### GMGA MEASURING No. 33 Alley 99/120 Dinh Cong Ha, Dinh Cong Ward, Hoang Mai District, 10000 Hanoi City, Vietnam Telephone: <u>+84 845 969 336</u> Email: <u>info@gmga.vn</u> Website: <u>https://gmga.vn/</u>



World's Best-selling Videoscope forFast and Accurate Inspection User Manual



# Table of Contents

Caution	2
Introduction	3
How to Begin	4
System Environment	5
Multi-function Keys	6
Menu	7
• Delee All	8
Deleting a Specific Photo	8
AV Output	9
Date/Time Setup	9
Setting Time Display	1(
• Language	1(
• TV System	1
Auto Power Off	
Operating Instructions	12

• Power On/Off	2
• Taking Photos 12	2
Video Recording	3
• Viewing Photo/Video 1	3
• Zoom-in	4
• Mirror View	4
Specifications1	5

## Caution

- A This product is designed for industrial use only. Do not use the system for human or any other biological inspection.
- Do not disassemble the product. This presents a shock hazard and could damage the unit.
- Use only recommended components or accessories. Unauthorized accessories and components may cause damage to this product.
- ▲ To avoid danger, do not put the insert tube into any flammable liquid or gas. Oil Pass: Leadless Gasoline, Machine Oil, Diesel, Brake Oil (DOT 4), Transmission Oil, Neutral Cleanser.
- Do not use this product in a fuel tank or other dangerous environment such as a gasoline or alcohol storage tank.
- Do not bend the insertion tube over 180 degrees during usage or storage.

- Do not remove the SD card while capturing photos or videos. This can cause a loss of the image or video recorded and may damage the SD card.
- Avoid direct exposure to sunlight for long period of time. Store the system in a cool, dry and wellventilated place.
- User may clean the camera lens with a cotton swab and small amount of soft grease remover. Do not use any corrosive liquid for cleaning, such as alcohol or thinner.
- Always remove the battery before long-term not using.
- Charge in an environment where the tempera- ture range is between 10°C~30°C (50°F-86°F). Charging may not be as effective when per- formed in other environment.

2 CAUTION

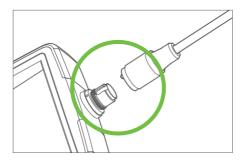
# Introduction Console

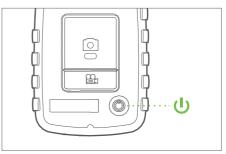




INTRODUCTION 3

# How To Begin





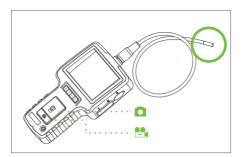
## Step 1

Insert the insert tube into the connector according to the direction of the dot and tighten the screw nut.

## Step 2

Press and hold down the power button on the console for 3 seconds until the image is displayed on the monitor.

4 HOW TO BEGIN



## Step 3

Aim the camera lens at the selected object. Press to capture a image, or press to begin recordinga video.

## System Environment

This product provides three simple working modes: Preview, Browse and Manual Mode.

### **Preview Mode**

Users will find themselves working under Preview Mode as soon as they activate the console. While aiming the camera tip on targeted object, the image will be displayed on the monitor simultaneously. All photo-taking and video recording are executed under Preview Mode.

### **Browse Mode**

Users may instantly view photos and progress basicfile maintenance feature.

#### Manual Mode

User may complete their preferences setup and file maintenance here.

NOTE: THE SYSTEM RETURNS TO PREVIEW MODE AUTOMATICALLY AFTER 150 SECONDS WITHOUT ANY RESPONSE IN MANUAL MODEL.

# **Multi-function Keys**

Each console button performs a unique function depending upon the Mode in which the system is being operated.

PREVIEW MODE	PREVIEW MODE	BROWSE MODE	MANUAL MODE
	Switch to Browse Modeto view photos and videos	Move to previous photoor video	Move up through the main manual
▼	Switch to Browse Modeto view photos and videos	Move to next photo or video	Move down through the main manual
ок	Entering Manual Mode	Play/Pause video clips	Execute selected command
+ ESC ⊿ □	Press once to Zoom in. Press and hold 3 seconds for Mirror View	Return to Preview Mode	Return to Preview Mode
٥	Capture a photo	N/A	N/A
	Start and stop video recording	Delete photo	N/A

6 MULTI-FUNCTION KEYS

## Menu

#### Overview

The user may press the OK button in Manual Mode to execute desired commands.

# MENU

DELETE ALL AV OUTPUT DATE / TIME LANGUAGE TV SYSTEM AUTO POWER OFF

## DELETE ALL

Delete all files in the memory card.

## AV OUTPUT

This command will send the video signal out through the AV port. The monitor will turn black until you execute this command again.

## DATE / TIME

User may set system time through this instruction.

## LANGUAGE

Use this command to select the desired language.

## TV SYSTEM

Set up your video format.

## AUTO POWER OFF

Set the auto power off feature to your desired length of time.

MENU 7

#### **Delete All**

- Step 1 Press OK during Preview mode. IMAGE STATUS : SHOWING THE MAIN MANUAL.
- Step 2 Press  $\blacktriangle$  or  $\nabla$  for "DELETE ALL" command.
- Step 3 Press OK.

IMAGE STATUS : "YES" OR "NO" OPTION APPEARS.

- Step 4 Use  $\blacktriangle$  or  $\checkmark$  to select "YES".
- Step 5 Press OK to execute.

### Deleting a specific photo (Browse mode only)

- Step 1 Enter Browse mode, then press ▲ or ▼ to locate the photo or video you wish to delete.
- Step 2 Press 📇

IMAGE STATUS : DELETE CONFIRM.

Step 3 Press OK to execute your selected option orpress ESC to cancel.



8 MENU

### AV OUTPUT

Step 1 Plug the included AV cord into the AV socket located on the right side of the console.

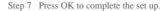
NOTE : PLEASE PLUG THE OTHER END OF THE AV CORD INTOTHE "AV IN" SOCKET ON THE EXTERNAL MONITOR.

- Step 2 Press OK during Preview mode.
- Step 3 Press ▲ or ▼ to move to "AV OUT" option.
- Step 4 Press OK.

IMAGE STATUS : IMAGE WILL BE TRANSMITTED TO THEEXTERNAL MONITOR.



- Step 1 Press OK during Preview mode.
- Step 2 Press  $\blacktriangle$  or  $\checkmark$  to move to Date/Time command.
- Step 3 Press OK to initiate the command.
- Step 4 Press 🖸 to increase the number or 📇 to decrease.
- Step 5 Press ▼ for next adjustment.
- Step 6 Repeat step 4 and 5 until the correct time/date are set.



DATE / TIME



MENU 9

## Setting Time Display

- Step 1 Press OK during Preview mode.
- Step 2 Press  $\blacktriangle$  or  $\mathbf{\nabla}$  to move to "DATE/TIME"
- Step 3 Press OK.
- Step 4 Press  $\blacktriangle$  or  $\blacktriangledown$  for "Display" option.
- Step 5 Press 🚺 to switch the "Display" function between ON/OFF.

IMAGE STATUS : PRESS O ONCE FOR ON, PRESS AGAINFOR OFF.

- Step 6 Press OK to complete set up.
- Step 7 Press ESC to return to Preview mode.



Time Display Off MENU

10



Time Display On

### Language

- Step 1 Press OK during Preview mode.
- Step 2 Press ▲ or ▼ to move to "LANGUAGE" option.
- Step 3 Press OK.

Step 4 Press  $\blacktriangle$  or  $\checkmark$  to select the desired language.

Step 5 Press OK.

LANGUAGE

## TV System

- Step 1 Press OK during Preview mode.
- Step 2 Press  $\blacktriangle$  or  $\blacktriangledown$  to move to "TV SYSTEM" option.
- Step 3 Press OK.
- Step 4 Press  $\blacktriangle$  or  $\blacktriangledown$  to select NTSC/PAL.

Step 5 Press OK.

TV SYS	TEM
	PAL

## Auto Power Off

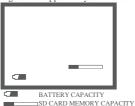
- Step 1 Press OK during Preview mode.
- Step 2 Press ▲ or ▼ to move to "AUTO POWER OFF" option.
- Step 3 Press OK.
- Step 4 Press ▲ or ▼ to select desired time lengthor chooseDisable.
- Step 5 Press OK.

AUTO POWER OFF	
	MINUTE
	MINUTE
	MINUTE
	MINUTE

# **Operating Instructions**

## Power On/Off

Step 1 To turn the console on, press and hold thebutton  $\bigcup$  for 3–5 seconds until you see the sign below appear on your monitor.



Step 2 Press and hold the U button for 3~5 seconds to turn the console off.

## **Taking Photos**

Press 🖸 button during Preview Mode to take aphoto.

IMAGE STATUS : RETURNS TO PREVIEW MODE AUTOMATICALLY AFTER PHOTO IS TAKEN.



12 OPERATING INSTRUCTION

#### Video Recording

Step 1 Press 📇 button to start video recording.

IMAGE STATUS : RECORDING TIME WILL APPEAR AT THELEFT BOTTOM OF THE SCREEN.

Step 2 Press 📇 button again to stop recording.

IMAGE STATUS : RECORDING TIME DISAPPEARS.



### Viewing Photo/Video

Step 1 Press  $\blacktriangle$  or  $\mathbf{\nabla}$  during Preview Mode.

IMAGE STATUS : DISPLAYING THE LATEST PHOTO/VIDEO.

Step 2 Press▲ or ▼ againtoview the oldestor second to last photo/video.

IMAGE STATUS : ALL FILES WILL BE STORED ACCORDING TO THE TIME SEQUENCE OF PHOTO CAPTURE OR VIDEO RECORDING.





NOTE : WHEN VIEWING VIDEOS, THE VIDEO WILL BE DISPLAYED AUTOMATICALLY UNTIL IT ENDS AND THEN THE NEXT PHOTO ORVIDEO WILL BE DISPLAYED.

OPERATING INSTRUCTION 13

## Zoom-In\*

Press  $\stackrel{\text{def}}{\text{ZPG}}$  button once and then release. A 2 times zoom will apply, indicated by a  $\oplus 2.0x$  on screen. Press again to return to normal view.



BEFORE ZOOM-IN

AFTER ZOOM-IN

#### Mirror View\*

Press and hold  $\frac{d}{drightarrow}$  button for 3 seconds. When Mirror View is activated, a mirrored view will apply, indicated by a M on screen. Press and hold for 3 seconds again to return to normal view.





WITHOUT MIRROR VIEW

WITH MIRROR VIEW

# Specifications

### CONSOLE

Dimension	117.5 X 207 X 37mm	Frame Rate	30 fps
Weight	0.383kg	Exposure	Automatic
Power	Rechargeable Li-Polymer Battery 3.7V Power supply AC 100-240V 50-60Hz Power consumption DC5.5 2A	White Balance	Fixed
Display	3.5 TFT LCD QVGA	Recharge Temperature	10°C-40 °C
Recording Medium	4G SD Card	Working Temperature	-20°C–60 °C
Video Output Format	NTSC & PAL	Storage Temperature	-20°C–60 °C
Video Output Interface	AV out		
Compression Format	Compliant with MPEG4		
Still Image Storage Format	JPEG		

SPECIFICATIONS 15

-	NOTE	
-		
-		
-		
-		

16 NOTE



