Unit: ± 0.5 mm

Feature

- Miniature size
- Outstanding quality
- VGA image pixel

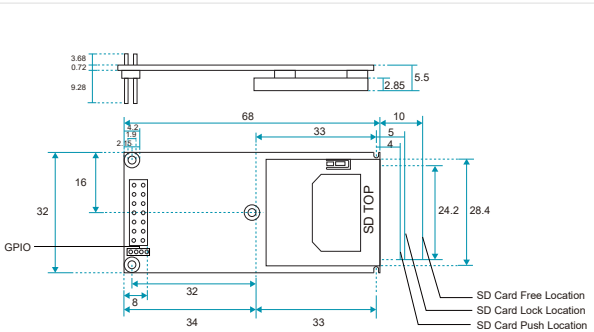
External Microphone



▲ MP-VRM100 ▲ MP-VRM200 ▲ MP-VRM200HD

Specification

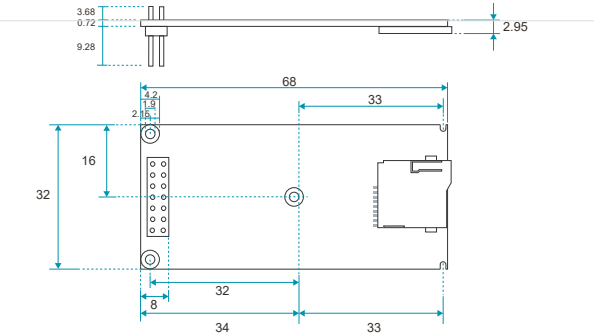
Model No.	VRM 100	VRM 200	VRM 200HD	VRM 103	VRM 203	VRM 203HD
Resolution	640 x 480 @ 30 fps (max) / VGA	640 x 480 @ 30 fps (max) / VGA	640 x 480 @ 30 fps (max) / VGA 1280 x 720 (HD 720p) @ 30 fps (max) / VGA	640 x 480 @ 30 fps (max) / VGA	640 x 480 @ 30 fps (max) / VGA	640 x 480 @ 30 fps (max) / VGA 1280 x 720 (HD 720p) @ 30 fps (max) / VGA
Zoom in/out	N/A	N/A	Yes	N/A	N/A	Yes
Memory	Support up to SDHC 32GB (SD Card memory slot)	Support up to SDHC 128GB (Micro SD Card memory slot)		Support up to SDHC 32GB (SD Card memory slot)	Support up to SDHC 128GB (Micro SD Card memory slot)	
Storsage Temperture	-25° ~ + 45°C					
Compression	MPEG 4 ASF file	H.264 (.mov) file		MPEG 4 ASF file	H.264 (.mov) file	
Playback	Synchronized audio & video recording					
Function	AV In Mode Play Mode Preview OSD displaying icons SD card Update Normal REC Mode Loop overwrite REC Mode	Time-lapse photography Self-timer Preview OSD displaying icons SD card Update Setup REC Mode Normal REC Mode Loop overwrite REC. Mode Motion detect REC Mode RTC date and time stamping		AV In Mode Play Mode Preview OSD displaying icons SD card Update Normal REC Mode Loop overwrite REC Mode	Time-lapse photography Self-timer Preview OSD displaying icons SD card Update Setup REC Mode Normal REC Mode Loop overwrite REC. Mode Motion detect REC Mode RTC date and time stamping	
Snapshot	JPEG					
Power(No camera)	5V / 380mA	5V / 580mA		5V / 380mA	5V / 580mA	
OSD menu	N/A	Yes		N/A	Yes	
Setting	N/A	Smart OSD menu		N/A	Smart OSD menu	
Video (Input / Output)	Analog Signal Input (NTSC/PAL) / TV output					
PC Interface	N/A				USB 2.0	
Dimension (mm)	Ø 32 x 68					



MP-VRM100



▲ MP-VRM103 ▲ MP-VRM203 ▲ MP-VRM203HD



MP-VRM200 / 200HD

* Working temperature means the camera device, not environment temperature.

Unit: ± 0.5 mm

I/O Pin Define

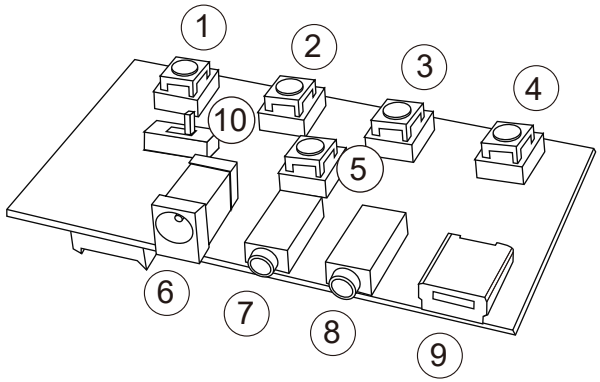


Pin 14	Pin 12	Pin 10	Pin 8	Pin 6	Pin 4	Pin 2
Pin 13	Pin 11	Pin 9	Pin 7	Pin 5	Pin 3	Pin 1

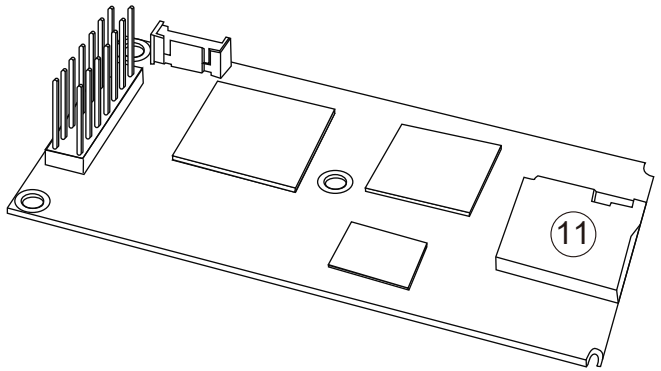
PIN	VRB03 I/O PIN	SIGNAL LEVEL
Pin1	(Input) 5V / 350 mA Power Supply	
Pin 2	GND	
Pin 3	(Input) NTSC Composite Video in	
Pin 4	(Input) Mono Audio Line in	
Pin 5	(Output) NTSC Composite Video out	
Pin 6	(Output) Mono Audio Line out	
Pin 7	(Output) SD Card full or Error LED out (high: SD Card Full or Error low: Normal)	Off On Off
Pin 8	(Output) Recording / LED out Recording-> high: SD Card Recording low: Stop	Off Off
Pin 9	(Input) Rec Control pin (Normal High Low Active)	Rec Stop Rec
Pin 10	(Input) Mode pin input (Normal High low active)	Mode
Pin 11	(Input) Menu pin input (Normal High low active)	Menu
Pin 12	Down (Normal High low active)	Down
Pin 13	Up (Normal High low active)	Up

OVERVIEW

MP-VRM100-JIG



MP-VRM200

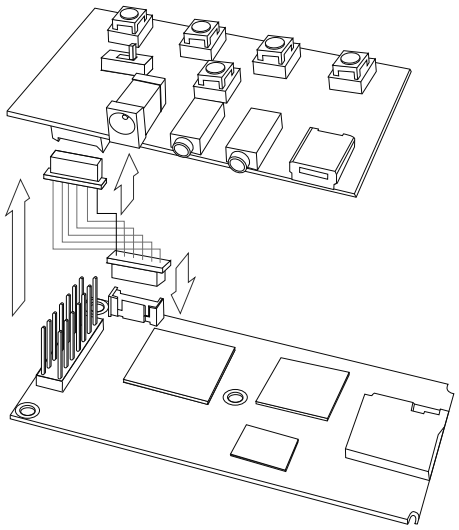


1. Down / Forward
2. Mode
3. Menu
4. Up / Rewind
5. REC. / OK
6. +5 VDC In
7. AV Output (2.5 mm Earphone Jack)
8. AV Intput (2.5 mm Earphone Jack W / Camera Power DC 5V)
9. Mini USB
10. ON / OFF Switch
11. Micro SD Card Slot

Unit: ± 0.5 mm

INSERT TO MP-VRM103-JIG

1. MP-VRM200 or MP-VRM200HD insert to MP-VRM100-JIG.

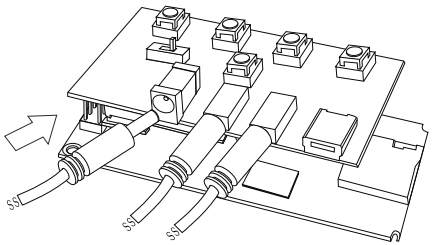


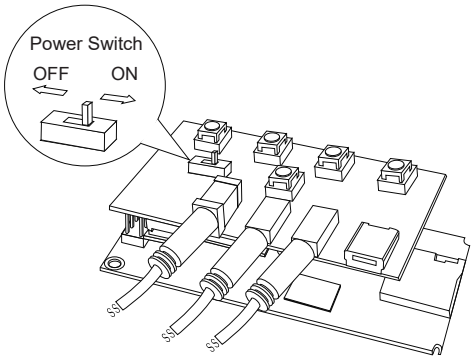
MP-VRM100-JIG

MP-VRM200
MP-VRM200HD

POWER INPUT

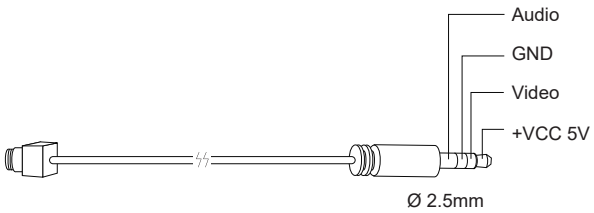
1. Adaptor connect to DVR.
2. When turning on the device, LED D1, D2 will be on. After the device is already turned on, LED D1, D2 will be OFF.
3. After turning on the device and entring AV_In Mode, at the same time AV_Out, no OSD shown on the screen.

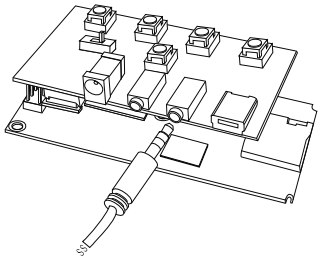




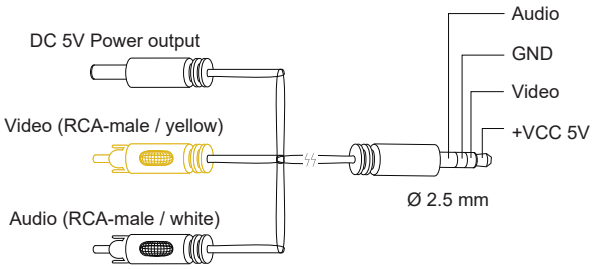
CONNECTING TO EQUIPMENT

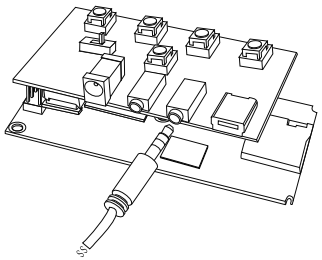
1. AV INPUT: DVR power DC 5V (350 mA) output for camera.





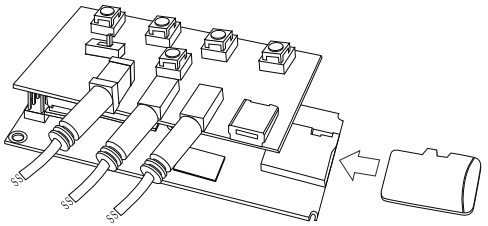
2. AV OUTPUT: AV cable connect to DVR according to diagram.

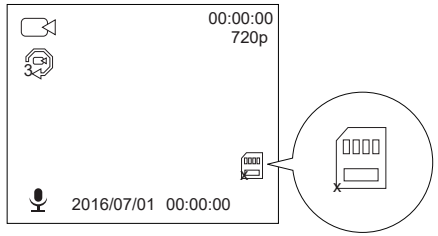




MICRO SD CARD SLOT

1. Insert mico SD card (support up to 32GB) to DVR according to diagram.
   When mico SD card is not inserted, the screen ontification will show "no SD card".

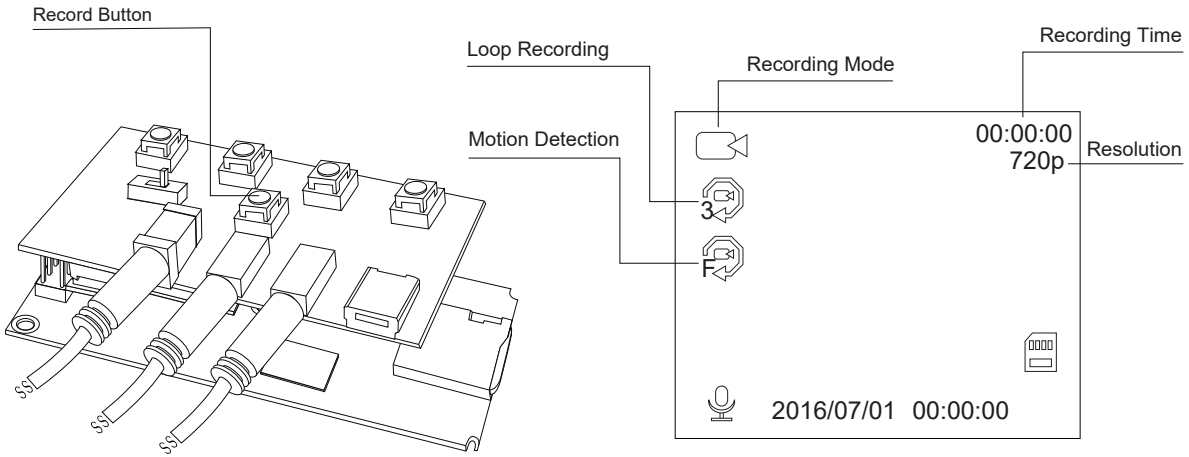




Unit: ± 0.5 mm

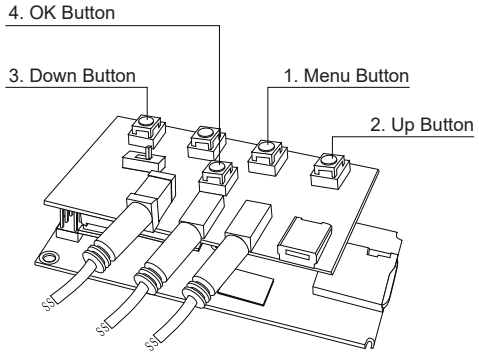
RECORDING [●REC]

1. Press "Record Button" to record video. Video file format (.MOV)



RECORDING MENU-VIDEO

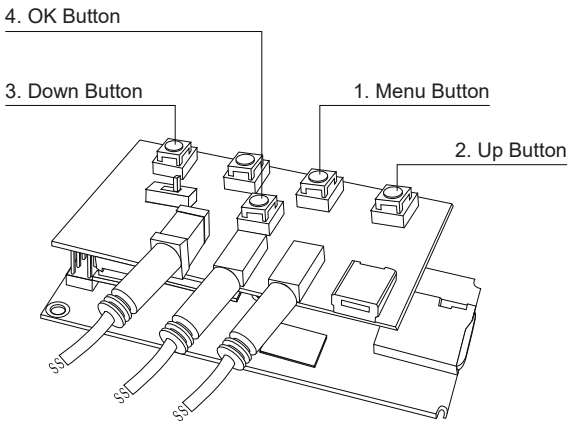
1. Video setup: Press "Menu Button".
2. Select item: Press "Up Button" or "Down Button". Press "OK Button" to finish setup.

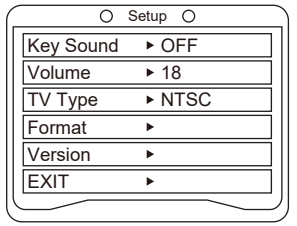


Item	Function	Description
Resolution	720p 1280x720 VGA 640x480	Recording resolution
Loop Recording	off 1 minutes 3 minutes 5 minutes	Loop recording is the process of recording to erasing the previously recorded material and replacing it with the new content.
Motion Detection	off / on	Motion detection is the process of detecting a change in the position of an object to record automatically.
Date Stamp	off / on	

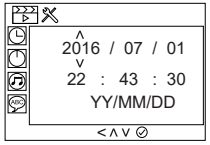
RECORDING MENU-SETUP

1. Video setup: Press "Menu Button".
2. Select item: Press "Up Button" or "Down Button". Press "OK Button" to finish setup.





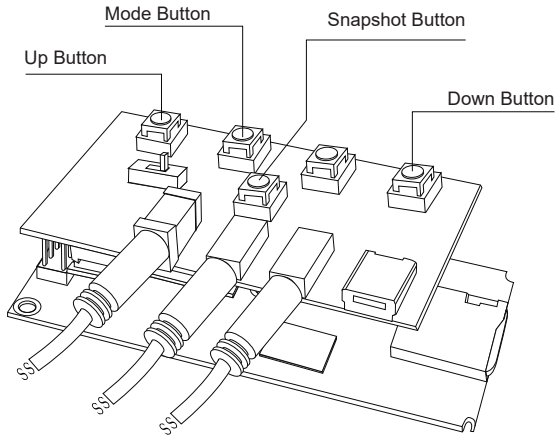


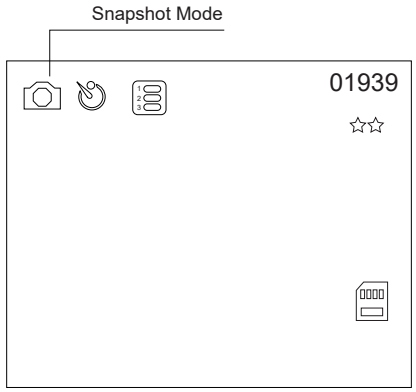
Item	Description
Date / Time	1. Setup time and date: Press "up button" or "down button". Press "OK button" to finish setup. 2. Go back to recording mode: Press "menu button". 
Auto Power Off	off / 1 minutes / 3 minutes / 5 minutes
Beep Sound	off / on
Language	English / 繁體中文 / 簡體中文
TV Mode	NTSC / PAL
Format	SD card format
Default Setting	Reset setting to defaults.
Version	M000.0606.0000.0524
Volume	15 (Factory default)

Unit: ± 0.5 mm

SNAPSHOT

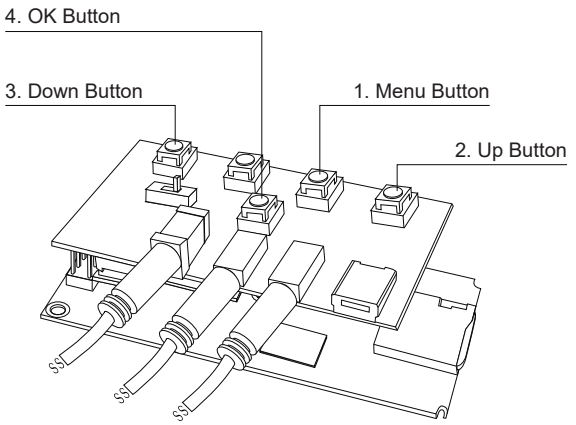
1. Capture snapshot: Press "Mode button", then switch to snapshot mode, and then press "Snapshot Button". Image file format (.jpg)
   (Zoom in image: Press "Down Button" ; Zoom out image: Press "Up Button".)
2. Go back to recording mode: Press "Menu Button" twice.

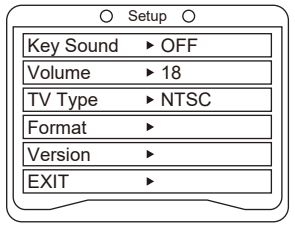




SNAPSHOT MENU-SETUP

1. Setup snapshot: Press "Menu Button" twice.
2. Select item: Press "Up Button" or "Down Button". Press "OK Button" to finish setup

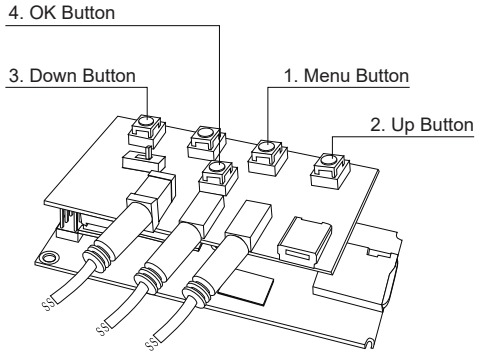




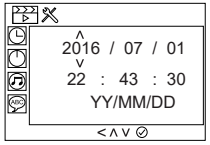


SNAPSHOT MENU-IMAGE

1. Image setup: Press "Menu Button".
2. Select item: Press "Up Button" or "Down Button".
3. Press "OK Button" to finish setup.



Item	Function	Description
Capture Mode	Single 2S Timer 5S Timer 10S Timer	Setting time for self-time.
Sequence	off on	
Quality	Fine ☆☆☆ normal ☆☆ Economy ☆	Image quality
Quick Review	off 2second 5second	Time to preview image after capture.
Date stamp	off on	

Item	Description
Date / Time	1. Setup time and date: Press "up button" or "down button". Press "OK button" to finish setup. 2. Go back to recording mode: Press "menu button". 
Auto Power Off	off / 1 minutes / 3 minutes / 5 minutes
Beep Sound	off / on
Language	English / 繁體中文 / 簡體中文
TV Mode	NTSC / PAL
Format	SD card format
Default Setting	Reset setting to defaults.
Version	M000.0606.0000.0524
Volume	15 (Factory default)