





Read the following precautions before operating the XtendaCam HD™ Inspection Pole.



Contact with power lines can result in death or serious injury.

#### The following actions will void The warranty:

**DO NOT TWIST THE CARBON TUBES** when adjusting the length of the pole. This will effect the internal communications cabling and destroy the mechanism.

Do not remove the bottom cover from the battery base.

The camera head on the MOTORIZED TILT XtendaCam IS WATERPROOF, HOWEVER, the control pad and the battery are NOT waterproof, they are "splashproof" only. Do not submerge the control pad, display and battery.

# Leg Assembly





- 1. Remove the 2 legs from the storage case.
- 2. Thread in one of the legs into the collar at the working end of the pole.
- 3. Thread the other leg into the remaining hole.
- 4. Adjust position- use locking screw to secure in place.





**Quick Start** 

# **Battery Assembly**





- 1. Remove the battery from the case.
- Charge the battery. Charging the battery takes 3-4 hours for a complete charge. Note the battery is fully charged upon initial delivery.
- 3. Align the internal plugs.
- 4. Thread the base completely onto the pole.
- When assembling the battery section, apply a light coating of synthetic grease to the "O" Ring. If "O" Ring appears worn replace immediately. Buna O-Ring -131
- 6. When the battery is low a warning will be displayed on the monitor, 15 minutes of battery life remain.

# **Attaching Display Cable**

- 1. Remove the "ACC" plug cap.
- 2. Insert and thread the plug on the video cable until it seats firmly in place.
- Attach the mini DIN connector plug from the video cable to the monitor/ display/recorder













# **RECHARGING BATTERY**







- 1. Remove the charging system from the case.
- 2. Remove the battery base from the pole.
- 3. Plug the charging cable into the battery base.
- 4. Plug the AC power adapter into a wall socket.
- 5. DO NOT remove the bottom cover from the battery base. *This will void the warranty.*

# **CAUTION: NIMh BATTERY**

When ordering replacement battery packs, please notice the marking on the bottom of the battery pack holder.



There are 2 distinctly different types of batteries used:

Nickel Cadmium and Nickel Metal Hydride. The different types are based upon the applications of the products' use.

When ordering look at the bottom of the battery pack for the part number "EM43050, NiMh" for Nickel Metal Hydride.

If there is not an engraved part number then the battery pack is Nickel Cadmium.

## **EXTENDING AND COLLAPSING THE XTENDACAM POLE LENGTH**



- 1. Remove the charging system from the case.
- 2. Remove the battery base from the pole.
- 3. Plug the charging cable into the battery base.
- 4. Plug the AC power adapter into a wall socket.
- 5. DO NOT remove the bottom cover from the battery base. *This will void the warranty.*

Note:

The collet at the camera head is NOT adjustable. Turning the collet will void the warranty. If the collet is rotated, the camera head will turn and shear the internal communication cable.





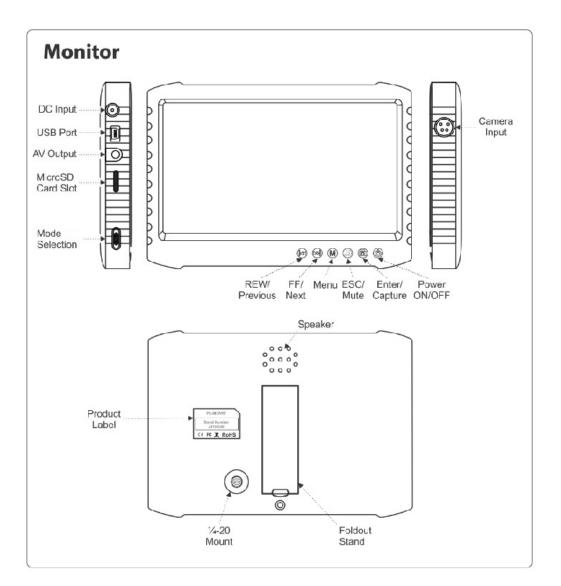








# **Controls**









# Installation/Setup

#### **Connect Monitor Power**

Connect the power supply to the unit and plug the power supply into a  $100v\sim240v$  AC outlet. The unit can also operate and charge via the USB port. Connect the USB cable to the USB port on the unit and the other end into a 5v USB port. Charging will be indicated by on-screen battery icon. Please allow up to 6 hours for full charge. The on-screen battery icon will stop blinking once the unit is fully charged.

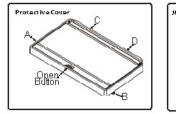
### **Insert Memory Card\***

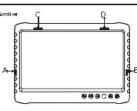
\*It is strongly suggested that a MicroSD card of class 10/U1 or higher be used from one of the following manufacturers: Kingston, SanDisk, Toshiba, and Samsung.

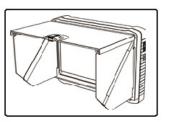
#### **Install Monitor Protective Cover**

#### Refer to Figures below

The underside of the protective cover has four tabs to lock onto the front of the monitor (Tabs A,B,C,D). Align tabs A and B with corresponding holes, A and B, on the monitor; then gently push the two together and slide the protective cover down towards the bottom of the monitor. Tabs C and D will clip into place. To remove gently push in opposite direction. To open the protective cover, simply press the open button on the front and lift.







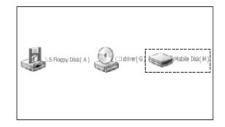






#### Connect USB Cable (Optional)

Use the USB cable to connect the unit to a PC or Mac. After powering up unit, the USB online icon appears on the PC. Open **My Computer**, and find the **Mobile Disk.** The video/picture files on the MicroSD card can be copied/cut/deleted/played.



#### Connect AV Output Cable (Optional)

Insert the AV cable into the AV OUT socket of the unit. Insert the other end of the cable into the VIDEO IN jack of a TV or another display. The DVR unit will output a high quality video signal as well as video playback.







# **Operation**

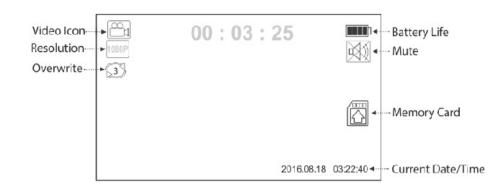
## **Basic Operation**

 Insert a microSD card. Press and hold the Power ON/OFF button on the unit for two seconds. Slide the Mode Selection switch to to select video mode, to select picture mode, or b to select playback mode. Press the Power ON/OFF button to turn On/Off LEDs on camera (LED Control for optional camera heads with illumination). Press and hold the Power ON/OFF for three seconds to power off the unit.

# **Other Operations**

### **Record Video**

During operation slide Mode Selection switch to to enter video mode.









2. Press Capture to start recording. The screen then displays "•" in the upper left corner.

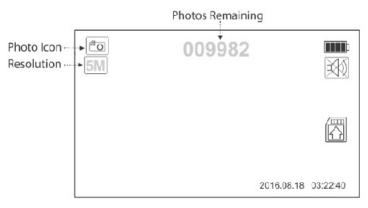


- 3. Press Capture again to stop recording.
  - \* Time Stamp will appear in lower right corner on video playback.
  - \* "Full Memory" Alert flashes on screen when Storage is full.
    - \* The Video will stop recording immediately if no incoming video detected.

### Take Photo

Notice!

During operation slide Mode Selection switch to onter picture mode.









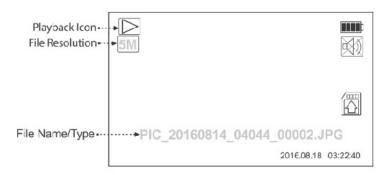
2. Press Capture button to capture a picture. The screen flashes to indicate the picture was saved.



\* The MicroSD Card is full when the Storage Remaining reads zero. \* "Full Memory" Alert flashes on screen when Storage is full.

### **Play Video/Picture**

 During operation, slide Mode Selection switch to b to enter playback mode. Press Previous or Next button to select between files to view., then press Enter button to enter.



2. For Video:

Press Previous or Next button to select a folder, then press Enter button to enter.

Delete Thumbnail	
Thumbnail	







3. Press Previous or Next button to select a video, then press Enter button to enter.



 Playing mode will begin and the selected video will automatically play.

[····]·		
Playback Icon • File Resolution •		
FF/REW Indicator	+2x	
File Name/Type…	+REC_20160814_04044_00002.A	/1
	2016.08.18 03	3:22:40

Pause: Press Capture button in playing mode to pause.

Press Capture button to resume.

Fast Forward: Press FF button in playing mode.

Rewind: Press REW button in playing mode.

Stop/Exit: Press ESC button once to stop.

Press ESC again to exit.

5. For Picture:

Repeat steps 1 thru 3 selecting photo instead of video. Press Previous or Next button to select a picture, then press Enter button to display the picture. While viewing, use Previous or Next to go to the next photo in folder. Press ESC button to exit.





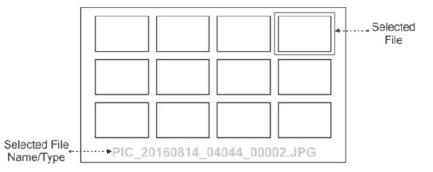


#### **Delete Video/Picture**

1. During operation, slide Mode Selection switch to 🕑 to enter playback mode. Press Previous or Next button to select between photo and video, then press Enter button to enter.

Playback Icon • File Resolution •		
		ß
File Name/Type		3
	2016.08.13 03	:22:40

2. Press Previous or Next button to select a folder, then press Enter button to enter.



3. Press Previous or Next button to select a file, then press Menu button to show options.

Delete Thumbnail	Current All Cancel
	,

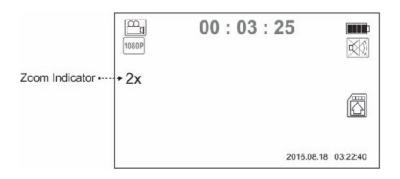






#### Magnification

1. During operation, slide Mode Selection switch to or to enter a capture mode. Press Next button to magnify image from 1.0x up to 4.0x. Press Previous button to lower magnification.



## **Device Settings**

#### **Entering Settings Mode**

During operation, press and hold Menu button for about 1-2 seconds to enter the Settings Mode. Menus vary slightly based off Mode Selected. In picture mode, user can adjust picture size, time stamp and date format without affecting formats for video mode and vice versa.

Language	English
Screen Off	Off
lcon Off	Auto
LoopRecording	3 Min.







### Language Setting

1. In the setting mode, press Previous or Next button to select "Language", then press Enter button to enter.

Language	English	
Screen Off	Francais	
Icon Off	Deutsch	
LoopRecording		

- 2. Press Previous or Next button to select a suitable language.
- Press Enter button to confirm and exit, or press ESC button to discard changes.

#### **Screen Off Setting**

1. In the setting mode, press Previous or Next button to select "Screen Off", then press Enter button to enter.

Language	1 Min.	
Screen Off	3 Min.	
lcon Off	5 Min.	
LoopRecording		

 Press Previous or Next button to select desired duration; Press Enter button to confirm and exit, or press ESC button to discard changes.







### **Icon Off Setting**

1. In the setting mode, press Previous or Next button to select "Icon Off", then press Enter button to enter.

011
Off
On
Auto

- 2. Press Previous or Next button to select icon visibility.
- 3. Press Enter button to confirm and exit, or press ESC button to discard changes.

#### **Loop Recording Setting**

1. In the setting mode, press Previous or Next button to select "LoopRecording", then press Enter button to enter.

Language	Off	
Screen Off	1 Min.	
Icon Off	3 Min.	
LoopRecording		

- 2. Press Previous or Next button to select desired recording length.
- 3. Press Enter button to confirm and exit, or press ESC button to discard changes.







### **Time Stamp Setting**

1. In the setting mode, press Previous or Next button to select "Time Stamp", then press Enter button to enter.

Time Stamp	Off
Date Format	Date Only
Date Input	Date&Time
Time Input	

- 2. Press Previous or Next button to select desired size.
- Press Enter button to confirm and exit, or press ESC button to discard changes.

#### **Date Format Setting**

1. In the setting mode, press Previous or Next button to select "Date Format", then press Enter button to enter.

Time Stamp	YY/MM/DD
Date Format	MM/DD/YY
Date Input	DD/MM/YY
Time Input	

- 2. Press Previous or Next button to select desired date layout.
- 3. Press Enter button to confirm and exit, or press ESC button to discard changes.







### **Date Input Setting**

1. In the setting mode, press Previous or Next button to select "Date Input", then press Enter button to enter.

~	
Time Stamp	
Date Format 2019	/ 08 / 14
Date Input	
Time Input	

- 2. Press Previous or Next button to modify numbers.
- Press Enter button to confirm and continue adjustments; Press ESC button to discard and exit.

#### **Time Input Setting**

1. In the setting mode, press Previous or Next button to select "Time Input", then press Enter button to enter.

Time Stamp	D-4-07:
Date Format	02 : 34 : 55
Date Input	
Time Input	

- 4. Press Previous or Next button to modify numbers.
- 5. Press Enter button to confirm and continue adjustments; Press ESC button to discard and exit.







### **Format Setting**

1. In the setting mode, press Previous or Next button to select "Format", then press Enter button to enter.

Format	Cancel
	Execute
TV Output	Execute
FW Upgrade	
FW Version	

- 2. Press Previous or Next button to select "Execute" or "Cancel".
- Press Enter button to confirm and exit, or press ESC button to discard changes.

#### **TV Output Setting**

1. In the setting mode, press Previous or Next button to select "TV Output", then press Enter button to enter.

NTSC
PAL
1

- 2. Press Previous or Next button to select desired output format.
- 3. Press Enter button to confirm and exit, or press ESC button to discard changes.







## Firmware Upgrade

1. In the setting mode, press Previous or Next button to select "FW Upgrade", then press Enter button to enter.

Format	Cancel
TV Output	Execute
FW Upgrade	
FW Version	

- 2. Press Previous or Next button to select "Cancel" or "Execute".
- 3. Press Enter button to confirm.

#### **Version Information**

1. In the setting mode, press Previous or Next button to select "FW Version", then press Enter button to enter.

Format	
	-
TV Output	SZZJP 05C181222A
FW Upgrade	
FW Version	

 Once done reviewing information, press Enter or ESC button to exit.







#### **Default Setting**

1. In the setting mode, press Previous or Next button to select "Default Setting", then press Enter button to enter.

Sys. Reset	Cancel
Sys. Neset	Execute

- 2. Press Previous or Next button to select "Cancel" or "Execute".
- 3. Press Enter button to confirm and exit, or press ESC button to discard changes.

#### **Size Setting**

 While in picture mode, enter setting mode. Next press Previous or Next button to select "Size Setting", then press Enter button to enter.

Size	3M	
Time Stamp	5M	
Date Format		_
Date Input		

- 2. Press Previous or Next button to select desired resolution.
- Press Enter button to confirm and exit, or press ESC button to discard changes.







# **Tips & Troubleshooting**

- 1. Memory Card should be inserted before powering on monitor.
- For USB connection, mode selection switch must be in playback mode,
- 3. Unit does not power up, maybe fully discharged. Plug into supplied ac adapter or usb to pc and allow unit to charge.
- 4. System interface stops responding, hold down power until unit powers off, then restart.
- 5. Unit doesn't play video, video file may be of wrong format. Convert video file to supported video format, AVI.
- 6. The On-screen text is unreadable, please check desired language is selected under language settings.
- Unit not able to be found by PC, or allow file transfer, replace USB cable/Test on another USB port.
- Unit does not save: make sure memory card is inserted; make sure memory card is not full or corrupted; attempt to format card under format settings.







# **Specifications**

Technical Specifications			
Screen	Size	Sin	7in
	Dimension	107mm <b>(W) x 6</b> 4mm(H)	154mm(W) x 85mm(H)
	Brightness	400 cd/m <sup>2</sup>	
	Input	HD TVI, AHD, CVBS	
Video	Aspect Ratio	16:09	
	Resolution	1920*1080; 1280*720; 848*480	
	Compression Format	H.264	
	Storage Format	AVI	
A condition	Frequency Range	20Hz-20KHz	
Audio	Compression Format	AAC	
Dist	Format	JPG/JPEG	
Photo	Resolution	5MP; 3MP; 2MP; 1.3M; VGA	
64	External SD card	MicroSD card 2-128GB	
Storage	64GB Recording time	24-64 hours	
	Phono	Analog Video	
Output	Mini USB	Digital File Transfer	
	Built-in speaker	1₩	
	PC	Windows & Mac OS	
Operating System	Port	USB 2.0	
	Language	Multiple	
	Voltage	DC: 5-12V USB DC: 5V	
Power	Current Consumption	<900mA	<900mA
	Built-in Battery	Li-battery 4.5Ah	Li-battery 7.0Ah
	AC Adapter	DC 12v 2A	
	Working Time	$\approx$ 4-6 hours	
Dimension	PC-MIVR7	139mm x 90mm x 19mm	183mm x 124mm x 20mm
Weight	PC-MIVR7	216g	380g

\* All the specifications are subject to minor change without prior notice.

