture.



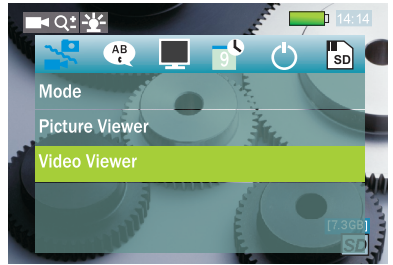
In the above photo, when selecting “Move Mode” mode, press “Up and Down Button” is to up /down translating picture, “Left and Right Button” is the left / right translating pictures. As shown to the right:

In the “Photo Menu” menu, move the cursor “Delete Photo” to delete the current picture, move the cursor to “Exit” to exit “Photo Menu” menu and return to the current picture browse. Press “Back Button” per time to return to an upward one.

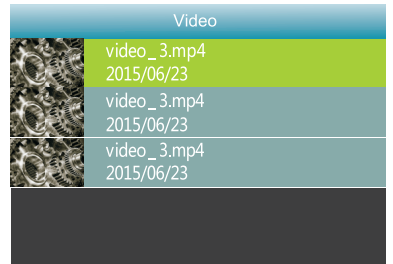


6-6. Video Playback:

In the “Mode” of the main menu, move the cursor “Video” option, as shown to the right:

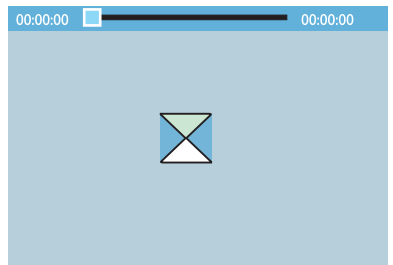


In the above photo, press “Enter Button” to enter the video player interface, as shown to the right:



In the above photo, you can press “Left and Right Button” for page turning, also press the “Up and Down Button” to select the corresponding video file.

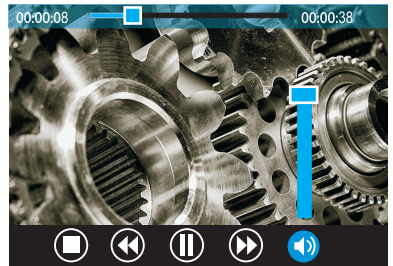
In the above photo, Press “Enter” to enter the “Video” menu, as shown to the right:



Directly play the current video after the program loaded the video as shown to the right:

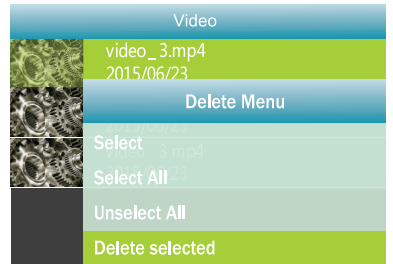


In the above photo, presses “Enter Button”, it will pop up playing field in the bottom of the screen, press “Left and Right Button” and move the cursor to “speaker” icon to adjust the volume. As shown to the right:



In the above photo, press “Back Button” to return to “Video” menu, in the “Video” menu, press the “Rotation button” and will bring up the “Delete Menu” submenu, as shown to the right:

In the above photo, you can delete the video, and also select the appropriate video or single video and then delete it.



6-7. Language settings:

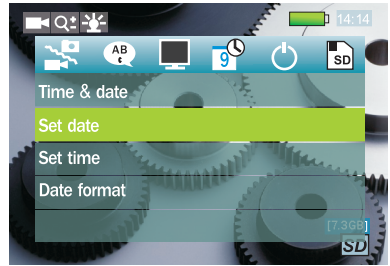
In the main menu, press direction button to select “Language” menu as shown to the right:

In the right, you can select different language.



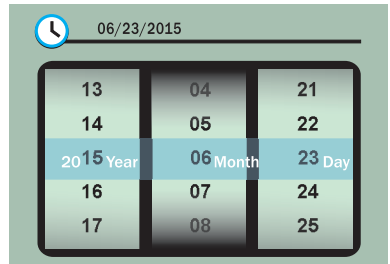
6-8. Date and date format settings:

In the main menu, select “Time & date” menu, as shown on the right:



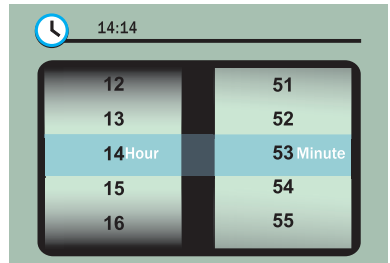
In the above “Time & date” menu, select “Set date”, then press “Enter Button” to enter the time setting as shown to the right:

In the right photo, press the “Up and Down Button” to adjust the number, press the “Left and Right Button” and move the cursor to the year/month/day



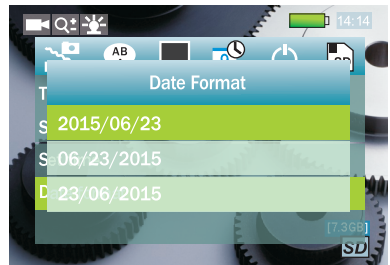
In the “Time & date” menu, select “Set time” can enter the time setting, as show to the right:

In the above photo, press “Up and Down Button” to adjust the size of the figures, press the “Left and Right Button” to select the hours and minutes.



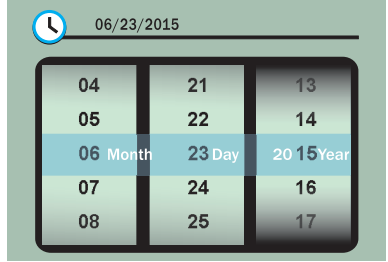
In the “Time & date” menu, select “Date format” can enter the date format settings, as show to the right:

In the above photo, you can set the three formats: “year/month/day”, “day/month/year” and “month/day/year”. After setting different date format,



“Set date” will change accordingly. If the setting is the above third format “day/month/year” and then enter the “Set date” option as shown to the right:

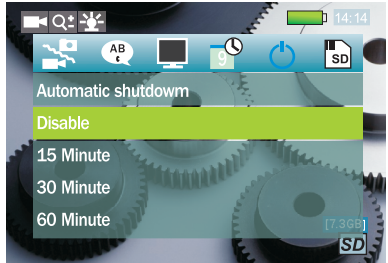
On the right photo, click the “Back Button” to come back the main menu.



6-9. Auto Power Off settings:

In the main menu, select “Automatic shutdown” menu, as shown to the right:

On the right, you can set auto power off to be “15/30/60 Minutes”, and also set “Disable” that doesn’t automatically shut down.



6-10. TV-OUT Output:

First, take out the video cable in the package, put the headset plug of the cable into “TV-OUT” port, as shown to the right:

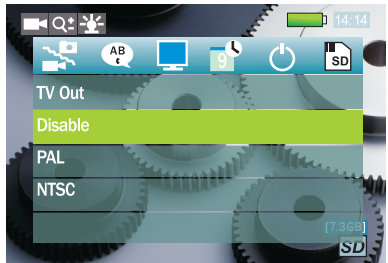
Put the of yellow, red, white plugs into the video, left channel, right channel in the TV respectively and confirm the connection is correct.



In the main menu, select “TV Out” menu, as shown to the right:

In the above photo, select the relevant system “PAL / NTSC”, then press the “Enter Button” to confirm output, The display data in the instrument will output to the TV, press the related operations in the instrument, TV will change accordingly.

If need to return to the display of the instrument, select “Disable” in the submenu of main menu “TV Out” , and then press “Enter Button” to confirm the display and will return to the display of the instrument.



6-11. SD Card Settings:

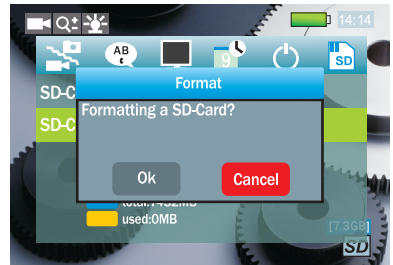
In the main menu, press “Left and Right Button” to select “Sd Card” option, as shown:

As you can see the current SD card information in the above photo.



In the above photo, Press “Enter Button” and will pop up the SD format menu. As shown to the right:

Press “Left and Right Button” to select the “Ok”, then press “Enter Button” to Format and delete the contents of this SD card, please be carefully for the operation.



6-12. System Upgrade:

Containing the upgrade procedure SD card plug into the SD slot, and then press “Up and Down Button” for 2 seconds, the system will enter automatically upgrade.

6-13. USB Connecting Computer:

Open the instrument and insert the SD card, then connect one end of USB to PC, the other end into the USB port of the instrument, PC will connect to this instrument and display a “Removable Disk”. You can upload and download data.

6-14. Charging:

Put DC 5V/2A charger into the charging port in the instrument, you can charge it in the staring up and power off. Under starting up, the battery icon in the upper right corner will be flashing when charging. The icon is no longer flashing when power is full.

7. Accessories:

Manual, DC 5V/2A charger, USB cable, TV-OUT video cable, CA17 probe and probe retractors, mirrors, magnets



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