



YAMAHA

YMA-CV03Y-00

USER MANUAL



Full HD Waterproof Motorcycle & Watercraft Action Camera

CONTENTS

Main Features	2
Buttons and Camera Body	3
Installing Battery	4
Installing MicroSD card	4
Waterproof Housing	5
Mounting your Camera	6
Remote control	6
Screen - Information and Icons	7
Main Menu - Navigation	7
Main Menu - Folders	7
Video Recording – How to	8
Image Capture – How to	8
FOLDER - Video Playback	9
FOLDER - Image Viewing	10
Deleting Files	10
FOLDER – Video Settings	11
Normal Recording	11
Motion Detection	11
Set Auto Recording Start Time	11
Auto Record in Vehicle	12
Loop Record	12
Video resolution settings	12
Video Sound Record Content	12

Time Lapse Video	13
Time Stamp on Video	13
Image Resolution Settings	13
Continuous Shot Settings	13
FOLDER – System Settings	13
Language Setting	13
Date and Time Settings	14
Image Flip	14
Display Frequency Setting	14
Auto Power Off	14
Auto Screen Off	15
Volume	15
Format and Reset	15
Memory Info	15
Camera Version	15
Firmware Update	16
Connecting to PC	16
Connecting to Television	17
Battery Charging	18
Battery Information	18
Camera Specifications	19
Troubleshooting (Link)	15
Parts Listing	20

IMPORTANT! Never risk your life or the lives of others when making a video. Accidents will happen so be prepared by becoming familiar with your Yamaha camera before using it. Do not try to adjust camera settings while riding your bike under any circumstances. Please read this manual before mounting and using your camera. **Save this Users Manual**

For support and firmware updates visit: www.ymap.motao.com

Inspect Your Camera: The camera shall be inspected upon receipt and checked for any missing parts per **Complete Parts Listing page 20 (Rear Cover)**

Repairs: All camera repairs shall be made by authorized personnel only and in conformance with the manufacturer’s recommendations or the warranty will be void..

Warranty: This Camera is covered by a limited **6** month warranty effective receipt date

For further warranty information visit **www.ymap.motao.com**

Main Features

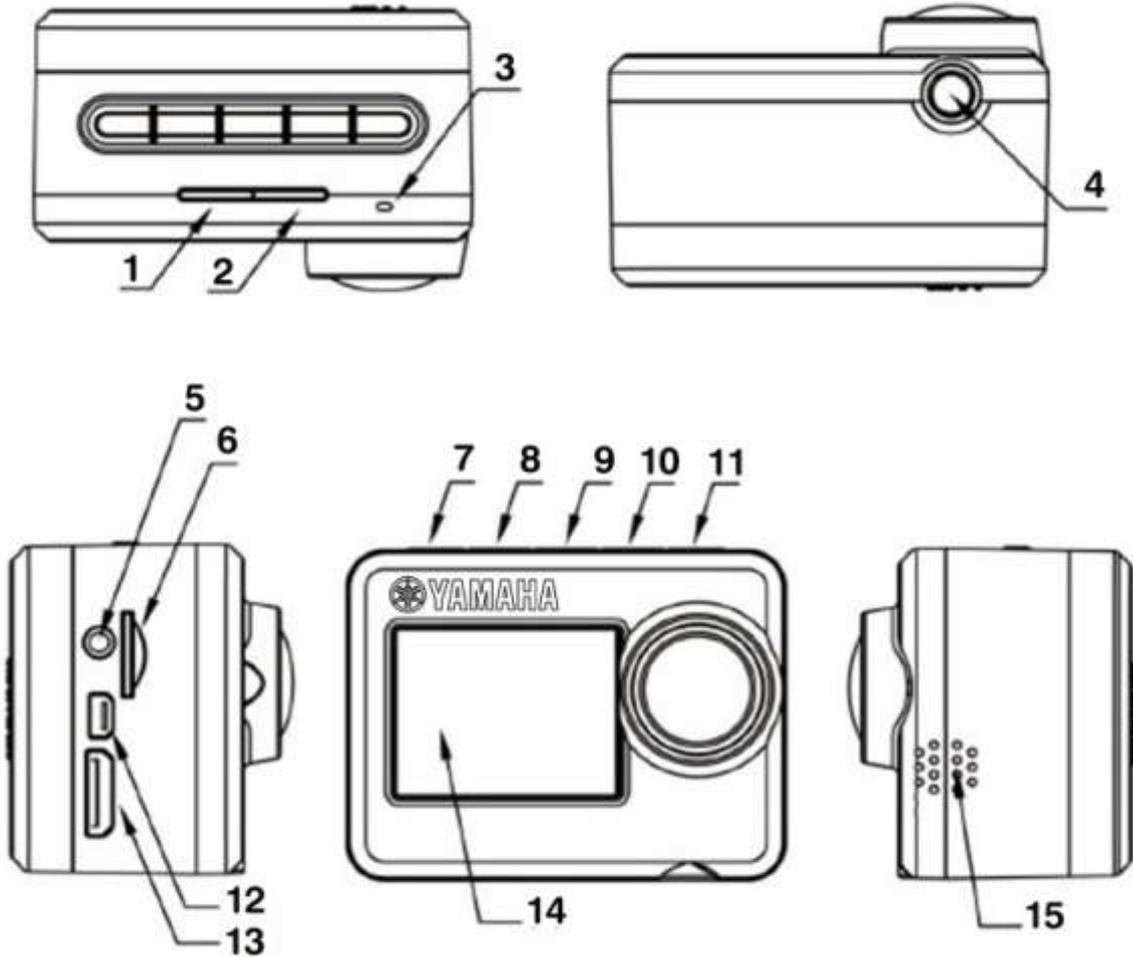
- 480 x 240, 1.5" TFT LCD Screen
- 5.0MP FULL HD CMOS sensor
- 170° Super wide angle FOV(field of view) under 720P, 127 ° under 1080P 720P
- H.264 Compression into MP4 video format
- 20 Meters (60 Feet) Waterproof
- RF wireless remote controller (requires manual power on)
- Support Timing record, Motion detect record, Auto record and Loop record
- Support Timing Capture (Self-timer) , Continuous capture
- Zoom focus available under 720P video record and Picture capture mode
- Video resolution Settings:

16: 9 Full HD 1920 x 1080P	30FPS
4: 3 Full HD 1440 x 1080P	30FPS
16: 9 HD 1280 x 720P	60FPS
16: 9 HD 1280 x 720P	30FPS
4: 3 WVGA 848 x 480	60FPS
- Picture resolution Settings:

4000 x 3000	12MP
3200 x 2400	8MP
2592 x 1944	5MP
- Video & Picture playback
- Support 1GB~32GB High speed Micro-SD memory card –
(8 GB RiData Class 10, MicroSD card Included only in Yamaha 2013 promotion package)
- High speed USB2.0 interface for Power charge and Data transfer
- HDMI、 USB and RCA Cable output optional

*The camera supports Continuous burst, Motion detection and Time Lapse capture.
For full details on these settings see pages 11 thru 13*

Camera Buttons and Ports

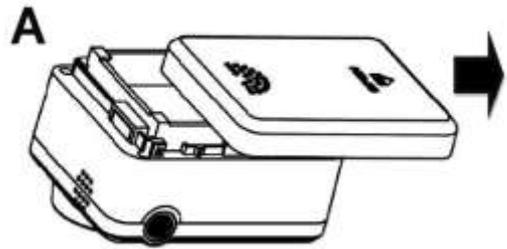


1. Video Record Indicator (red)
2. Power Indicator (red) & Power charge Indicator (green)
3. Microphone (no Icon)
4. Tripod screw hole
5. Audio output
6. TF card slot
7. REC & Confirm button
8. UP & Zoom+
9. Menu button
10. Down & Zoom- / Remote Pair
11. Power ON & Picture Capture
12. USB Port
13. HDMI Port
14. TFT LCD
15. Speaker

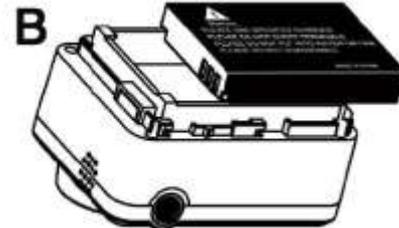
Battery Installation

Install the battery according to the graphics

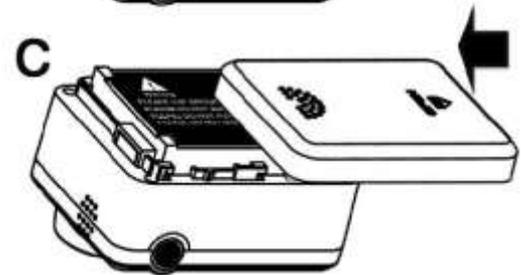
A - Open the battery cover



B - Install the battery (Note: label side face up)



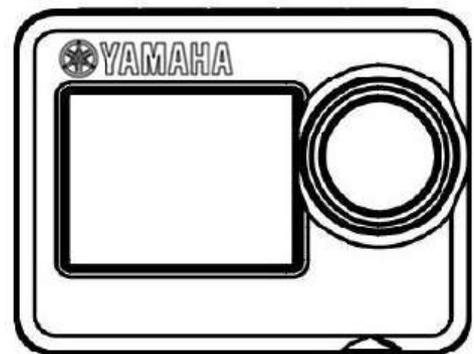
C - Close back cover



Inserting Memory Card

The camera does not have built-in memory.
A Micro SD card is required and a class 10
8GB to 32GB is recommended

Install a Micro SD card
according to graphic

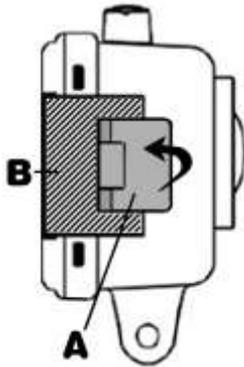


After installing the SD card, power on the camera and an SD card icon will appear in the top right corner of the screen – this indicates SD card is correctly installed. If no icon is displayed then an SD card is not installed or the card is invalid.

Using the Waterproof Housing

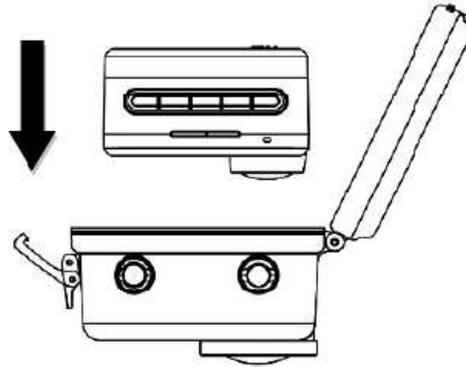
1. Opening The Latch

Per arrow in the graphic below, pull latch "A" outward and the clasp "B" will slacken and allow you to pull lock mechanism away from the rear cover.



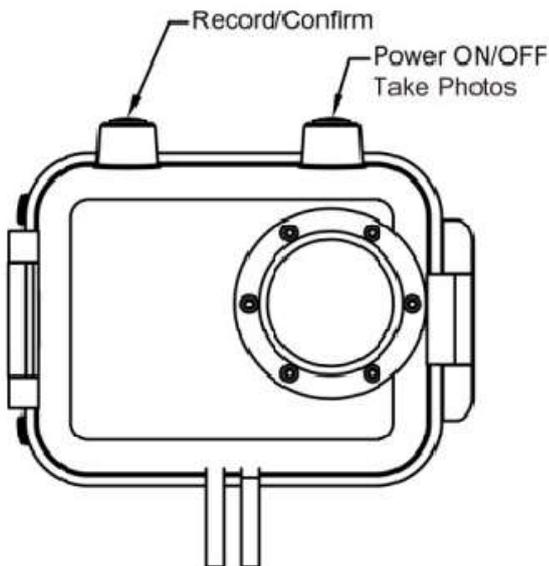
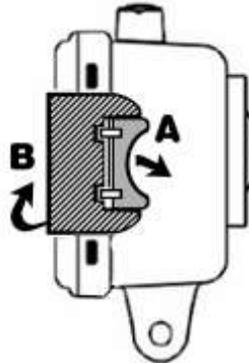
2. Insert Camera

Open hinged rear cover and insert camera as shown in the graphic below.



3. Close the Cover

Per graphic to the right, First close the clasp "B" and then press inwards the latch "A" to lock tight



Two button operation only when camera is inside the waterproof housing

Note! The waterproof housing is certified at a maximum depth of 30 Meters (99 feet). Should an area of condensation form on the inside the waterproof housing this will not cause a problem for the cameras safe function. .

Mounting the Waterproof Housing

To mount, choose the best mount to for the event you are planning, The Yamaha HD camera kit includes the following clips, mounts and bases.

Main clip mount which inserts into one of two base mounts, one for flat surfaces and a curved base with 3M adhesive backing for helmet mounting.

Two tripod mounts are included, one for use with the waterproof housing and the other is used without the housing and mounts directly into the cameras built in tripod socket

Also in the kit are three mounting stem extensions.
See page 20 for complete list.



Note! Your camera mounts are rugged but they are plastic and may break under heavy stress and certain rough riding conditions therefore it is recommended that you tie a thin tether line to the camera housing. If the camera should break lose during riding it will remain tethered to the bike. Make sure the tether does not connect to or near moving parts of the motorcycle..

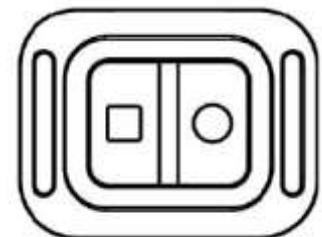
Remote Controller

START VIDEO RECORD

Remote to start video record only when Camera is Powered ON.
Remote will not start record if camera power button is OFF.

STOP VIDEO RECORD

Remote to stop video record only, will not power OFF camera.
This allows multiple recording starts and stops.



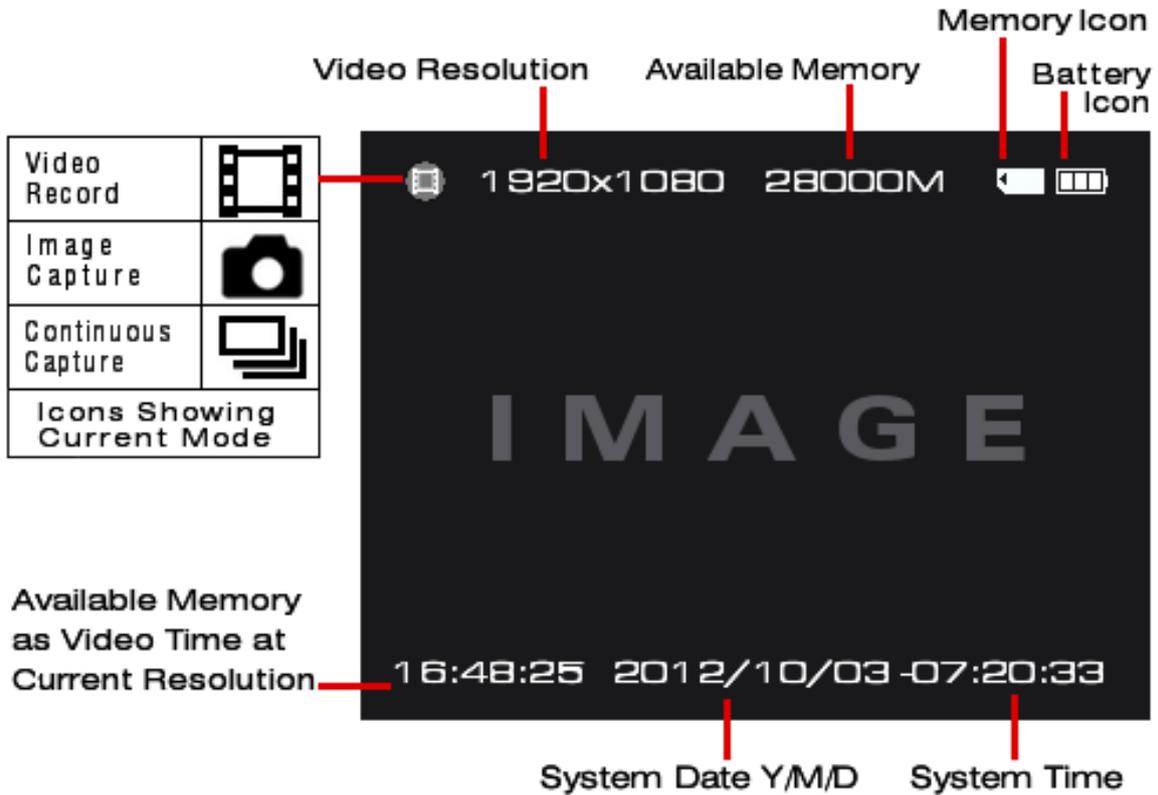
PAIRING A REPLACEMENT REMOTE with CAMERA

Note – The camera and remote have been pre-paired at the factory when manufactured. This feature is only necessary when a new remote control replaces the factory paired remote

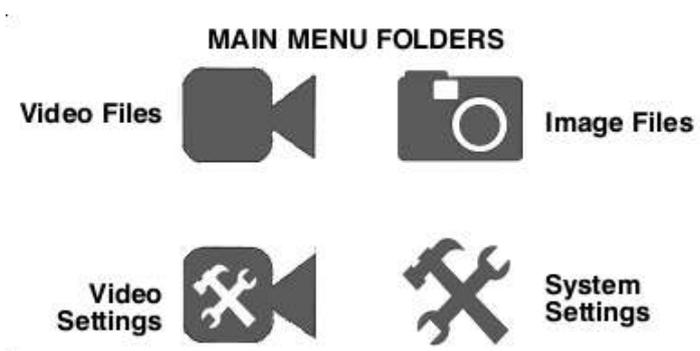
1. Hold down the “<” button on the camera when in power OFF state. Don’t let go.
2. Then press POWER button to turn ON the camera.
3. When camera has powered on immediately press the  button (Start Video Record) and immediately release the “<” button.
4. When pairing the screen will go dark during the process. If pairing is a success the camera will power ON automatically. If pairing has failed the camera will power OFF automatically.

System Boot Screen

Opening screen Icons and Information which will display along with an image of what the camera lens is pointing at.



Main Menu



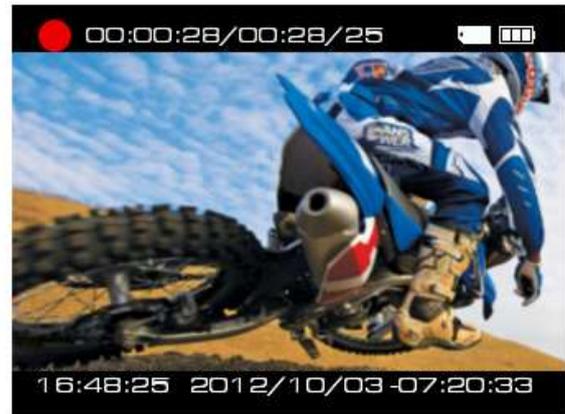
Pressing the **MENU** button opens a directory with four folders. This easy to navigate directory stores all your videos, images and is where settings are changed for the feature you need. The icons shown link as follows:

Navigation

Scrolling is the use the "< or >" buttons on the button bar. Navigating the menus and making settings in this camera will require scrolling. When in a menu, the active folder's icon will be highlighted with an orange border around it. Additionally the Video and Image folders will also tally the number of files contained in them in the top corner of the folder icon.

Video Recording

1. Press  button to turn on the camera.
2. Press **REC** button to start the video record, a red icon will flash on the screen to indicate camera is recording.
3. For Zoom, Press " <" or ">" **Scroll** buttons.
4. To stop recording, press **REC** again and your video will be saved up to that point.



Video Screen

Note! Zoom feature not available when camera is inside its waterproof case.

Image Capture

1. Press  button to turn on the camera.
2. Press  button again while camera is on to take a picture. While in image capture mode a white camera icon will be on the screen. When a picture is taken the icon will flash red then go back to white.
3. When camera icon is white zoom is possible by pressing the "<" or ">" **Scroll** buttons.



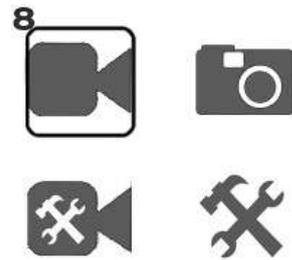
Camera Screen

IMPORTANT! Each video and image file is recorded with a default name the camera recognizes. Do not rename images on the Micro SD card as the image name will not be recognized and will not have a thumbnail in the folder. Do not store any images on your MicroSD card from other cameras. The Yamaha HD Camera can only recognize images with a **CAMY** prefix and videos with a **MOVY** prefix and 4 number suffix

Video Playback

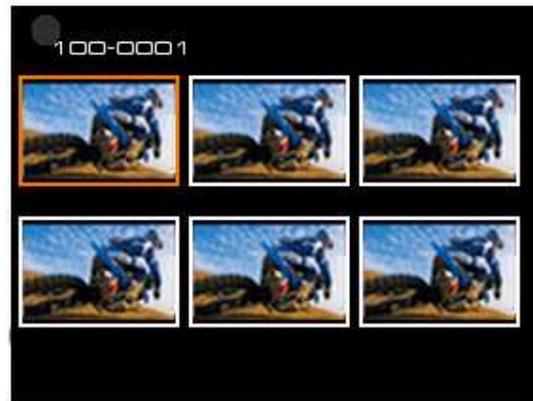
1. Press **MENU** button to enter the main menu
Press **Scroll** buttons to choose the **Video Folder**.

In the example Menu screen here the Video Folder is highlighted and the total files in the folder is displayed in the upper left corner. Here it shows 8 video clips.



Main Menu Screen

2. Press **REC** button to enter the folder. Video clip thumbnails will display as per example Thumbnail screen. The active thumbnail will be highlighted with an orange border,
3. Press **Scroll** buttons to cycle through and Stop at the video clip you want to play.



Thumbnail Selection Screen

4. At the highlighted thumbnail, Press **REC** to confirm and the video will fill the screen, immediately press **REC** once more to start video play back.

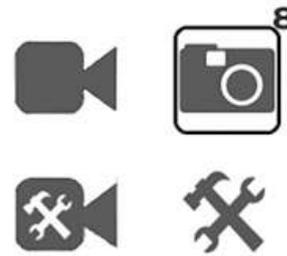


Video Selection Screen

Browse Images

1. Press **MENU** button to enter the main menu
Press **Scroll** buttons to choose the **Image Folder**.

The quantity of images in the folder will display on the top corner of the folder icon. If the number of images displayed is 0 (zero), the folder will not open.



Main Menu Screen

2. Press **REC** button to enter the image folder.
All the images will be displayed in thumbnail sets of 3 per row'. The active thumbnail will be highlighted with an orange border.

3. Press **REC** to open the Image.



Thumbnail Image Selection Screen

4. To see next image in the folder press ">" button.

To return to thumbnail view Press **MENU** and **MENU** again to return to Main Menu.

Deleting Files

Press and hold **MENU** button while browsing images or when an image has been selected - The **Delete Option** Menu will display on the screen. Use **Scroll** buttons to choose what you want'

Settings::

No : cancel current operation and quit

Yes : confirm current operation and delete the single image.

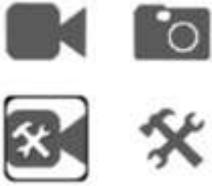
ALL : confirm deletion of all files in the folder

Press **REC** button to confirm deletion or cancel if **No**.

Note! Once you delete files from the MicroSD the files are permanently deleted and can't be recovered. So we recommend making a copy with via file transfer to your computer before deleting files directly from camera.

Deletion via Loop Record – See page 12

Video Setting



Press **MENU** button enter the main menu.
Press “<” or “>” buttons to scroll the Video Setting folder.
Press **REC** button to enter.

VIDEO MODES:

Normal REC

Camera will start recording video once the **REC** button is pressed. A small red circle start to flash on the screen indicating recording. Also half of the red LED light bar will steady flash. When your finished Press **REC** button again to stop video record, The video clip will automatically be saved. Pressing the **REC** button again will start a new video clip.

Motion Detect

Camera will start recording video only when motion activates a detector. When the lens detects movement It begins to record and the camera will not stop recording video until all movement has ceased.

The movement detector will require 10 seconds shut down to reset before it can start movement detection again at each additional restart. The default video record time is 1 minute if the movement was less than 30 seconds. The camera will not stop recording video if movement is constant the camera will record until battery runs out or memory is full and no longer has space.

Time REC

Sets a time to start recording video automatically. For This feature you must first set your time Rec settings by Pressing **REC** to next Video Mode screen, then press **Scroll** button to **Time Rec** and press **REC**.

The **Time Rec Settings** menu will have 5 lines of numbers with default numbers or unset in white. A graphic explaining these numbers and what they mean is to the right. Entering dates past or values beyond a maximum set limit will invalidate the setting.

TIME RECORD SETTINGS					
Year	Month	Day	Hour	Minute	Video length
2013	08	30	11	45	05
2013	09	00	01	30	10
2013	10	03	08	20	05
2013	10	30	10	00	05
2013	12	31	12	59	99
Max Values					

To make a time setting use the **Scroll** buttons to add / subtract the number. Press **REC** button to set the option desired. After an option is set, Press “>” to move to next option or to move down to next line.

2013 08 30 11 45 05	Yellow - Highlighted scroll setting
2013 09 00 01 30 10	Red - Active being set/ White not set
2012 10 03 08 20 05	Green - All settings Valid
2013 10 30 10 00 05	Red - Something in this setting is invalid
2013 12 31 12 59 99	White line - Default, no settings made

Auto REC

This feature is for use if camera is used as a “black box” in a vehicle

The camera will start recording video automatically after vehicle has been turned on. For this feature to work presets must first be made in “Auto REC time” settings menu.

OFF : Not activated

10 Seconds : Camera will start recording 10 Seconds after starting vehicle.

20 Seconds : Camera will start recording 20 Seconds after starting vehicle.

1 Minute : Camera will start recording 60 Seconds after starting vehicle.

Note : This function is designed for using camera without waterproof, inside a car as a black box. A cigarette lighter power adapter would be required. Only the Motao No.: CV340 cigarette lighter adapter will work with this camera. Other lighter power cords will not work with this camera. Motao No.: CV340 is a special order accessory.

Loop Record

The camera will delete the earliest video clip for newest video clip if memory is not enough. Select the “ Loop Setting” and press “ **REC**” button to enter the time setting.

OFF : Loop record is not activated

1 Minute: 1 minute per video clip.

5 Minutes: 5 minutes per video clip.

Note: Loop record only available under Normal record and Auto REC mode.

Video Resolution

Choose suitable resolution for different purpose, lower resolution will save power and memory for longer time record.

Resolution		Frame Rate	Ration
1920x1080	Full HD 1080P	30FPS	16 : 9
1440x1080	Full HD 1080P	30FPS	4 : 3
1280x720	HD 720P	60FPS	16 : 9
1280x720	HD 720P	30FPS	16 : 9
848x480	QVGA	60FPS	4 : 3

Record Content

A setting option for “Audio and Video” (video clip with sound) or “ Video “ (video clip without sound) only. Press **REC** button to confirm setting and quit.

Self-Timer

Press  button to activate this feature, camera will take pictures every 10 seconds. This feature is for use with **Time Lapse** video software.

Note : Self-Time feature upon power OFF, will reset to normal capture automatically.

Time Stamp

When set at ENABLE, the Date and Time video was taken will display on the video .

Photo Size

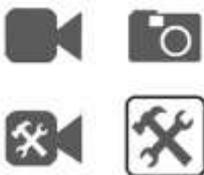
Set image resolution here. Select the size image you need. Three resolution settings:

4000 x 3000	12MP
3200 x 2400	8MP
2592 x 1944	5MP

Continuous Shot

Press MENU to enter the main menu, use Scroll button to select “ Continuous shot” menu, press REC to confirm and when in the menu choose the quantity of shots.

System Setting



Press **MENU** to enter the main menu,
Press “< or “>” button to System Setting icon (hammer and wrench)
Press **REC** button to bring up System Settings menu.

Language Setting

Select the language and press **REC** button to confirm.

Date & Time Setting

Date Setting:

Press **REC** to select the option, Press **REC** again to next option select, use **Scroll** buttons to change.



2013: **Year** option, Red color means active for changing

10 : **Month** option, use **Scroll** buttons to select, press **REC** to confirm.

15 : **Date** option, use **Scroll** buttons to select, press **REC** to confirm.

Time Setting:

Press **REC** to select the option, **Hour** will be in red, use **Scroll** buttons to change. Then **REC** to confirm switch to **Minute**, use **Scroll** buttons to change and **REC** to confirm.

Image Flip

Active this function when you need to install the camera at upside down position, to make right video recorded. The recorded image will flip 180° .

Display Frequency

Please choose the correct frequency according to your country or area, picture would flash if incorrect frequency set.

Auto Power OFF

If you want the camera power off automatically after some time, then activate this function and set a power off time. Camera will power off no matter what state its in.

Press **REC** button to enter active setting will be yellow. **Scroll** to desired setting and confirm by pressing **REC**..

OFF : Not active

5 Mins : Camera will power OFF after 5 minutes.

10 Mins : Camera will power OFF after 10 minutes.

20 Mins : Camera will power OFF after 20 minutes.

Auto Screen OFF

For power saving or simply to turn off the screen when recording. Screen will turn off at set time.

Press **REC** button to enter and confirm the setting.

1 Minute : Camera will turn off the screen.

5 Minutes : Camera will turn off the screen.

Volume This option controls sound level of internal speaker, set using **Scroll** buttons.

Format

This function is for re-formatting a microSD card. **Note** : **All** data on memory card will be erased if you use this function. Data from a formatted memory card **CAN NOT** be recovered.

Memory Info

This function shows the installed MicroSD Card memory status.

Free: Amount of memory remaining on the card and

Used: The amount of memory no longer available.

Reset

The system will reset to default factory settings.

Important Note :If you have made a FRIMWARE update you must use this feature to reset the system to the new firmware adjustments. (**see page 16**)

Version

Displays the version of your camera software. (Model No. – **Version**) YMA-CV03Y-00 **01**

TroubleShooting: Please visit our customer service page at www.ymap.motao.com

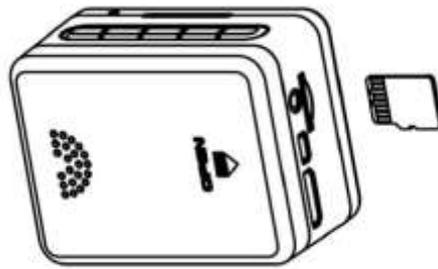
Firmware Update

The camera may have software updates and you may need to install new firmware: The Camera firmware can be found on this camera's official Customer Service web portal at:

www.ymap.motao.com

Follow the instructions at the site to download and install the firmware package: You will need to install the update onto a MicroSD card via PC then transfer the card to your camera.

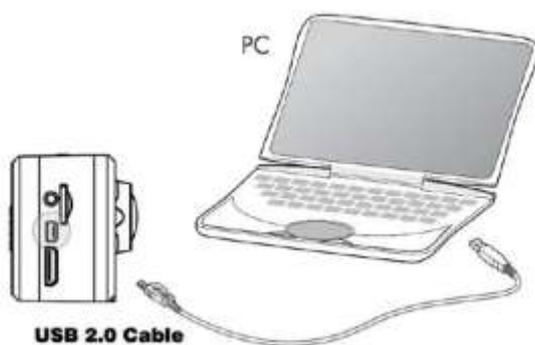
Install the SD card



Select "Start" and press **REC** button to confirm the update operation, camera will reboot automatically with a black screen when update has completed. If the firmware update or SD card failed the screen will prompt **FAIL**.

Connect with Computer

Connect the camera with computer via USB cable, available for data transfer, power charge and firmware update. Power on the camera after connect it with the computer by USB cable, and the screen will display "USB connected" like graphic below, means successfully connected.

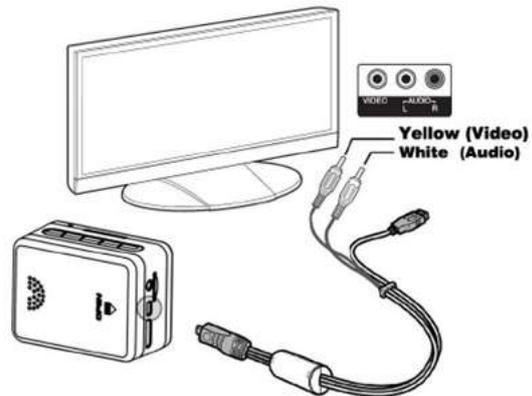


Important Note: When connected to a PC via USB all features **will not work** directly from camera, such as Record, Playback and Browse. Charging the battery will occur as well as data transfer via the connecting computer only.

Connect to Television

Via USB-RCA cable connect with TV (output)

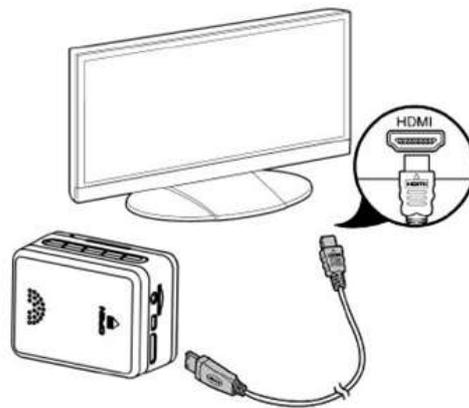
Find out the USB-RCA cable in standard accessories, USB side insert to camera, RCA side insert to TV (Yellow for Video, White for Audio)



Via HDMI cable connect with TV (output)

Please insert the **A** type connector to the TV , insert **C** type connector to camera

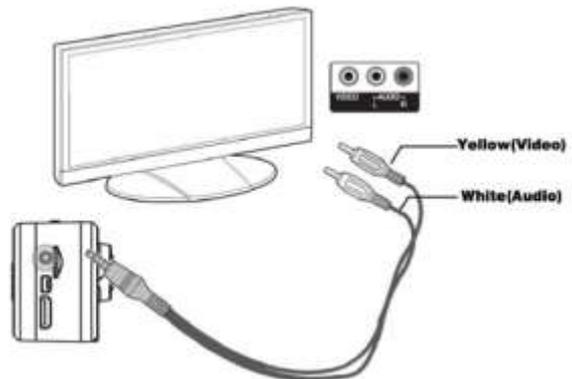
Note : The video that output to TV is 1080P resolution when playing back video clip, real-time output display is 480i only.



2.5mm - RCA cable connect with TV (output)

This cable is not included in standard accessories.

Start playing back video clip or browse pictures



- Turn the TV to AV or HDMI input channel, power on the camera
- Press **MENU** button to enter main menu, press " < " and "> " to select video or picture folder, press **REC** button to enter
- Use " < " and "> " button to select the file to playing, press **REC** to confirm, press again to play.

Note: Real-time output resolution to TV is 480i.

Battery Charging

Install the battery per instructions on page 4, then select the method of charging below.

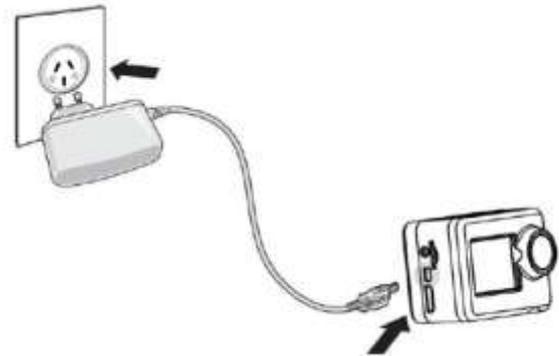
Charge by computer

Note: Power charge by computer, please make sure the camera is POWER OFF state. The green charging indicator will flash, indicator will turn off after full charged.



Charge by Wall charger

The Yamaha camera includes an wall socket direct charger made specifically for the camera. It plugs into the cameras mini USB port



Charging and Battery Tips:

1. Avoid completely draining of power before recharging
2. To extend battery life, battery should be fully charged before it is used for the first time.
3. When storing the camera for a long period, please remove the battery and store it separately.

Charging Specifics

Full charge time	Standby time	Video Record Time
3.5 Hours in Power ON state	Approximately: 3.5 Hours	Approximately : 110 Minutes (1080p)
2 Hours in Power OFF state		

Battery Icon instruction

	>75% electric quantity		>35% electric quantity
	>10% electric quantity		<10% electric quantity

Specifications

		Item	Spec	Remark	
Basic Spec			Built in memory	No	
			TF Card	1-32 GB	Support SDHC
	LCD	Size	1.5 inch		
		Resolution	480 x 240		
	Sensor	Size	1/2.5 inch	CMOS	
		Image Pixel	2592H x 1944V		
	Video	Output Interface	HDMI/USB/RCA		
	Audio	MIC	Built in		
		Output Interface	HDMI/USB/RCA		
		Speaker	Built in		
	PC Interface	USB	USB 2.0	High Speed	
Power	Battery	3.7[V], 800[mAh]	Li-ion Battery		
	DC Charger	DC 5V, 1200mA			
Main Unit Spec	Main Unit Dimension		58.6x31.2x44.8mm		
	Weight		85g	With Battery	
	Waterproof Housing Dimension		75.3x37.9x58.5mm		
Other Function	Motion Detection		YES		
	Timing Record		YES		
	Auto Record		YES		
	Loop Record		YES		
	Continuous Capture		YES		
	Self-Timer		YES		
	Zoom Focus		YES		
	Time Stamp		YES		
	Image Flip		YES	180 ⁰ Upright	
	Video Quality Option		YES		
	Support Record Under Screen Off		YES		
	File Protection While Low Power		YES		

		Item	Spec	Remark
Record Spec	Auto Power OFF Option		YES	5, 10, 20 Minutes
	Video Record	Optional	FULL HD 1920 x 1080 30FS	
			FULL HD 1440 x 1080 30FS	
			FULL HD 1280 x 720 60FS	
			FULL HD 1280 x 720 30FS	
			QVGA 848 x 480 60 FPS	
	Capture	Optional	4000 x 3000 12MP	
			3200 x 2400 8MP	
			2592 x 1944 5MP	
	Sound Record		NO	
Play Back	Slide Playback		NO	
	Thumbnail Browse		YES	2 x 3 Matrix
	Video	Support	Full HD 1920 x 1080	HD 1280 x 720
			Full HD 1440 x 1080	WVGA: 848 X 480
			HD 1280 x 720	
		Frame Rates	30 FPS	60 FPS
		File Format	FULL HD MP4 H.264/MPEG4	
Playing Speed	Optional	X1, X2, X4, X8		

Parts Listing

