

MVB-55 Series

Portable Video Boroscope



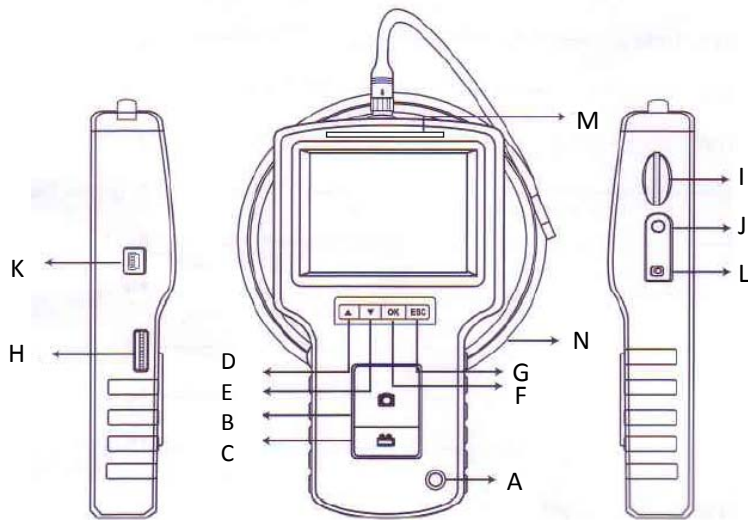
User Operating Manual

By metzin.com

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Parts and Controls Function



- A. Power button
- B. Photo button
- C. REC button
- D. PREV. button
- E. NEXT button
- F. Multi-selector OK
- G. ESCAPE ESC
- H. Light switch
- I. SD Jack
- J. AV jack
- K. USB jack
- L. DC IN jack
- M. Main unit
- N. Probe / cable

Interface Overview



This handy, easy-to-use device is designed with simple operational functions and commonly used by both amateurs and professional. There are 3 basic modes for easier operations as follows:

PREVIEW Mode	Display summarized optional functions such as: picture taking, video taking, etc.
SURFING Mode	Allows user to survey photos and video in the memory card and maintain files.
MENU Mode	Includes file maintenance, settings, etc.

PS: If the menu mode is not operated for 10seconds, the system will automatically switch back to the preview mode.

Operation Function

All the buttons of this scope have different functions under each mode as cross referenced below:

Button	Preview Mode	Surfing Mode	Menu Mode
▲ ▼	Acts as "Backward/Reverse" function Acts as "Forward" function	Back to previous photo or video Switch to next photo or video	Selecting the previous function or option. Selection the next function or option
OK	To enter into the Menu mode	To delete photos or videos	Confirms selected function or option
ESC	To return to the Preview mode	To return to the Preview mode	To return to the Preview mode
	To take photograph	"NEXT" (under the Preview mode) "Start/Stop" (under the REC mode)	Displays information on the software version for technical repairs and maintenance
	To start/stop video recording	To return to the Preview mode	To return to the Preview mode

Main Menu

Under the preview mode: Press MENU button to display the various optional functions as follows:

DELETE ALL

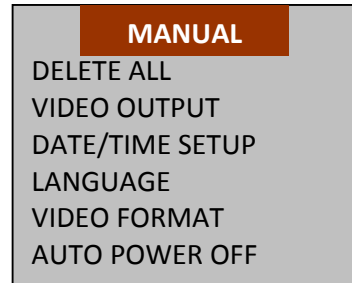
VIDEO OUTPUT

DATE/TIME SETUP

LANGUAGE

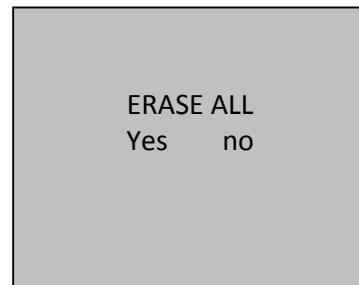
VIDEO FORMAT

AUTO POWER OFF



DELETE ALL set up

Displays a frame which includes two options as in picture 2. Use "PREV" and "NEXT" to select "Yes" or "No" and press OK to confirm.



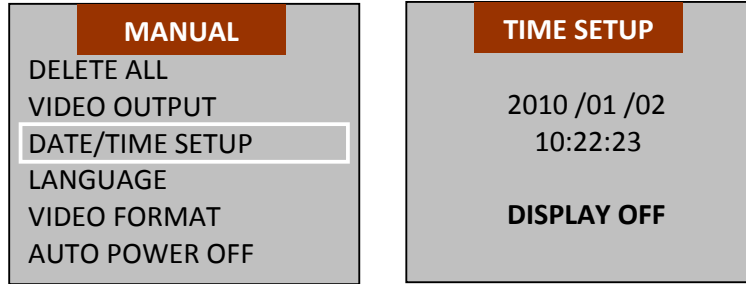
VIDEO OUTPUT order

Once you insert the video cable, select this function to transfer the viewing screen from the main unit to television screen, the main unit screen will turn black. You can transfer the screen back to the main unit by selecting the same function.

DATE/TIME SETUP

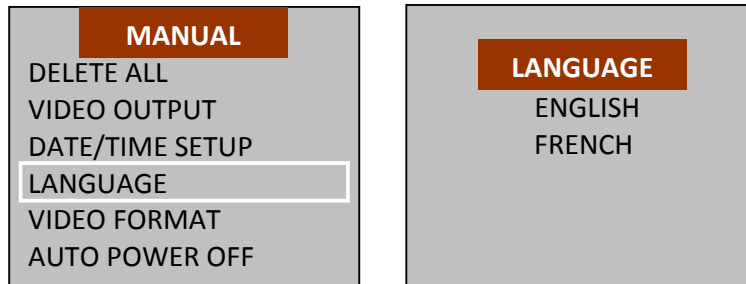
Press PREV button & NEXT button to select year/month/day or hour/minute/second, and press SEC button for increasing numbers and press PHOTO button for reducing number.

If the "Date/Time" set up indicates "ON" status, the photo taken will include the Time/Date of occurrence.



LANGUAGE SETUP

To select language. (2 optional language)

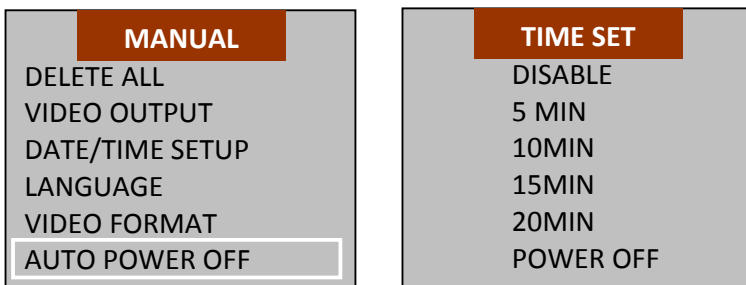


VIDEO FORMAT SETUP

To setup the TV output format

AUTO POWER OFF SETUP

To setup time for auto power off

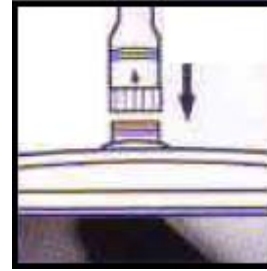


Operation

Installing (Getting started)

Step 1

Connect the probe with the main unit. Place the main unit facing inward and connect the probe (marked with an arrow) by inserting it to the main unit and screwed on (refer to picture 1)



Step 2





















Press POWER s the button for 3-5 seconds to turn it on, then displays the sign as the one in pic 2 that will disappear in 5 seconds and then you can start the use.




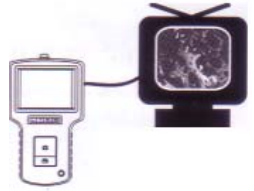
( Capacity of SD card  Capacity of battery)

Step 3

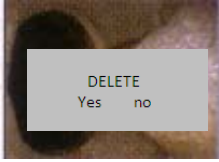
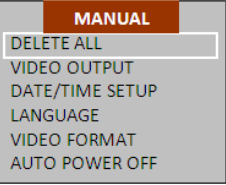
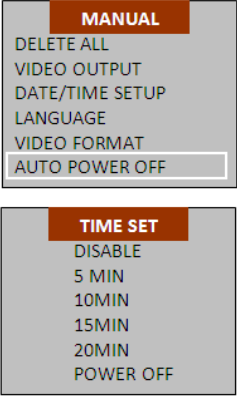
Press POWER button for 3-5 seconds to turn it off.

<p>PHOTO </p>	<p>Touch  or press  to display the picture continually. Status: After taking picture, the system automatically switch back to previous mode.</p>	 
<p>REC </p>	<p>1. Press  for video recording Status: Displays the sign  in the lower-left corner to indicate recording status. 2. Press  to stop recording. Status: The sign  in the lower-left corner disappears to indicate end of recording.</p>	  <p>P.S.: The video is saved automatically when you press  to stop recording and proceed with next action (picture taking or video recording)</p>
<p>To view photos and videos</p>	<p>1. In the preview mode press  or  Status: Will display the latest picture. 2. And press  or  to survey the first photo/video taken and the second photo/video taken. Status: Files are organized by date sequence.</p>	   <p>P.S. : Shows the previous or next actions (either taking photograph or video recording).</p>

Operation

<p>DATE/ TIME SETUP</p>	<ol style="list-style-type: none"> 1. Press OK to select. 2. Press ▲ or ▼ to set Date (YY/MM/DD), Time (HR/MIN/SEC). 3. Press ⏏ for adding or ⏪ for decreasing the numbers (date/time) and further pressing ⏪ will go to “DISPLAY” option and press ⏏ or ⏪ for “ON” / “OFF” DISPLAY option. <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="516 583 714 743" style="border: 1px solid gray; padding: 5px;"> <p style="text-align: center; background-color: #e67e22; color: white; margin: -5px -5px 5px -5px;">MANUAL</p> <p>DELETE ALL VIDEO OUTPUT DATE/TIME SETUP LANGUAGE VIDEO FORMAT AUTO POWER OFF</p> </div> <div data-bbox="738 583 937 743" style="border: 1px solid gray; padding: 5px;"> <p style="text-align: center; background-color: #e67e22; color: white; margin: -5px -5px 5px -5px;">TIME SETUP</p> <p style="text-align: center;">2010 /01 /02 10:22:23</p> <p style="text-align: center;">DISPLAY OFF</p> </div> <div style="text-align: center;">  <p style="display: flex; justify-content: space-around; margin-top: 5px;"> Display Date Cancel Date </p> </div> </div>
<p>Input/Output Pictures into External Viewing Screen</p>	<ol style="list-style-type: none"> 1. Connect the black AV cable with the main unit to the AV jack on the right side of the main unit. (P.S. : Make sure the other side of the AV cable is well connected with the external viewing screen) 2. Press OK to select 3. Press ▲ or ▼ to transfer to “Video Output” option. 4. Press OK again. <div style="text-align: right; margin-top: 10px;">  </div> <p style="color: blue; margin-top: 10px;">Status: Picture will output to external viewing screen PS: The function will detect automatically if AV cable already inserted in the AV jack. If not but inserted, the image screen will switch back to the main unit.</p>
<p>To Regulate Output Viewing</p>	<ol style="list-style-type: none"> 1. Press OK 2. Press ▲ or ▼ to select video format option. 3. Press OK 4. Press ▲ or ▼ to select NTSC or PAL 5. Press OK

Operation

<p>Delete Single File (Limited to Viewing Mode)</p>	<ol style="list-style-type: none"> 1. Press ▲ or ▼ to go to the required file 2. Press OK to go to the delete option 3. Press ▲ or ▼ for “Yes” or “No” option 4. Press OK to confirm 	
<p>Delete All Files</p>	<ol style="list-style-type: none"> 1. Press OK to go to “DELETE ALL” in the Main Menu 2. Press ▲ or ▼ for “Yes” or “No” option 3. Press OK to confirm 	
<p>Auto Power On/Off Setting</p>	<ol style="list-style-type: none"> 1. Press OK 2. Press ▲ or ▼ to go to the Auto Power Off option 3. Press OK 4. Press ▲ or ▼ to set up the time options (5mins/10mins/15mins/30mins) or DISABLE option (if you choose not to have this function) 5. Press OK <p>PS: The system will still automatically switch off without prior setting.</p>	

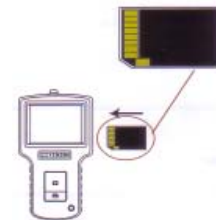
ACCESSORIES

USB Cable – enables connection to PC for convenient file transfer and maintenance.

Video Cable – connects screening to television when required.

Adaptor – enables power charging when low power is indicated.

SD card – Please refer to the picture for direction when inserting to the unit.



SD Card Routes

When you get the product, recommend you set up the time and date for the future management of the file.

The product preset time is YEAR 2007, January 1st. If file name shows first two mode codes are 11. It indicates the time is preset time.

The file name is defined not by sequence ID, but by photo saved time.

Picture file and video file are defined by the same way, but extension is different. Picture file is .JPG; Video file is .ASF.

Troubleshooting

↘ No image on the LCD monitor after turn power on:

If battery is exhausted, turn power on and then no action, please charge battery or use AC adaptor.

↘ No image but words on the LCD monitor after turn power on:

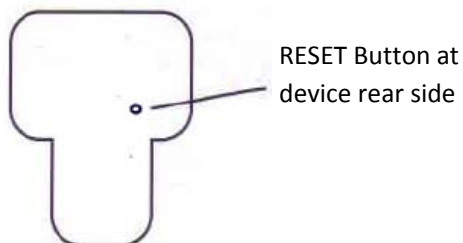
Please check connector if connected well.

↘ Cannot take pictures and video

No SD card inserted, no photo taking and video recording.

↘ Shut down:

When all the function freeze or fail, please insert an insulated needle to the hole on the back of the main unit. The system will restart automatically.



Caution

ⓘ Do not remove the SD Memory card while data is being saved to the card while photographing or video recording, as this may cause the data to be lost or the card to be damaged. While video recording it need storage mass data, we recommend using more than 80x SD card to card better quality.

Important:

Use cotton buds soaked in alcohol to clean the lens.

⊖ DO NOT use the product in dangerous environment such as oil tank.

DO NOT use chemical liquid to clean off the surface of the product.

DO NOT open the product unit, the action might damage the product and void the limited warranty.

When storing the product, be careful when bending the probe. DO NOT bend the probe to 180 degree.

Please use the original spare parts, if not, it might damage the product.

DO NOT use the product in an aircraft and medical field.

DO NOT use the product under the direct sunshine environment.

Please keep the product in dry and adequately ventilated environment.

Specification

Handle Working Temperature	-20°C to 60°C
Probe Working Temperature	-20°C to 70°C
System Storage Temperature	-20°C to 60°C
While battery in charging	0°C to 40°C



Specification

Insertion Tube & Light Source Spec.

- Image Sensor: CMOS Image Sensor
- Resolution (Dynamic / Static): 320X240 / 640X480
- Tip size (Insertion Tube) Diameter: 5.5mm
- Insertion Tube Length: 1 – 30 meter
- Frame Rate: -30 fps
- S/N Ratio: 42dB
- Exposure: Automatic
- White Balance: Fix
- Field of View (FOV): 67°
- Depth of Field (DOF): 1.5cm~10cm
- Light Source: 4 White LEDs

System Spec.

- Display: 3.5" TFT LCD 320x240 Pixels
- Power: DC5V
- Interface: Mini usb 1.1/ AV out/ Av in/
- Battery: Rechargeable Li-Polymer Battery (3.7V)
- Video Out Format: NTSC & PAL
- Recording Medium: SD card (Max. capacity up to 2G)
- Compression Format: MPEG4
- USD port
- Still Image Storage Format: JPEG (640x480)
- Video Recording Format: ASF (320x240)
- Language: English / French

Function

- ✓ Quick Snap
- ✓ Quick Video Recording
- ✓ Quick Review
- ✓ AV Out
- ✓ Video/Picture Viewer

