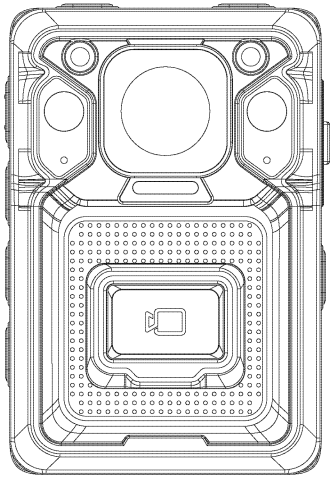
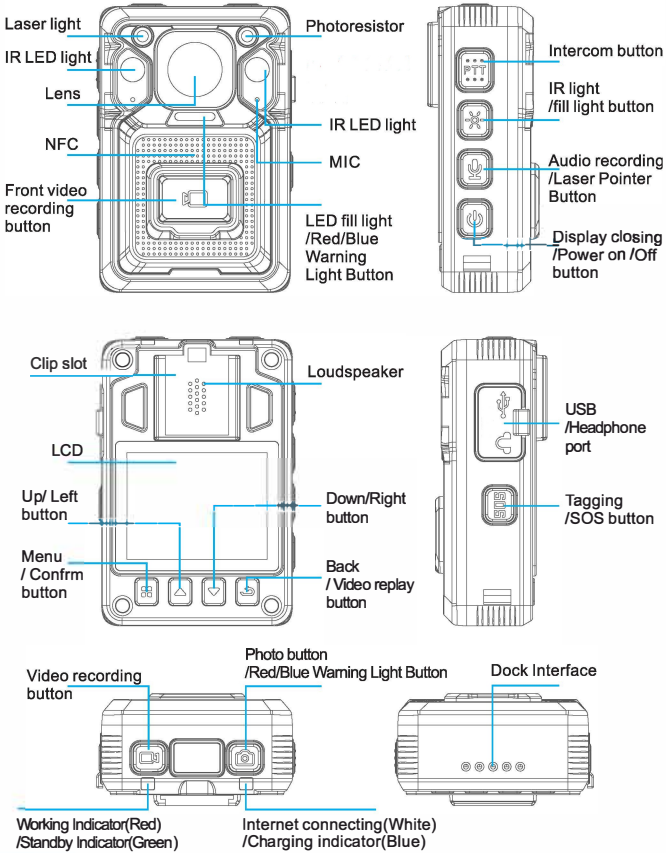


USER MANUAL

OVERVIEW



PARAMETER

Size/weigth/button		
Size	84.5mm*56.3mm*27.3mm	
Weight	140g(0.31lb)	
Button	- Front big Record button and top Record button easy operation - Yellow PTT button - Yellow SOS button	
Hardware		
Chipsets	Ambarella H22	
Sensor	OS05A20	
Indicators		
- 3 color LED indicator for camera status - 3 color LED indicator for battery level - Programmable buzzer - Vibration		
Light		
IR	IR upto to 10 meters at 0 lux with visible shape image	
Flash Light	90 degrees view angle light source for low light condition can enable/disable by button press	
Laser	Optional(position the object to record,enable/disable by button)	
Durability		
Shock Proof:1.8m (5.9ft)	IP Rating:IP67	
Video/picture/audio		
Coding	H.264/H.265	
View Angle	HOV 140 degrees	
Video Resolution	1080P30 (Chipsets support 4K,limit to 1080 for lower power consumption) / 1080P60 / 720P30 / 720P60 / 480P30	
Video Streaming Resolution	720P30 / 480P30 / 320P30	
Audio Streaming:Support	Text Streaming:Support	
Streaming Bitrate:300kbs-4M kbs	Snap Shot:During recording	
Video Format:MP4	Picture format:JPEG	Audio Format:AAC
EIS	6 axis image stabilizer(Optional)	
SOS	Audio alarm activates in all cameras at same group and audio alarm in command certer	
External Camera		
External Camera	Support	
Night Vision	Ultral low light performance & IR LED	
Storage	Optional 32GB,64GB,128GB,256GB	
Hardware Interface		
USB Port	Support external camera connection	
Pogo Pin connection	Support dock & go operation	

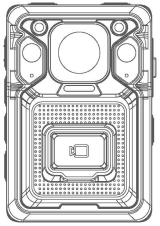
PARAMETER

Wireless Connections	
Wi-Fi	2.4G, AP/STA/P2P,Wi-Fi channel can be set by cam manager
/	/
IR: 10 meters (2 IR LED)	GPS/NFC:Optional
/	/
Clustered Talkback(PTT)	Optional (camera talk to camera,camera talk to command center, command talk to cameras);can set cameras to groups from camera GUI or from command center software
Alarm	SOS button to activate warning signal in camera and in command center and advise command center the position of camera
Text message	Camera can send text message to camera or command center
Protocol	
TCP/IP, RTSP, RTMP, GB/28181/JSON	
Battery	
Recording Time	- 1080P Up to 14 Hours;480P Up to 16 Hours - GPS and WiFi on at 480P30 12 hours and 30 minutes
Standby Time:100+ hours	Charging Time:4 hours
Streaming&Recording time	7.5 hours
Pre&postrecording	
Pre-recording	30 seconds to 60 seconds varies from resolution settings
Post-recording	30 seconds to 60 seconds from resolution settings
Motion Detect	Support
Security Features(Optiona	
File Encryption	AES256 encryption during writing files to memory card AES256 encryption RTSP Video/audio/Text streaming data
Network Security	Https&Http Server
Wi-Fi Security	Dynamic Pin Code authentification
USB Command&JSON command	
- all camera settings available under mass storage mode - all camera settings available under USB simple mode - USB heart beat available - Control over LED/buzzer available under mass storage mode - Ambarella driver free even while USB encryption activated - Support driver free connection to computer	
Mount solution	
Standard mount	360 degrees rotatable crocodile mount
Optional mount	MOLLE compatilbe mount
Optional accessoires	CLICKFAST Stud
Video Stamp	
Content supported	User ID/Device ID/Date/Time/Geo-tags/Logo

BUTTON

Button	Button Icon	Operation	Function
Power Button		Press	Press to turn on/off LCD
		Hold for 3 seconds	Hold to turn on/off camera
REC Button on Top		Press	Start/Stop video recording
		Hold for 3 seconds	Start video recording when camera is off. In preview mode, hold to switch video resolution.
REC Button on Front		Press	Start/Stop video recording
		Hold for 3 seconds	Start video recording when camera is off
Audio Button		Press	Start/Stop audio recording
		Hold for 3 seconds	Start audio recording when camera is off; Turn on/off laser pointer
Photo Button		Press	Take photo
		Hold for 3 seconds	Turnon/off the red & blue warning light
Infrared Button		Press	Turn on/off infrared LED
		Hold for 3 seconds	Turn on/off white LED flashlight
PTT Button	PTT	Holding for 3 seconds	Push to talk
SOS Button	SOS	Press	Mark the important video while video recording
		Hold for 3 seconds	Turn on SOS function
Playback Button		Press	Exit to previous interface
		Hold for 3 seconds	Directly playback the latest recorded file.
Menu		Press	Menu; Confirm
Scroll Up /Down Buttons		Press	Scroll up or left/Scroll down or right
		Hold for 3 seconds	Zoom in/Zoom out
Reset		Hold for 3 seconds	Reset the camera when holding power button & the video record button on the top

FUNCTIONALITIES



1. Power On/Off

Power on: When camera is off, hold to turn on the camera. The turn on indication as below:

- Camera status Indicator turn green
- Camera LCD will show boot up logo
- Boot up music
- Camera vibrate

Power off: When camera is on, hold to turn off the camera. The turn off indication as below:

- Camera LCD will show turn-off logo, LCD goes black
- Camera status Indicator will turn off
- Turn-off music
- Camera vibrate

FUNCTIONALITIES

Notice: If camera is in recording mode, the video will be stored properly then camera turn off.

Turn on/off LCD: When camera is on, press to turn on / off the backlight of LCD screen.

2. Video Recording

When camera is in standby mode: If camera is in standby mode (power on but not recording), press to start recording, press again to stop recording.

When camera is off: Hold , camera will turn on and start recording automatically, press again to stop recording.

3. Video Setting

In preview mode, press , input the right password to enter setting menu, select the first icon (Camera Setting icon) and press again to go to setting list.

Default password: For general user default password is 000000, user can only check settings, but can not change settings.
For administrator default password is 888888, user are able to change settings. To change password, please use Cam Manager.

1）Resolution

There are six options to select from:
2560X1440 30P / 1920X1080 60P / 1920X1080 30P / 1280X720 60P / 1280X720 30P / 848X480 30P

(2) Quality
There are three options to select from: **S. Fine / Fine / Normal**

(3) Photo Size
There are six options to select from: **4M / 8M / 12M / 16M / 30M / 40M**

(4) Selfie
There are four options to select from: **Off / 3 sec / 5 sec / 10 sec**

Press , camera will take a photo after the selected time period.

(5) Timelapse
There are six options to select from:
Off / ½ sec / 1 sec / 3 sec / 5 sec / 10 sec

Press , camera will keep taking photos until you press again. Photos will be taken intermittently with the selected time period.

(6) Burst Mode
There are eight options to select from:
Off / 2 pcs / 3 pcs / 5 pcs / 10 pcs / 15 pcs / 20 pcs / 30 pcs

Press , the selected quantity of photos will be captured continuously.

(7) Streaming Resolution
There are three options to select from:
1280X720 30P / 848X480 30P / 432x240 30P

(8)Streaming Frame Rate

There are six options to select from: **5FPS / 10FPS / 15FPS / 20FPS / 25FPS / 30FPS**

(9) Streaming Bit-rate
There are seven options to select from: **300kbps / 500kbps / 1000kbps / 2000kbps / 3000kbps / 4000kbps / 5000kbps**

(10) Streaming Control
There are six options to select from: **Off / Video / Audio / Text / Audio and Video / All**

Notice: Select off to turn off all streaming.

(11) H265 Encoding
There are two options to select from: **Off / On**

(12) Pre Record
There are eight options to select from:
Off / 5 sec / 10 sec / 15 sec / 20 sec / 30 sec / 60 sec / 2min

Camera will record 5sec-2min of video prior to record button being pressed to start recording.

(13) Loop Record
There are two options to select from: **On / Off**

When loop recording is set “On”, it provides a way to let camera keep recording when memory space is full, because the oldest file will be overwritten by the latest file.

(14) Post Record
There are six options to select from:
Off / 5 sec / 10 sec / 20 sec / 30 sec / 60 sec/120 sec

Camera will record 5-120sec after record button being pressed to stop recording.

(15) One Touch Recording
There are two options to select from: **On / Off**

One Touch Recording set On, camera will start recording right away once powered on.

(16) Video Length
There are five options to select from: **2 min / 5 min / 10 min / 15 min/ Off**

Notice: Set to Off, video will be split into 30 minutes video interval.

(17) Mute Recording
There are three options to select from: **Off / Only Pre-record / On**

Audio won’t be recorded when mute recording is on; If Only Pre-record chosen, then only the pre-recorded video will be muted.

(18) Record Notification
There are six options to select from: **On / 5 sec / 10 sec / 15 sec / 30 sec / 60 sec**

Recording Notification will give audio beeping at the specified interval as long as the camera is recording. This will not affect the notifications at the start and end of recordings.

(19) Motion Detect
There are two options to select from: **On / Off**

Camera will detect movements of scenes.Once motion detect is set on, press to initiate motion detect, once camera detects the movements, it will start recording, and stop recording until video scene has not changed or moved for over 10 seconds.

4. Photographing

In Preview Mode, single-press , and the unit will start taking photo similar to a digital camera.

5. Screenshot

To capture picture while video is being recorded, just single- press

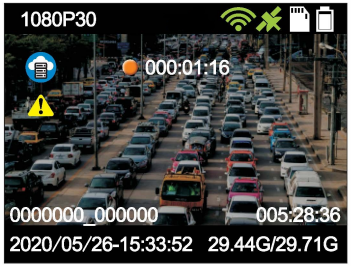
6. Audio Recording

In Preview Mode, press , and the camera will start audio recording. Press again to stop audio recording.

One key audio recording: When camera is off, hold for 3 seconds, camera will turn on and start audio recording right away. Press again to stop audio recording.

7. File Tagging

While video is being recorded, press SOS, there will be a icon show on the LCD screen, the video will be tagged as important file. Press to stop recording, video will be saved as important video.



8. Quick switch from audio/video recording

(1) When camera is video recording, press to stop video recording and start audio recording. The video will be stored properly then switch to audio recording.

(2) When camera is audio recording, press to stop audio recording and start video recording. The audio will be stored properly then switch to video recording.

9. Playback

In Preview Mode, press, and find “Video, Photo, Audio”, all files recorded can be browsed.

10. One Key Playback

In Preview Mode, press and hold to check the last file recorded.

11. Data Upload

In preview mode, press , input the right password to enter setting menu, select the “Data Upload” icon and press again to go to video upload interface.

Default password: For general user default password is 000000, user can only check settings, but can not change settings.
For administrator default password is 888888, user are able to change settings. To change password, please use Cam Manager.

Local

In “Local” setting interface, all the video, audio, photo files are showing, and user can select the needed file to playback or upload.

12. General Settings

In preview mode, press , input the right password to enter setting menu, select the “General” icon and press again to go to setting list.

Default password: For general user default password is 000000, user can only check settings, but can not change settings.
For administrator default password is 888888, user are able to change settings. To change password, please use Cam Manager.

(1) Language Setting

There are three options to select from: **English, 简体中文 (Simple Chinese), Ting vit nam (Vietnamese)**

(2) TV OUT

There are two options to select from: **NTSC / PAL**

(3) GPS

There are two options to select from: **On / Off**

(4) Vibration

There are two options to select from: **On / Off**

(5) IR Filter

In dark circumstances, infrared LED will help record better quality video.
There are four options to select from: **Off / Manual/ Auto / Recording Auto**
Off: Infrared LED disabled.
Manual: Press , to turn on infrared LED, Press again to turn off infrared LED.
Auto: Infrared LED will be turned on / off automatically according to the environment light condition. When environment light condition is dark, infrared LED will be turned on automatically; When environment light condition is bright, infrared LED will be turned off automatically.

Recording Auto: Only during video recording, infrared LED will be turned on / off automatically according to the environment light condition.

(6) Auto Power Off

There are seven options to select from:
Off / 30 sec / 1 min / 3 min / 5 min / 10 min / 30 min

Auto Power Off will only power off the device when it has been in standby mode for the selected interval. This will NOT power off the device during recordings.

(7) LCD Auto Off

There are six options to select from:
Off / 10 sec / 30 sec / 1 min / 3 min / 5 min

LCD Auto Off will turn off LCD display for the selected interval. This will NOT power off the device.

(8) Key Tone

There are two options to select from: **On / Off**
On: Camera will beep when buttons are pressed.
Off: Camera will not beep when buttons are pressed.

(9) Voice Volume

There are eleven options to select from:
0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10

(10) Voice Remind

There are three options to select from: **Off / Beep / Speech**

(11) Clock Beep
There are two options to select from: **On / Off**
On: Once time is full clock, camera will beep.
Off: Once time is full clock, camera will not beep.

(12) LED Light
There are two options to select from: **On / Off**
On: LED indicator will be on.
Off: LED indicator will be disabled.

(13) CarDV Mode
There are two options to select from: **On / Off**

CarDV Mode means camera will power on automatically and start recording after connected to power source such as car charger.

(14) File Tagging
There are six options to select from:
Normal / Traffic / DWI / Confidential / Criminal / Other

(15) Stealth Mode
There are two options to select from: **On / Off**
On: Turn off all LED indicators, IR LED and all prompt sound.
Off: All LED indicators, IR LED and all prompt sound will be normal settings.

(16) Enhanced Standby
There are two options to select from: **On / Off**

(17) Password Mode
There are two options to select from: **On / Off**

On: A password is required, when user want to go to Menu mode.
Default password: For general user default password is 000000, user can only check settings, but can not change settings.
For administrator default password is 888888, user are able to change settings. To change password, please use Cam Manager.

Off: No password is required to go to Menu mode.

(18) wifi
There are three options to select from: **WIFI / Power-up Start / Mode**

a. WIFI: **On / Off**
On: WIFI enabled.
Off: WIFI disabled.

b. Power-up Start: **Off / Auto / Manual**
Off: WIFI will not turn on automatically once camera is powered on.
Auto: WIFI will be turned on automatically once camera is powered on.
Manual: WIFI needs to be turned on/off manually.

c. Mode:**AP / Station / Direct**

(19) Change Device ID
Set the Device ID you would like to have.

(20) Change User ID
Set the User ID you would like to have.

13. About Device

In preview mode, press to enter into setup menu, select the “About” icon and press again to go to setting list.

It includes information as below: Location System Info, Total Space, Available Space, Remaining Video, Remaining Audio, Remaining Photos, Battery Status, Temperature, Server IP, Server Port, Account, module, IMEI, APN, IP, Signal, WLAN MAC, WLAN SSID, WLAN IP, Serial Number, Hardware Version and Firmware Version.

14. Other Button Functions

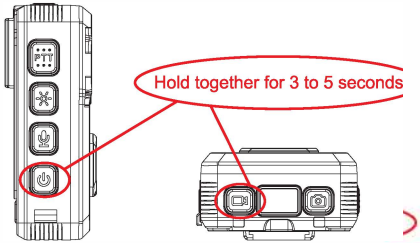
1.PPT Button: When is turned on, hold PTT to achieve the PTT function. Either real time PTT audio communication between platform headquarter and camera, or cluster PTT communication between camera & camera.

2.SOS Button: When is turned on, hold SOS to send an alarm (includes alarm & GPS information) to the platform headquarter or the APP.

15. Reset

Resetting camera will power off the camera forcibly, it helps when the camera is down.

Hold (Record button on the top) and together for 3 to 5 seconds, camera will reset.



16. Charging

Please charge camera via USB cable and wall charger provided. The battery used in camera is Polymer Lithium type. When camera is fully charged, blue charging indicator will turn off.

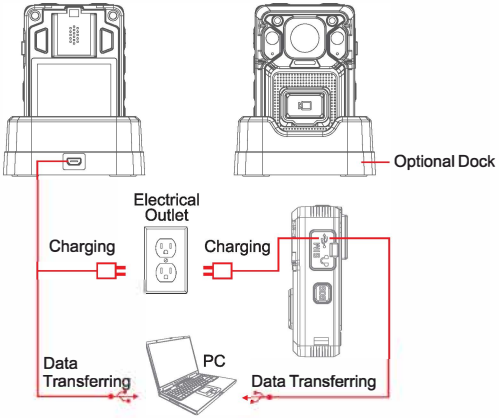
There are 2 ways of charging:

1. Connect camera to computer via USB cable

Since the current of different computer's USB port varies from each other, it is normal if there are circumstances that camera can not be fully charged.

2. Charging by adapter & USB cable

When camera can work normally, while being charged by adapter + USB cable.



17. Headset

Please use the headset(optional accessory) provided. Camera will automatically go to headset mode, once headset is plugged in the headset hole. Hold the control button on the headset, camera will start PTT communication. Once headset is plugged out, camera will be back to normal mode.

18. External Camera

Once the external camera is connected to camera via USB port, camera LCD will show the image from external camera. External camera unplugged, the image in camera LCD will be switched to image captured by main camera.

Installing the Camera Management Software allows for viewing and downloading saved photos and videos, changing device settings, and syncing date and time.

1. Software Requirements

Windows 7,8, or 10 operation system
Hard drive storage for archiving video (1TB recommended)

2. Cam Manager Login

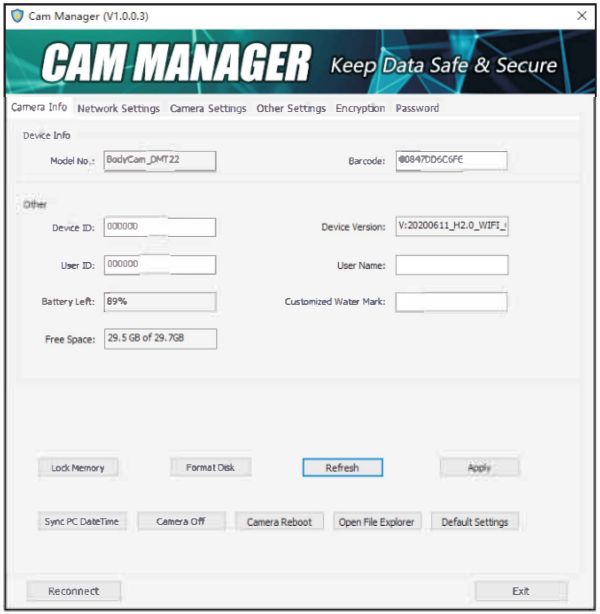
1. Open the " Cam Manager " software on your computer. Connect camera to computer via USB cable. Your camera will power on and get connected to computer.

2. There are 2 user types:
(1) General User: This mode allows for viewing and downloading media files only. The default password is: 000000

(2) Administrator: This mode allows for changing device settings as well as viewing and downloading media files. The default password is: 888888

3. Camera Info

After login, the Camera Management Software will open on the Camera Info tab.



Under "Device Info", There are device model Number and bar code;

(1) Under "Other"
There are settings of: Device ID, User ID, Firmware version, Battery Left level, free space and Watermark. Making changes by enter new settings into the white textbox, click "Apply" to save the settings.

(2) Click “Refresh” button to refresh the battery status;

(3) Click “Sync PC Date Time” to sync the camera’s date & time to the computer’s.

(4) Click “Open File Explorer” to get access to camera SD card mass storage. User are able to check, copy or delete files.

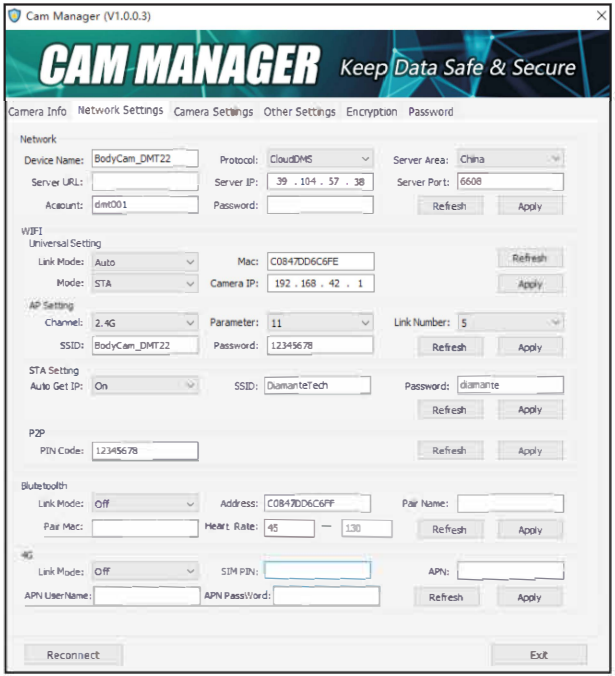
(5) Click “ Format Disk” to Format the Camera’s Memory Disk, the files will be DELETED immediately, and the disk's space will be released.

4. Network Settings

(1) Under “Server Config”, user can change Device Name, Protocol, Server URL, Server IP, Server Port, Account and password.
Making changes by enter new settings into the white textbox, click “Apply” to confirm the setting.

(2) WIFI
A. Click “Link Mode” drop-down list (under “Universal Setting”)
There are three options to select from: **Off / Auto / Manual**
Off: WIFI will not turn on automatically once camera power on.
Auto: WIFI will be turned on automatically once camera is powered on.
Manual: WIFI needs to be turned on/off manually.

B. Mode: **AP / Station / Direct**
AP: User can check the video streaming using WIFI APP.
Station: Camera can get connected to WIFI hotspot and make live video streaming through special software.
Direct: Camera make video streaming and short distance video transfer by using WIFI direct function on smart phone.



C. In AP Setting, user can change WIFI SSID & WIFI Password by inputting new WIFI SSID in the “SSID” textbox and new password in the “Password” textbox, click “Apply” to save the settings.

D. In STA Setting, user can change WIFI SSID & WIFI Password by inputting new WIFI SSID in the “SSID” textbox and new password in the “Password” textbox, click “Apply” to save the settings.

E. In Direct mode, user can check the WIFI Password. To change password, just input new password in the “Pin Code” textbox, click “Apply” to save the settings.

5. Camera Settings

Click the “Camera Settings” tab in the Camera Management Software.

From here you can change device settings. Select the setting you wish to change, and a drop down will appear with all available options. Select the setting you want. Click “Apply” to update settings with the new chosen options.

Main Resolution

Click the “Main Resolution” drop down. There are six settings to choose from: **2560x1440 30P / 1920x 1080 60P / 1920x 1080 30P / 1280x720 60P / 1280x720 30P / 848x480 30P**

Click the setting you prefer and click “Apply” to save.

Image Quality

Click the “Image Quality” drop down. There are three settings to choose from: **High / Medium / Low**

Click the setting you prefer and click “Apply” to save.

Note: Image Quality refers to the quality of videos.

Streaming Resolution

Click the “Streaming Resolution” drop down. There are three settings to choose from:

1280 x 720 / 848 x 480 / 432 x 240

Click the setting you prefer and click “Apply” to save.

Streaming Bitrate
Click the "Streaming Bitrate" drop down. There are seven settings to choose from: **5000Kbs / 4000Kbs / 3000Kbs / 2000Kbs / 1000Kbs / 500Kbs / 300Kbs**

Click the setting you prefer and click "Apply" to save.

Streaming Frame Rate
Click the "Streaming Frame Rate" drop down. There are six settings to choose from: **5 FPS / 10 FPS / 15 FPS / 20 FPS / 25 FPS / 30 FPS**

Click the setting you prefer and click "Apply" to save.

Mute Recording
Click the "Mute Recording" drop down. There are three settings to choose from: **Off / On / Pre-recorded**

Click the setting you prefer and click "Apply" to save.

Streaming Control
Click the "Streaming Control" drop down, There are six settings to choose from: **OFF / Audio / Video / AV / Text / ALL**

Click the setting you prefer and click "Apply" to save.

Video Splitter
Click the " Video Splitter" drop down. There are five settings to choose from: **Off**(Videos will be in segment of 30 minutes) **/ 2 min / 5 min / 10 min / 15 min**

Click the setting you prefer and click "Apply" to save.

Note: Video splitter refers to the length of video segments while the device is recording. The minute amount is the length of each video segment before the device begins a new video file. This will NOT stop the device from recording, it will just split your videos into smaller, more manageable files.

Recording Notification
Click the "Recording Notification" drop down. There are six settings to choose from: **Off / 5 sec / 10 sec / 15 sec / 30 sec / 60 sec**

Click the setting you prefer and click "Apply" to save.

Note: Recording Notification will give audio chirps at the specified interval as long as the camera is recording. This will not affect the notifications at the start and end of recordings.

Pre Record
Click the "Pre Record" drop down. When checked with a second amount, the camera will record 5-120 seconds of video prior to Video Recording button being pressed.
There are eight setting to choose from: **Off / 5 sec / 10 sec / 15 sec / 20 sec / 30 sec / 60 sec / 120 sec**

Click the setting you prefer and click "Apply" to save.

Post Record
Click the "Post Record" drop down. There are six settings to choose from: **Off / 5 sec / 10 sec / 20 sec / 30 sec / 60 sec**

Click the setting you prefer and click "Apply" to save.

Note: The camera will record extra set length of video after Video Recording button being pressed.

Web Server
Click the "Web Server" drop down. There are four settings to choose from: **Off / Http / Https / Http & Https**

Click the setting you prefer and click "Apply" to save.

Note: Files recorded can be browsed via web server when WiFi is turned on.

Photo Size
Click the “Photo Size” drop down. There are six settings to choose from: **40M / 30M / 16M / 12M / 8M / 4M**

Click the setting you prefer and click “Apply” to save.

Timelapse

Click the “Timelapse” drop down. There are six settings to choose from: **Off / 0.5 sec / 1 sec / 3 sec / 5 sec / 10 sec**

Click the setting you prefer and click “Apply” to save.

Photo Quality
Click the “Photo Quality” drop down. There are three settings to choose from: **High / Medium / Low**

Click the setting you prefer and click “Apply” to save.

Volume
Click the “Volume” drop down. Select the volume number you prefer and click “Apply” to save. 1 is the lowest speaker volume, and 10 is the largest.

Burst Mode
Click the “Burst Mode” drop down. There are eight settings to choose from: **Off / 2 pictures / 3 pictures / 5 pictures / 10 pictures / 15 pictures / 20 pictures / 30 pictures**

Burst Mode means camera captures a continuous sequence of pictures.

Click the setting you prefer and click “Apply” to save.

Display Brightness
Click the “Display Brightness” drop down.

Click the setting you prefer and click “Apply” to save.

Selfie Mode:
Click the “Selfie” drop down. There are four settings to choose from: **Off / 3 sec / 5 sec / 10 sec**

Click the setting you prefer and click “Apply” to save.

File Tagging
Click the “File Tagging” drop down. Click the setting you prefer and click “Apply” to save.

TV Out
Click the “Video Standard” drop down. There are two settings to choose from: **NTSC / PAL**

Click the setting you prefer and click “Apply” to save.

Auto Power Off
Click the “ Auto Power Off ” drop down. There are seven settings to choose from: **Off / 30 sec / 1 min / 3 min / 5 min / 10 min / 30 min**

Click the setting you prefer and click “Apply”to save.

Time Zone
Click the “Time Zone” drop down to select the correct time zone, and then GPS will change the date and time accordingly.

Date Format
Click the “Date Format” drop down. There are three settings to choose from: **YYYY-MM-DD / DD-MM-YYYY / MM-DD-YYYY**

Click the setting you prefer and click “Apply” to save.

Auto IR
Click the “Auto IR” drop down. There are four settings to choose from: **Off / Manual / During Recording / Auto**

Click the setting you prefer and click “Apply” to save.

Audio Prompt
Click the “Audio Prompt” drop down. There are four settings to choose from: **Off / Beep / Speech**

Click the setting you prefer and click “Apply” to save.

IR Sensitivity
Click the “IR Sensitivity” drop down. Click the setting you prefer and click “Apply” to save.

LCD Auto Off
Click the “LCD Auto Off ” drop down. There are six settings to choose from: **Off / 10 sec / 30 sec / 1 min / 3 min / 5 min**

Click the setting you prefer and click “Apply” to save.

Encoding Format
Click the “Encoding Format ” drop down. There are two settings to choose from: **H.265 / H.264**

Click the setting you prefer and click “Apply” to save.

Charge State:
Click the “Encoding Format” drop down. There are two settings to choose from:
Off: Camera can not be charged while camera is on.
Normal State: Regular charging mode while camera is on.Fast **State:** Fast Charging mode while camera is on.

Click the setting you prefer and click “Apply” to save.

Video EIS
Click the “Video EIS” drop down. There are two settings to choose from: **Off / On**

Click the setting you prefer and click “Apply” to save.

Double Click Record
Click the “Video EIS” drop down. There are two settings to choose from: **Off / On**

Click the setting you prefer and click “Apply” to save.

GPS
Click the “GPS” box to turn GPS on or off. When checked, GPS will be turned on. Please make sure GPS module is included in the camera. Turn on camera, when GPS signal is received, GPS icon will turn green , and then GPS coordinates will be created as watermark of video.

Power-on Auto Record
Click the “Power-on Auto Record” box to get camera to starting recording automatically after powered on.

Clock Prompt
Click the “Key Tone” box to turn on/off clock beep prompt.

Key Tone
Click the “Key Tone” box to turn on/off vibration of camera. When checked, camera will beep when buttons are pressed.

Auto Update Time
Click the “Vibration” box to turn on/off auto update time function.
On: Once GPS signal is received, the camera date & time will be synchronized to GPS time.
Off: Once camera is connected to Cam Manager, the camera date & time won’t be synchronized to PC’s.

Vibration Prompt
Click the “Vibration Prompt” box to turn on/off vibration of camera.

Enhanced Standby
Click the “Enhanced Standby” box to turn on enhanced Standby, uncheck to turn off.

Dash Camera Mode
Click the “Dash Camera Mode” box to have the camera automatically power on and start recording when connected to power supply such as a car charger.

Motion Detection
Click the “Motion Detection” box to turn on motion detection, uncheck to turn off.

Led Indicator
Click the “Led Indicator’’ box to turn LED indicator lights on or off. When checked, the camera will have LED indication when video is recording or photos are taken, and camera battery is low.

Loop Recording
Click the “Loop Recording” box to turn on loop recording function.
On: If memory becomes full, the oldest files will be overwritten by the latest file.
Off: Camera will stop recording when the memory is full.

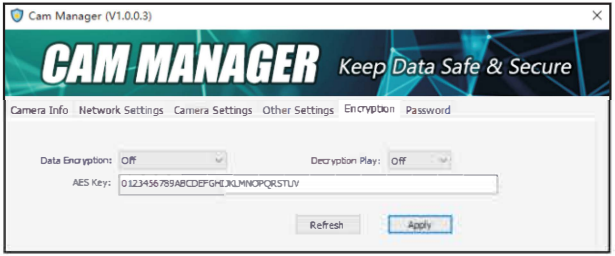
Low Space Warning
Click the “Low Space Warning” box to turn on loop recording function.
On: Camera will make notification when the camera storage space is low.
Off: Camera won’t make notification when the camera storage space is low.

Stealth Mode
Click the “Stealth Mode” box to turn on stealth mode, uncheck to turn off. In stealth mode, all the LED indicators, voice indication, key tone will be disabled.

Low Battery Warning
Click the “Low Battery Warning” box to turn on loop recording function.
On: Camera will make notification when the camera battery is low.
Off: Camera won’t make notification when the camera battery is low.

6. AES Encryption

Click the “AES256 Encryption” tab in camera management software.



Data Encryption

Click the “Data Encryption” drop down. There are four settings to choose from:

Off / File Encryption / Streaming Encryption / Both

Decryption Play

Click the “Decryption Play” drop down. There are two settings to choose from: **Off / On**

Note: When choose on, user are able to display encrypted video in camera playback mode.

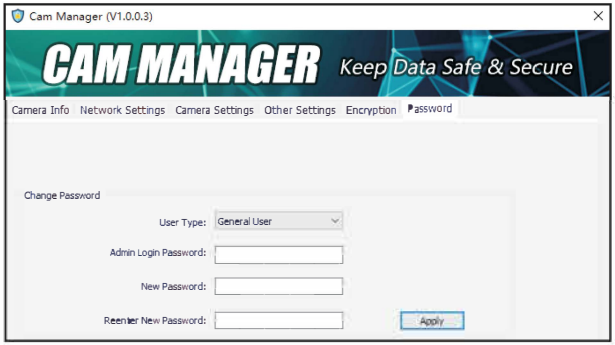
AES Key

To change AES Key, just input the new AES Key in the text box. The AES Key is consist of letters & numbers.

After changing the settings, click “Apply” to save.

7. Change Password

Click the “Change Password” tab in the Camera Management Software.



From here you can change device passwords. Select the user type for the password that you wish to change. Enter the admin password, then enter the new password you wish to set for the user type, and confirm the password.

Click “Apply” to save the new password.

Note: Passwords can only be changed while logged in with the admin account. The admin password will always be required to make changes to any account passwords.

How to connect body camera to CMSV6

Note: The CMSV6 software is only for WIFI version camera.

1. Connect to CMSV6

2. Connect camera to CMSV6 platform

The instruction for network connection as below:

1. Open cam manager, Click “Network Settings” tap, then Click “Protocol” drop down, which is under “Server Config”.
Choose “CloudDMS”, click "Apply" to save the setting.

2. Find “Server IP” under “Server Config”, input the server IP provided by our company, click "Apply" to save the setting.

3. Find “Account” under “Server Config”, input the account provided by our company, click “Apply” to save the setting.

4. Find “Server Port” under “Server Config”, default setting is 6608, no need to change.

5. Find “APN” , input the APN of the SIM card, click “Apply” to save the setting.

The instruction for WIFI network connection as below:

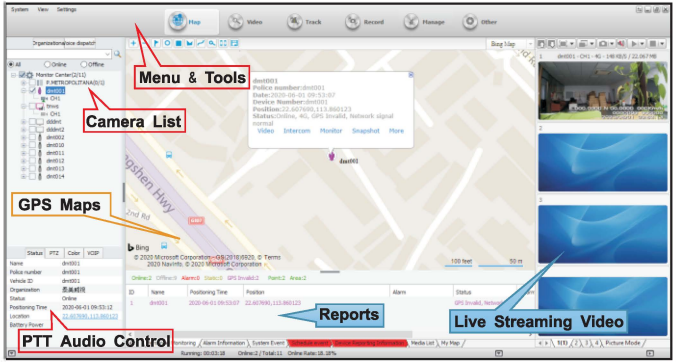
1. Open cam manager, Click “Network Settings” tap, then Click “WIFI Start” drop down, which is under “WIFI”.
Choose “Always On”, click “Apply” to save the setting. Click “Mode” drop down, which is under “WIFI”, choose “STA”, then click “Apply” to save the setting.

2. Find “STA Mode” under “WIFI”, input the right WIFI name in the “SSID” textbox, input the right WIFI password in the “Password” textbox, click “Apply” to save the setting.

3. After set up the WIFI, please open the CMSV6 software, by double click

Input the right account, password & server IP address to log in.

4. How to use the CMSV6



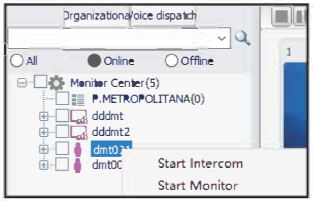
1. Camera List
The camera status will be shown in the camera list.
Blue icon refers to camera online and GPS signal received;
Pink icon refers to camera online but GPS signal is not received yet;
Blue icon refers to camera offline.

2. PTT Audio control shows the information of the selected cameras:
Status: The camera basic info: Officer Name, Police Number, Vehicle ID, Organization, Online status, Positioning Time, Location, Battery Power.
PTZ: Not available
Color: Not available
VOIP: There are 3 modes, Intercom, Monitor and broadcast.
Intercom: Camera can have two way communication with CMSV6 platform. If PTT button is pushed, camera will transfer voice to CMSV6 platform.

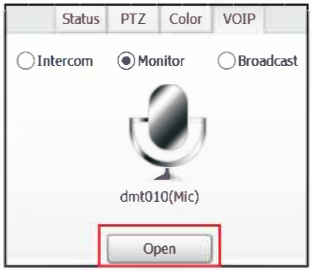
Monitor: CMSV6 platform can check the video and audio from camera only.
Broadcast: CMSV6 platform can send audio broadcast to one or multiple cameras.

3. Start & Stop Intercom/Monitor
There are 3 ways to start & stop intercom/Monitor

(1) Choose the camera from camera list (Under Organization), right click the mouse, choose “Start Intercom” or “Start Monitor”. Then right click the mouse, choose “Stop Intercom” or “Stop Monitor”.



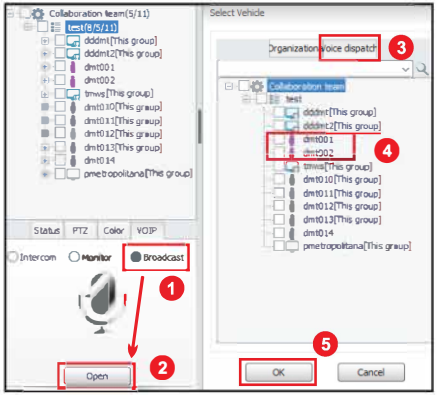
(2) Find Intercom/Monitor under “VOIP”, click “Open” button, then choose the camera you need to work with, click “OK” to confirm. To stop, just click “Stop” button.



(3) Choose the camera on the maps, and click the “Intercom” or “Monitor” to start intercom or monitor.

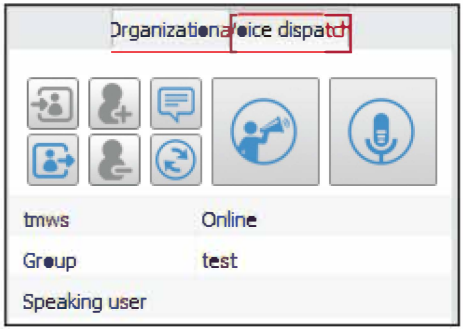
4. Start & Stop Broadcast

Find Broadcast under “VOIP”, click “Open” button, then choose the cameras you need to broadcast to(multiple cameras can be choose), click “OK” to confirm. To stop, just click “Stop” button.



5. Voice Dispatch

Choose “Voice dispatch” to make group voice talk.



Enter this PTT group

Leave this PTT group

Get other camera into the PTT group

Get the camera out of the PTT group

Choose the cameras that you like to send messages to, input the text and send. Messages will be shown on the chosen camera’s LCD screen.

Refresh Interface

Group talk

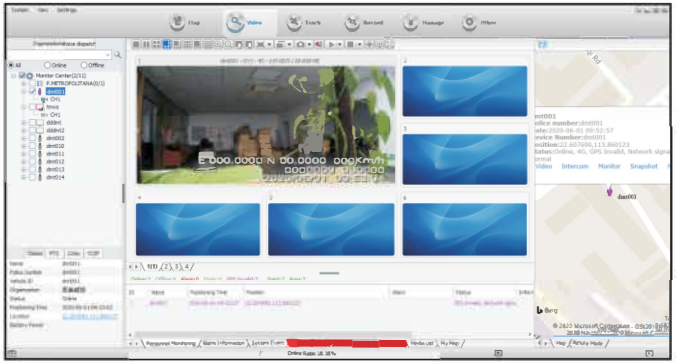
Audio recording

6. GPS Maps: The camera location will be shown on the maps.

7. Reports: Reports will record the events, such as Personnel Monitoring, Alarm Information, System Event, Schedule Event, Device Reporting Information, Media List, My Map.

8. The Streaming Video: Click to see the video streaming.

9. Menu & Tool:
Map: Shows the GPS location of cameras.
Video: Shows the video streaming.
Track: The certain camera 's GPS routes with in certain period of time could be tracked.
Record: Check and search the videos that has been uploaded to CMSV6 software.
Manage: Account management.
Other: Other settings.



10. Live Video Streaming

(1) Open the streaming video, by double click the camera from the camera list to open the preview of camera live streaming.

(2) Preview view: By changing

to set the preview quantities of camera on each page.

(3) Zoom in/Zoom out: By clicking to zoom in and zoom out the streaming video.

(4) Next page: By clicking to change pages.

(5) Display ratio: By clicking to set the display ratio, and

there are four options: Full screen, 4:3, 16:9, and Original Rario Display.

(6) Display mode: Set the video mode: Real Good, Fluent Good.
– Real good mode will take video's real time as priority, so less latency.
– Fluent Good will take video's fluency as priority, so video will be fluent.

(7) Capture mode: Capture Image & Front end Capture

– **Capture Image:** Take a screenshot from CMSV6 software(must open the live video preview).
– **Front end Capture:** Take a photo using camera (don't have to open the live video preview).

(8) Volume: To enable/disable voice and tuning voice volume.

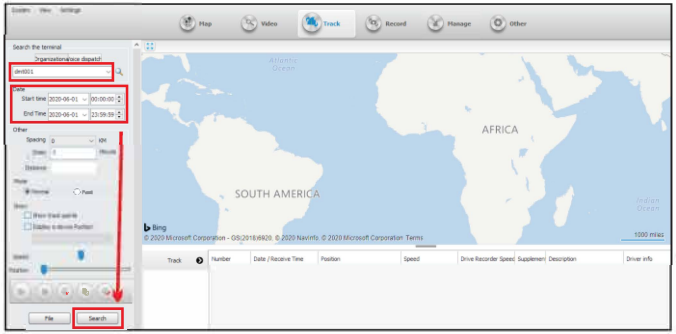
(9) Start Video:

– **Start Video:** Start the video preview of the selected video window;
– **Open All Videos (The current page):** Start all the videos on the current page;
– **Open All Videos (All pages):** Start all the videos of all pages;
– **Display Polling Window:** Set certain time to display video.

(10) Stop Video: To stop video and clear data.

(11) Full Screen: To make video preview set to full screen.

11. GPS Tracking
User can search GPS tracking and export the data. Firstly select camera, then input start & end time, click search.



Icon & Functions

Icon	Functions
	Start or stop tracking playback
	Finish tracking playback
	Delete the GPS tracking
	Export the GPS tracking to Excel file
	Turn the GPS tracking to GPS routes
File	The history log of searched GPS trackings

12. Video Playback
User can download the recorded files from camera and play it back:

(1) Select camera, define the date & time, then select “Storage Server (Video)”, click “Search” to start searching. If searching photo, please select “Storage Server(Photo)”.

CMSV6 SOFTEARE

(2) After searching, select “File” to check the recorded files.

(3) Select the file you want to download, double click mouse or right click mouse, select file download to download the file. The download status could be checked in “Download” part.

(4) Use hplayer or other player to playback the downloaded files.

(5) If video download stopped or failed due to network issue, the file can be continue downloading by clicking “Continue Download”.

Q&A

Question	Analysis	Answer
Camera can’t be powered on	Out of battery	Charge for 4 hours.
	Mainboard Protection	Use Reset button.
Working time of camera is short	Camera was not fully charged	Charging time should not be less than 4 hours.
Data Uploading Interrupted frequently	USB port of PC Can’t supply enough power	Use the USB port of back panel
Camera can’t be recognized by PC	USB cable issue	Change USB cable.
	Wrong driver	Reinstall driver.

NOTICE FOR USER

Even if within the warranty period, if the following occurs, certain maintenance costs will be charged.

(1) The malfunction and damaged caused by incorrect use, the unauthorized repairs and alteration.

(2) The damage caused by fire, flood, abnormal voltage, other natural disasters and secondary product damage.

(3) he product malfunction caused by the fall and transportation failures after purchase.

NOTICE FOR USER

(4) The product malfunction caused by Not in accordance with the user manual operation.

(5) The malfunction and damaged caused by the other barriers (man-made factors or external device).

FCC Statement
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help important announcement

Radiation Exposure Statement
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.