Mitcorp

X2000 HD VIDEOSCOPE SYSTEM

TAIWAN EXCELLENCE 2020

TABLE OF CONTENTS

Safety & Cautions

CE NOTICE

The Videoscope System is in conformance with the following standards:

- 2014/30/EU Electromagnetic Compatibility Directive

RoHS NOTICE

The X2000 Videoscope System is in conformance with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive. This means that our product is both lead-free and without the hazardous substances either in the manufacturing process or in the final product.

FCC NOTICE

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT
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.
CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF exposure warning
This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

SAFETY GUIDE

USER MUST PAY ATTENTION TO THE INFORMATION PROVIDED HERE TO ENSURE SAFETY.

We suggest you read the following statements carefully before using the system.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

CAUTION BATTERY

- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.
- Never replace the battery by yourself.

⚠ **WARNING** If this product is used without observing the information given under this symbol, it might cause injuries or loss of life.

CAUTION If this product is used without observing the information given under this symbol, it might cause damage to this product.

⚠ **WARNING** HAZARDOUS ENVIRONMENTS

- Do not use this system in explosive environments such as gasoline or alcohol storage tanks.

⚠ **WARNING** FLAMMABLE GASES

- Do not use this system near flammable gases.

⚠ **WARNING** INDUSTRIAL USAGE ONLY

⚠ **WARNING** INTENSIVE LIGHT MAY CAUSE EYE INJURY

- Avoid looking at the probe head while LED is on.

CAUTION CERTAIN SUBSTANCES MAY DAMAGE THE PROBE

- Please refer to the list of chemical resistances below. Contact the store of purchase for further information on other chemicals or unsure chemical solutions.

Chemical Resistance

- Water
- Brake fluid
- Gasoline
- Diesel fuel
- Transmission fluid

CAUTION Camera High Temperature warning

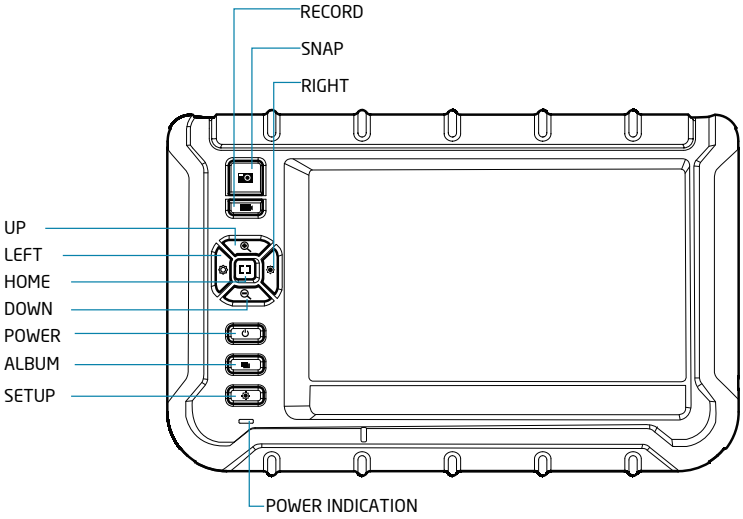
- Prevent using the camera head in over 100°C environment.
- The base unit shows 3 levels of camera temperature warning signals. Remove the probe when the 100°C warning signal pops up.
- 2.8 mm probe do not support the temperature function.

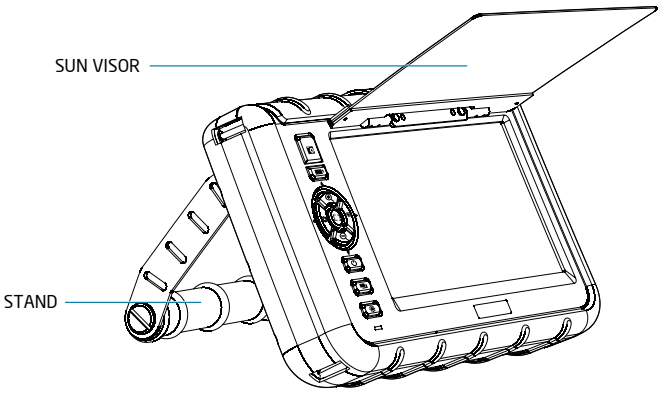
CAUTION Changing probes

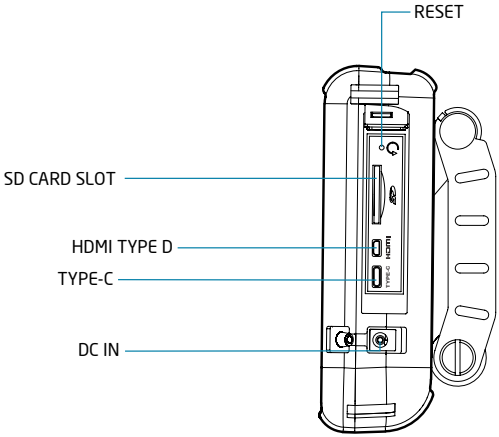
- The system doesn't support probe hot-swapping. Properly shut down the system before changing probes.
- The firmware, drivers and some functions of the user interface, however, are conditionally different from each other. During the reboot, the system will detect the probe type. During a reboot, the system will detect the probe type. When changing to different types of probes, the system will display a reminder on screen and then automatically shut down. Users should reboot again to use the proper firmware.
- See the functional differences in the **<APPENDIX>**.

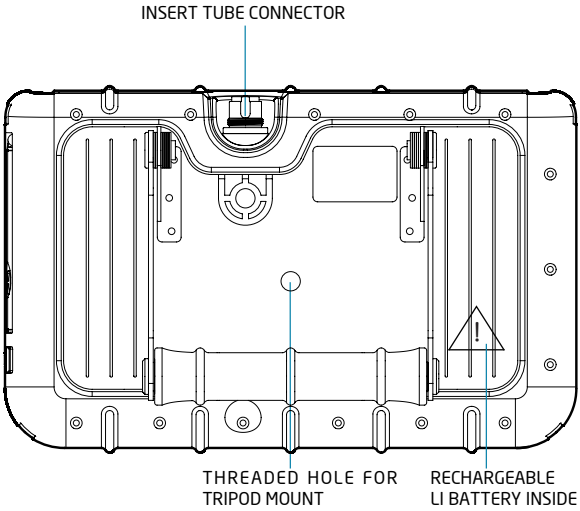
Part I Product Outlook

• 1.1 X2000 Base Unit



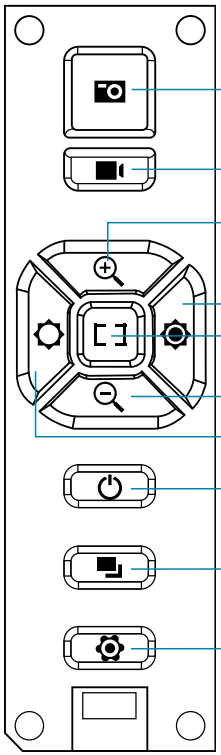



RESET
SD CARD SLOT
HDMI TYPE D
TYPE-C
DC IN


INSERT TUBE CONNECTOR
THREADED HOLE FOR
TRIPOD MOUNT
RECHARGEABLE
LI BATTERY INSIDE

Part II Main Button Function

• 2.1 Main UI



SNAP	Take pictures
RECORD	Record videos
UP	Zoom in
RIGHT	Increase brightness
HOME	Switch to full screen / back to live view
DOWN	Zoom out
LEFT	Decrease brightness
POWER	Turn on / off the system
ALBUM	Quick access albums
SETTING	Change language, date, and other system settings

Live View Screen UI

• 2.2 Live view Screen Overlays

Full Screen

Press the [ ] button to hide/display function buttons on two sides.

• 2.3 Zoom In/Out

Press the ⊕ / ⊖ button. Digital zoom 3x adjustable.

• 2.4 Brightness Control

Press the ☼ / ☼ button. 10 levels adjustment.

The X2000 system provides a live view manual exposure function to mitigate glare and reflections (such as on metal surfaces.., etc.). Tap a glare spot on the screen, the system will automatically tune to optimize the brightness of the image. Tapping a dark spot will increase the brightness (higher exposure gain value).

NOTE: When the manual exposure in enabled, the screen will show a "[◦]" icon. By touching the icon you can go back to auto exposure.

• 2.5 Snapshot

Press the 📷 button. Timestamp/logo watermark/grid will be recorded on the photo if they are enabled.

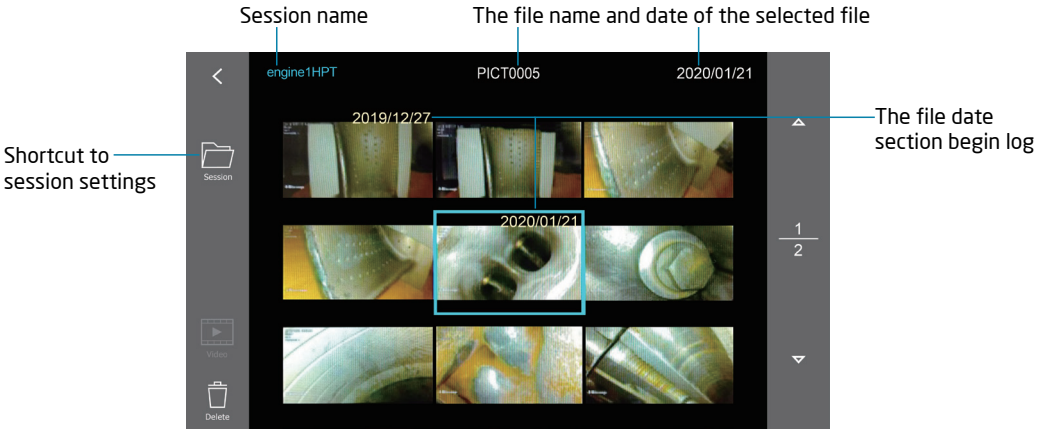
• 2.6 Video Recording

Press the ■ button to start / stop recording video.
During the recording, press 📷 button to take and save a real time screenshot.

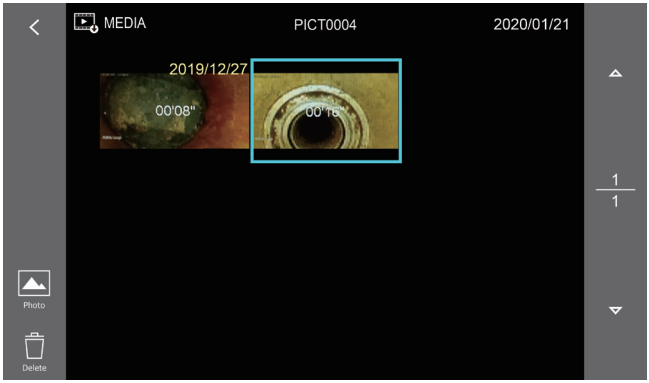
NOTE: Because of system constraints, videos are separated into 5 minute long clips.
The total recordable amount depends on the SD cards memory.

• 2.7 Album

• 2.7.1 Photo Gallery:
Press the ■ button, the screen displays a 9 photo grid preview of the stored images on the SD card (Note the newest file is shown on the bottom right side)
Press the 🎞 icon to switch to video gallery
Overlay information as below:



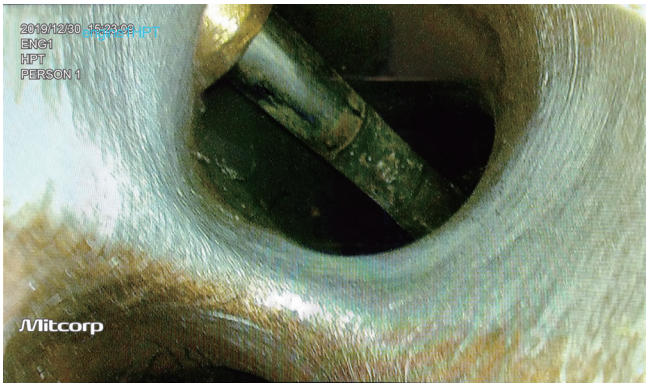
Press the 🖼 icon to switch to the video gallery



• 2.7.2 Single Photo View:

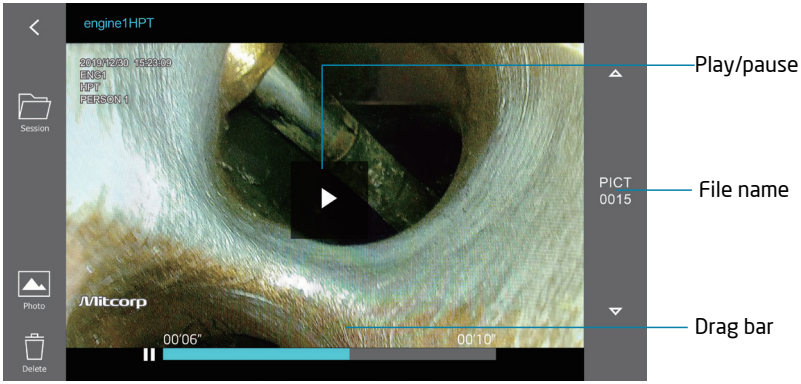
Press icon to switch to the video gallery. The and instruction is in the next section.

Press [ ] to switch to full screen view.



• 2.7.3 Single Photo View:

Press icon to switch to photo gallery.
Overlay information as below:



• 2.7.4 Single Video View:

Press to a single photo file. Touch any position of the screen to play / pause.

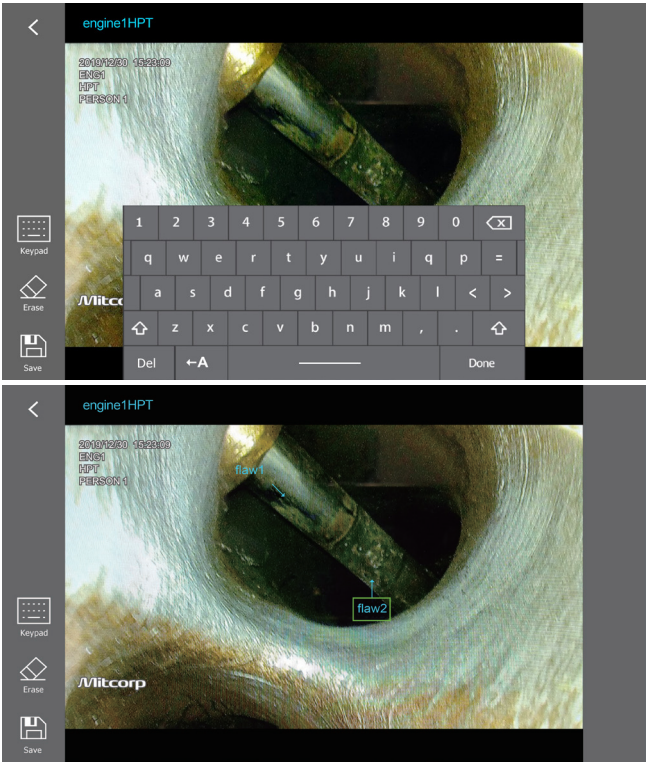
• 2.8 Album - Photo Annotation Function

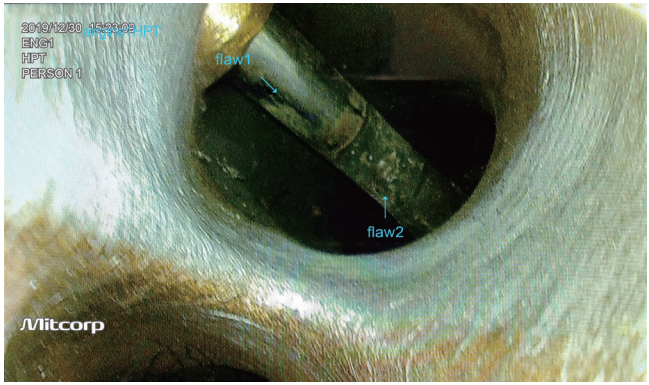
The X2000 system allows users to add a maximum of 10 notes to a photo. Each note can be maximum 24 signs long. The editing steps are as follows:

• 2.8.1 Add One Note:

In any photo single view

(1) Press Add Note → keypad → ←A to put a arrow sign. Multi-tap the ←A to spin the arrow direction as need.
(2) Key in the text as needed, Tap the "Done" icon.
(3) The text shows within a green frame.
(4) Repeat the steps above to add more notes.





- 2.8.2 Erase Notes

  Tap on any note on the screen, it will show a green frame. Touch the to delete the notee.

  When keying in any note, use the function to erase all characters.

- 2.8.3 Save

  Please make sure to save the photo to keep the notes you made. The system will create a new file in the album. The original file will not be overwritten.

• 2.9 Album - Compare Function

Press the " " key to compare the live view with any stored image file.

Move — To move the compared photo to the desired position.

Switch — To switch the sides of the viewing windows.

Replace — To choose another photo for comparison.

Note:

Press the [ ] key to go back to live view.

Note:

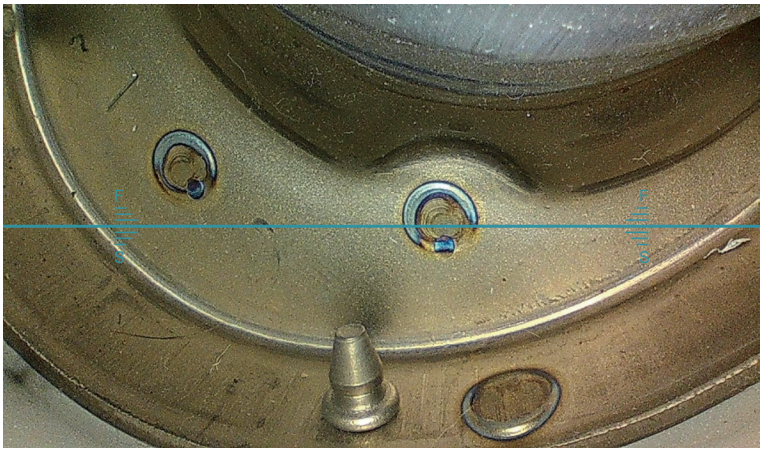
The and functions require access to stored image files and will be disabled when there is no SD card inserted.

Part III Touch-Screen Key Functions

• 3.1 Function List

Function	Button	Description
Light Boost		Maximizes the EV to enhance the view in dark spaces.
Light Off		Front LED on/off.
Mirror		Mirrors the image.
Grid		Attach the contact pin and enable the function to get a reference point for a 2 dimensional measurement (inch/cm) on screen.
Compare		Compare a chosen image on the SD card with the live view.
Wireless		Enable/disable wireless connection.
Particle Free		Attach the side-view mirror and enable function to remove particles on the image (the system auto zooms to 1.1x to optimize the viewing area).
Dual View (*1)		Attach the dual-view mirror and enable the function, the screen will provide F (front) and S (side) labels. When working with 3.9mm dual camera probe, this function turns to switch between front and side view (the LED simultaneously).
Light Direction		When using the dual-view mirror, switch the LED light direction to get better image illumination.
Image (*2)		Use the adjustment bars to get better image results.
Negative		Inverts the image (light areas appear dark, dark areas appear bright).
Rotate Image		Rotate the image clockwise 90 degree by every press.

- Dual View(*1) (While using a 6.0mm dual view mirror)

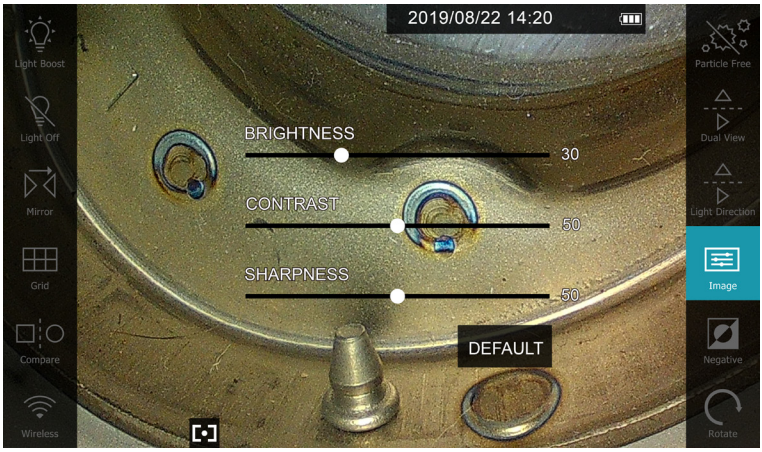


- When working with 3.9mm dual camera probe, this function turns to switch between front and side view (the LED simultaneously). There won't be any separate line on the live view picture.

Image [*2]

To get better image results in various inspection circumstances, the system provides 3 adjustable image configurations: Brightness, Contrast, Sharpness.

Note: Pressing the "Default" button resets the image settings to default.



• 3.2 WiFi

• 3.2.1 Enable Wireless

Tap 

→ 

In a few seconds the  indicator will show up, then the system is ready to be connected to mobile devices.

• 3.2.2 Wi-Fi Connection With Mobile Devices

Open your mobiles Wi-Fi settings and search for the X2000 system SSID. The SSID and the password can be found in the ⚙ / ⓘ.

Connect the system with your mobile device.

Note:

- Typically, after connecting for the first time. This will save the SSID and password.
- The X2000 main system allows to connect to 2 mobile devices simultaneously.
- When using a new mobile device to connect to the X2000 for the first time, please check if there is any other device connected to the system. This may cause the new device's connection attempt to be rejected and failed.

• 3.2.3 Live Sharing And Accessing The Images Of The System.

Launch the "VideoscopeNow" APP.

When the system starts streaming the live view to the mobile app, the Wifi icon will show up on the OSD.

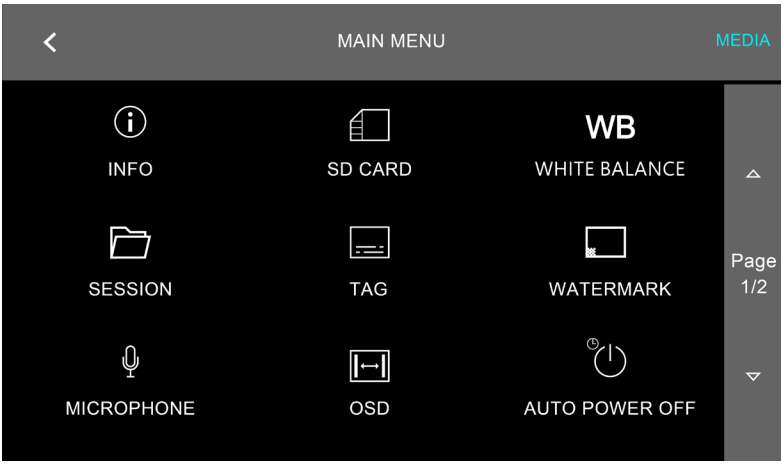
Note:

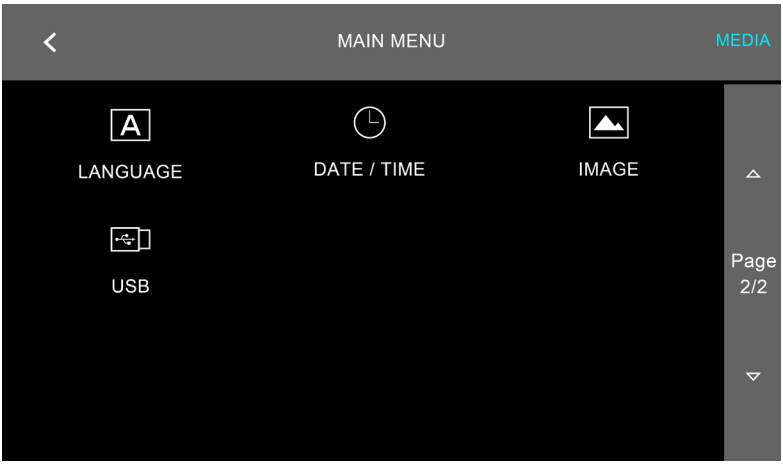
MITCORP provides the "VideoscopeNow" APP for using the X2000 remotely.

'VideoscopeNow' is a tool specifically designed for industrial videoscopes that can share the live view from the main portable console system through a Wi-Fi connection. It can also act as a remote controller to take photos and record videos. With the app, users can also access the photos/videos on the main system and download them onto their connected mobile devices.

Part IV Main Menu Settings

- 4.1 Menu



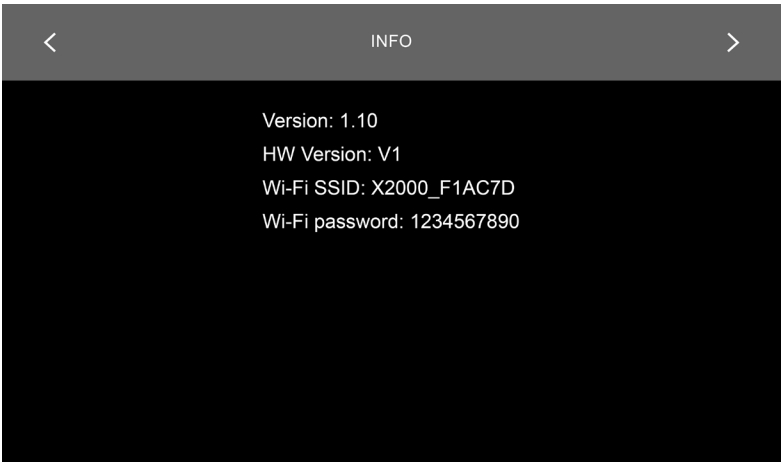


• 4.2 Info.

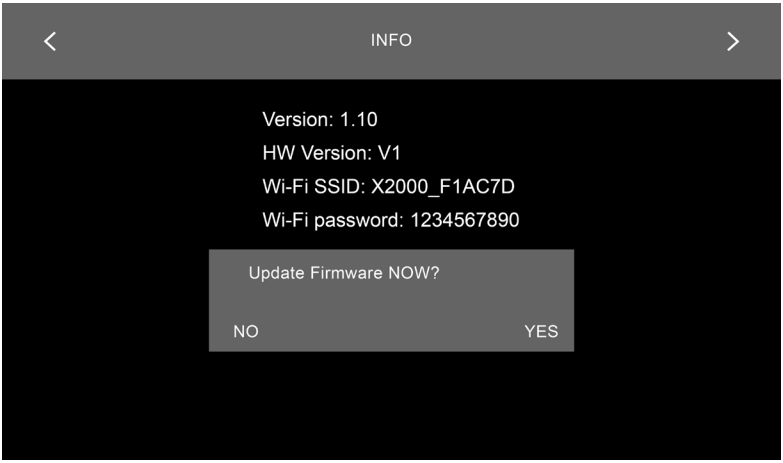
Current firmware information.
- Version: (Firmware version)
- HW Version: (Hardware version)
- Wi-Fi SSID: X2000_(identification code)
- Wi-Fi password: 1234567890

Firmware upgrade: When there is a new firmware version available, save the file (.BRN file format) in the SD card root directory.

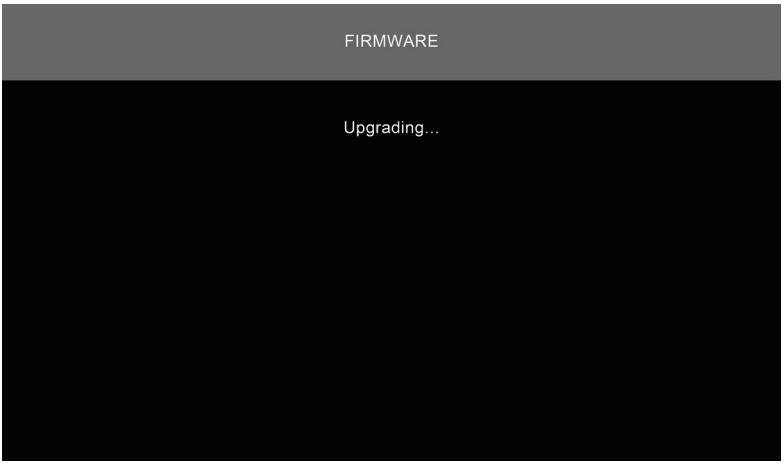
1. Tap the ">" on the upper-right of the screen.



2. Follow the instructions.



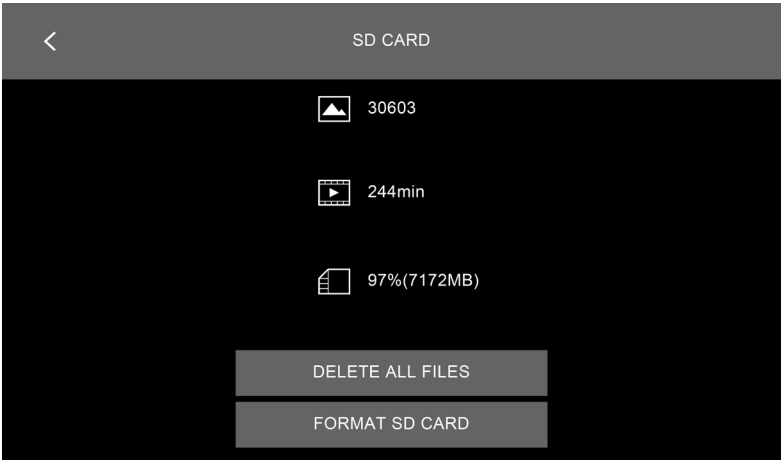
3. The system will automatically shut down when the upgrade is done. Reboot the system then check if the new version is properly installed.



• 4.3 SD Card Status

Storage information.

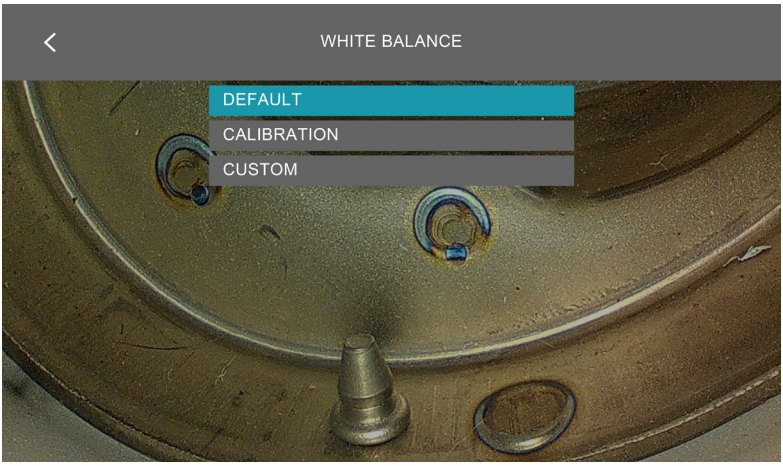
- The X2000 system supports user defined/built file storage folders.
- The default storage folders: JPG (for still images) / VIDEO(for recorded videos) will be built when a new SD card has been inserted.



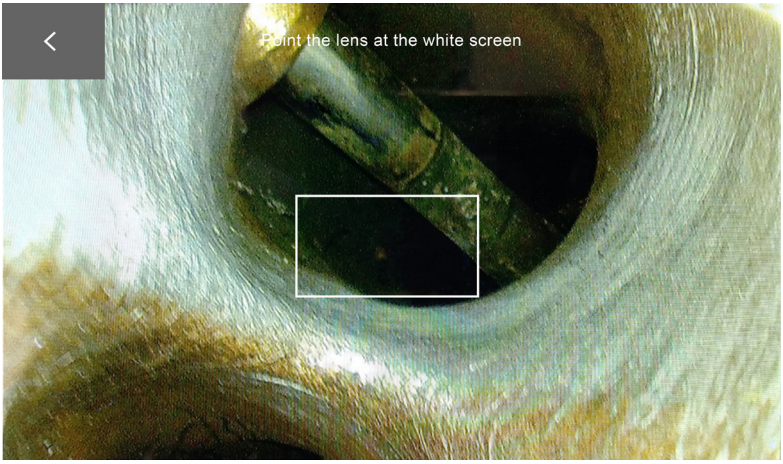
• 4.4 White Balance

White Balance: 3 modes: Default / Calibration / Custom
- Default: Factory default setting.
- Calibration: Subject to various inspection environments, it is suggested to calibrate the white balance before each use to get the best image hues. The steps are as follows:

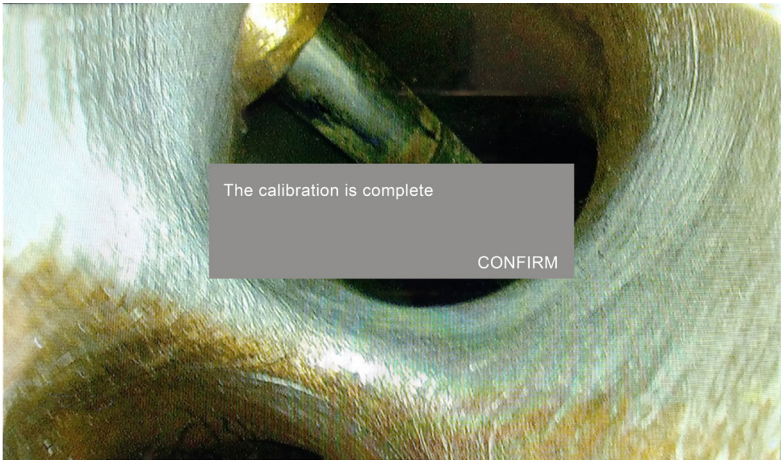
1. Press the "CALIBRATION" button



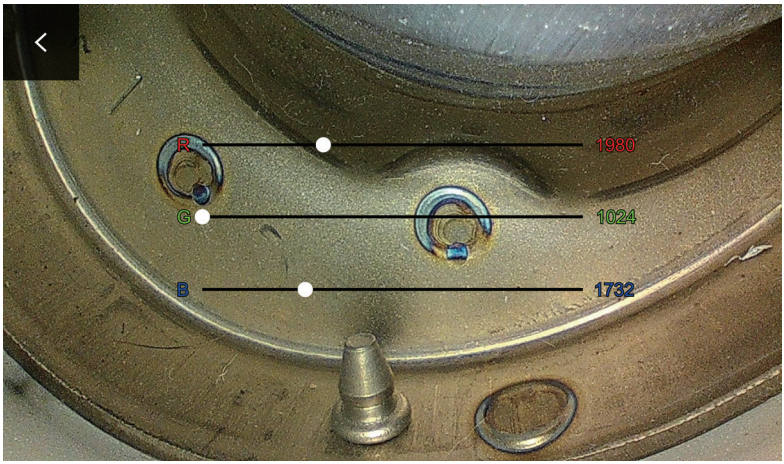
2. Point the probe lens toward a plain white paper and try to let the rectangle on the screen appear as nature white as possible.



3. Press the button on the upper-left of the screen, then tap confirm; The calibration process is completed.

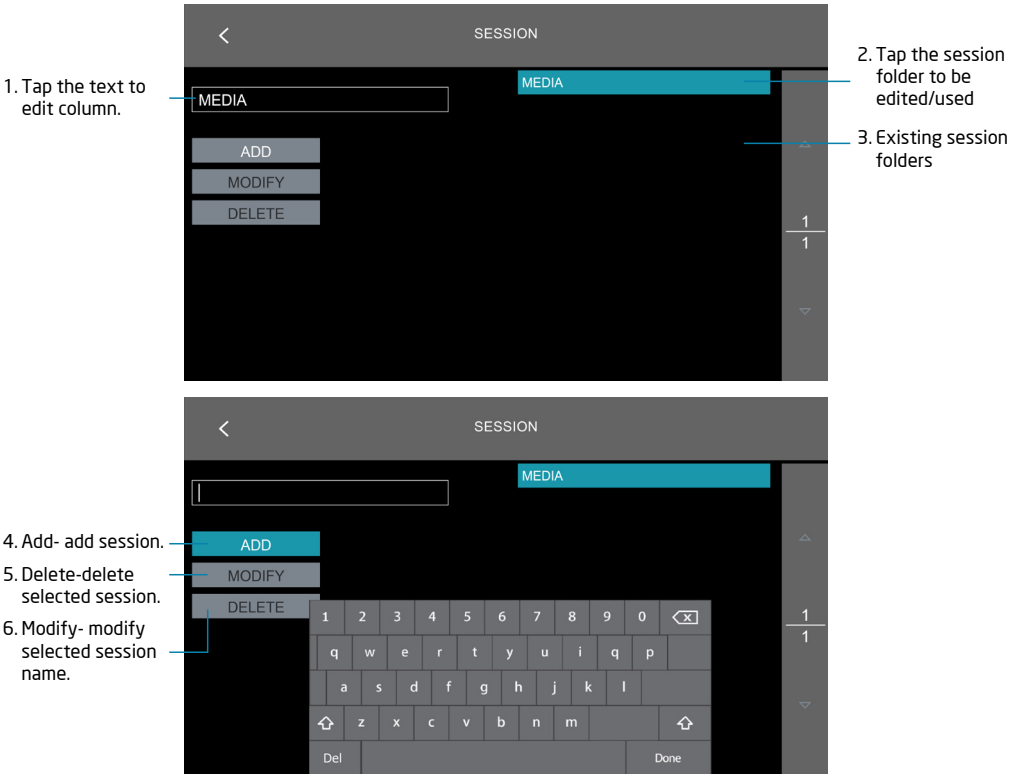


- Custom: Users can customize own settings with the R/G/B parameter bar.



• 4.5 Session

The X2000 system provides custom built photo/video storage folders under the SESSION setting. When a new SD card is installed, the default folder MEDIA will be created. The editing steps are as below:



NOTE:

- SESSION / TAG: (update function above firmware-v1.04).
- When deleting a 'SESSION', inside the session folder will be deleted.

• 4.6 Tag

For each session folder, the system provides 3 editable tags to put overlay texts on every single image (Tag text usually refers to inspection parts or environment information). The editing steps are as below:

NOTE:

- The SESSION and TAG custom settings are saved in the system's internal memory. You cannot edit the files on the SD card via other PCs to get the same results.
- When replacing the SD card, the custom SESSION and TAG settings will be automatically applied to the new SD card. If the new SD card has folders with the same name, these folders will be applied directly. Other data/files on that SD card will not be changed or moved.

Application example 1:

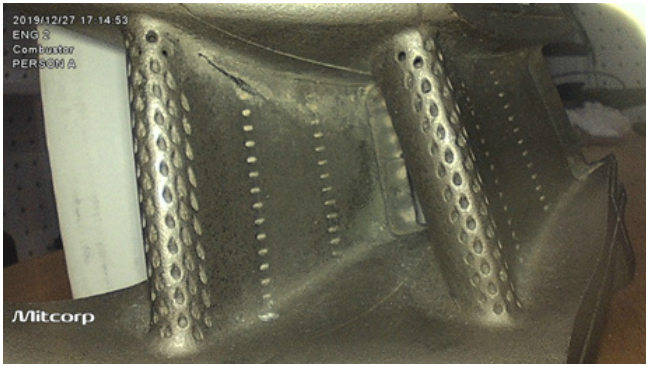
In an air jet landing inspection project, the project manager assigns "Person A" from the engine department 2 jobs:

1. Inspection of ENGINE1-HP Turbine. 2. Inspection of ENGINE2- Combustor.

He also assigns "Person B" of the airplane body department to:

3. Inspection of WINGBOX1. 4. Inspection of WINGBOX2 Pylon.

The "SESSION & TAG" functions are used as below to accelerate the inspection review and report generation.



TAG sample photo

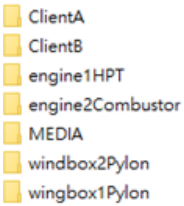
SESSION	TAG		
ENGINE 1 HP Turbine	1: ENG-1	2: HPT	3: Person A
ENGINE 2 Combustor	1: ENG-2	2: Combustor	3: Person A
WINGBOX 1 Pylon	1:WINGBOX 1	2: Pylon	3: Person B
WINGBOX 2 Pylon	1: WINGBOX 2	2: Pylon	3: Person B

Application example 2:

The engineer "Person C" is assigned to CLIENT A-Tank 1 and Client B-Tube 2 to do an equipment leak inspection. He uses the "SESSION & TAG" function to accelerate his review and report generation.

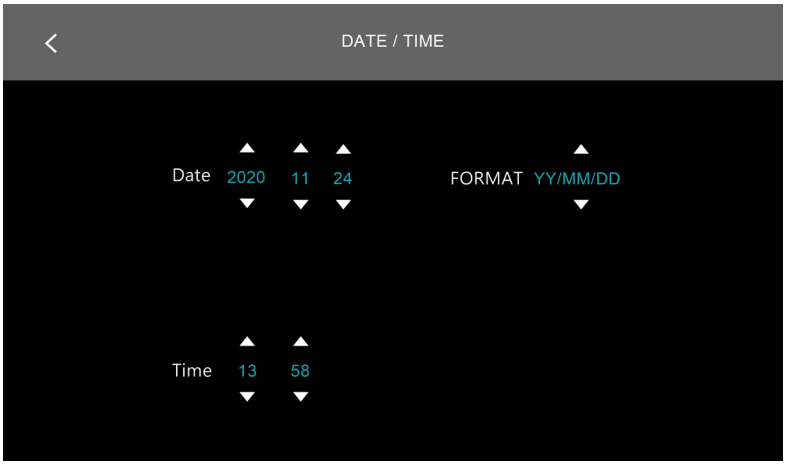
SESSION	TAG		
Client A	1: Tank 1	2: Person C	
Client B	1: Tank 2	2: Person C	

Both samples are stored in the same SD card, they will be sorted into session folders that contain the tagged images:



• 4.7 Language

• 4.8 Time setting



• 4.9 Snapshot

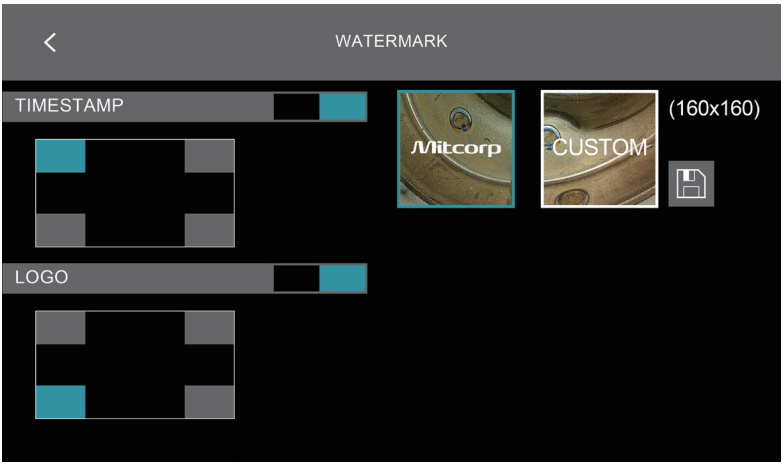
- Snap shot photo resolution options:
  (1) FINE: (1) 2560*1440; (2) STANDARD: 1280*720.

(* 60 HD or 60 HDLF probe is connected)

• 4.10 Watermark

- On/off switch for both timestamps and logo watermarks on snapshots.
- The timestamps and watermarks can be placed in any of the 4 corners of the photos. Tap the position icons as needed.
- The standard Mitcorp watermark can be replaced:

1. Save the logo file in the SD card in the root directory.
2. Insert the SD card and the system will show the existing file list. First, tap the custom logo file and then the "Save" Icon to load the logo into the system's memory. The logo should show in the preview window on the right side (example seen as "CUSTOM" in the image below) when the process was successful.
3. Tap the preview window to enable the custom logo watermark.

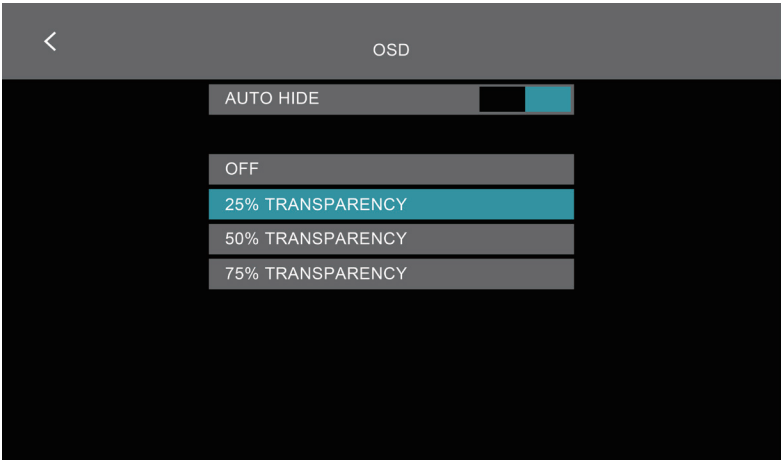


• 4.11 Microphone

Users can turn on/off the built-in microphone.

• 4.12 OSD

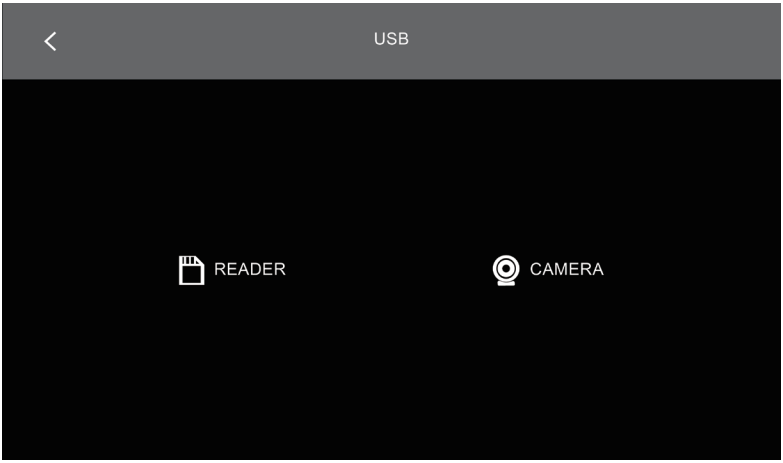
- AUTO HIDE on/off switches on the OSD (On-Screen Display) function bars on the sides of the display. They won't be hidden anymore during inactivity.
- The transparency of the function bars is adjustable in 4 levels.



• 4.13 Auto Power Off

• 4.14 USB

- When a PC is connected via USB, the following options are available:
  (1) SD card reader ; (2) Camera.



Note:

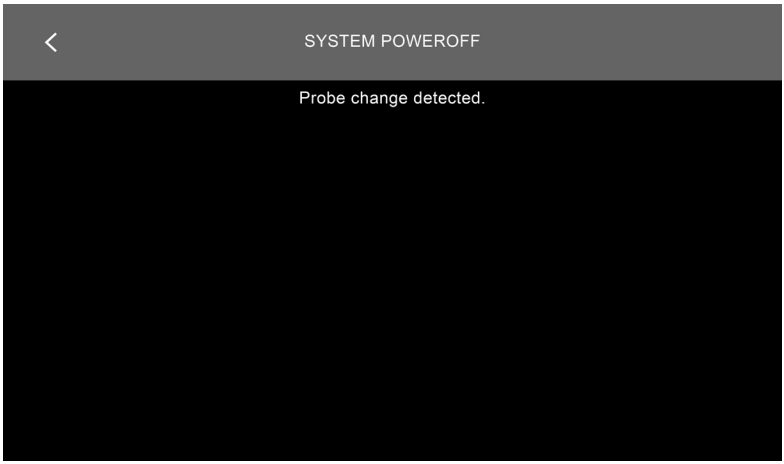
Users need to install the PC software "USB VIDEO SCOPE" before connecting a PC and using the CAMERA mode. Refer to operation guide of the <APPENDIX> section.

The "USB VIDEO SCOPE" software can be downloaded at www.mitcorp.com.tw.

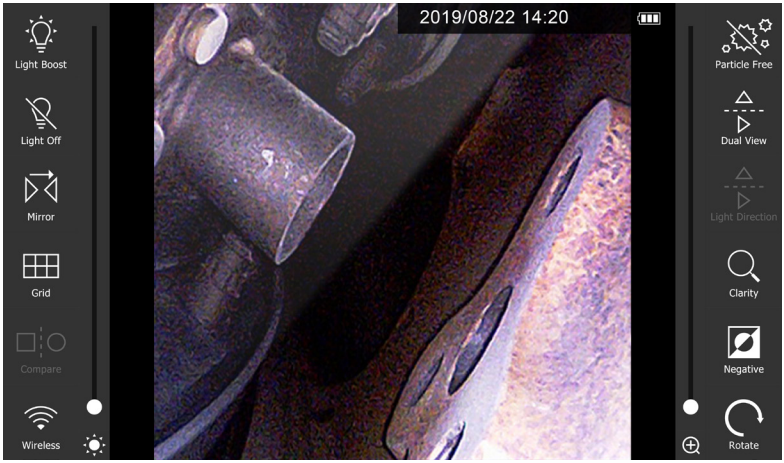
APPENDIX

When connecting 3.9mm series probes, different functions and interfaces can be found as below:

1. When changing from 6.0mm probes, the booting screen will show the following message and then shut down:



2. The picture output at resolution 400*400 on screen, as below:



3. The image setting -> Photo Resolution (refer to chapter 4.8) provides 2 options:

4. When connecting a 39HD probe the system provides 1600*1600/800*800 resolution options:

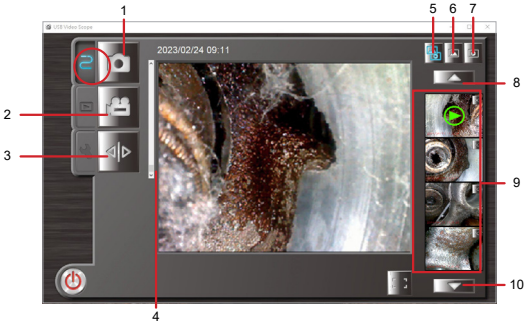
USB videoscope

The software enables Mitcorp videoscope to work on PC. Connect your PC to the video scope base unit USB port, select the "CAMERA" mode, then launch this software. Download the software to PC.
Operating system: Win10 and higher version.

System requirement: CPU AMD Athlon II 2GHz above (Quad core) / Independent graphics card / card / RAM 4G or above. The software function breakdown into 3 mode: Instant Mode (live view) / Browse Mode / Setting Mode.
Detail instruction as follow:

OPERATION

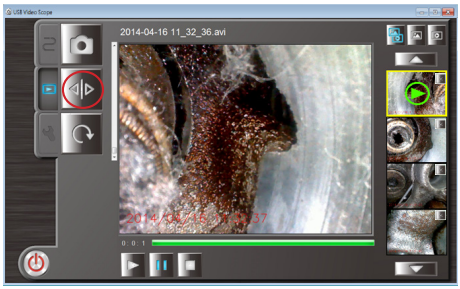
Instant mode



1. Snapshot - Click button or [space bar] from the application window, or press the Snap button on the console to take a photo.
2. Video record - Click button or [Ctrl] + [R] key on the application window to start recording video. To stop recording, click the Rec button on the application.
3. Mirror - Click or [Ctrl] + [M] key to flip the image horizontally.
4. Zoom in - Roll up the bar to zoom in the image from x1.0 to x4.0, You can also click the [↑] key on your PC to zoom in, click the [↓] key on your PC to zoom out.
5. Preview both photos/videos or [Alt] + [A] key.
6. preview photos only, or [Alt] + [P] key.
7. Preview videos only, or [Alt] + [V] key.
8. Click to previous file, or [PgUp] key.
9. Display 4 latest photo/video, press [1] ~ [4] key to preview
10. Click to next file, or [PgDn] key.

Browse Mode

Press 2nd TAB on the screen or press any picture/video on the preview window. The Browse mode will not function if no pictures/videos in the folder.



Mirror
Click or Ctrl + M key to flip the image horizontally.

Rotate
Click or F2 key to rotate image counter-clockwise 90°.

Screenshot on video
You can click or space bar key anytime during video playing to get still image.

Video Play
Click to play selected video, or Ctrl + P key.
Click to pause, click to continue play, or Ctrl + P key.
Click to stop the video, or Ctrl + S key.

Delete
Select the image click on the up right of the photo / video image or Delete key.

* Back to instant mode, click ESC key.

Setting Mode

Destination folder set up

Select the destination folder to save images and videos, click to change setting or to skip and keep the default setting. (C:\Users\Documents\USB VideoScope)

Time stamp set up

Select the time stamp display format, all photos and videos will be saved with selected format on left buttom.

* Back to instant mode, click ESC key.

Specifications

X2000		
		
Display		7" LCD, Resolution 1024x600
Power supply	AC adapter:	100V~240V, 12V 2.5A. 50~60Hz
	LI battery	Rechargeable Li Battery 3.6V 9800mAH, approximate operation time: 5hrs, charging time: 4 hrs
Video output	HDMI	TYPE D, HDMI 1.4a transmitter with 3D format and CEC support
	USB	USB TYPE C, supporting USB full-speed and high-speed data transmission
	Wi-Fi	IEEE802.11B/G
Operating temperature(*)		In air: 0~40°C With AC power adapter: 0-40°C Charging temp: 0~35°C
Storage temperature		-10°C~70°C
Drop resistance		1m
Relative humidity		Max 95% non-condensing
Dust proofing and water proofing		IP57
Insert tubes interchangeability		6.0mm HD series; 3.9mm series

* High temperature during charging/operation may cause degradation of battery performance and life.

Software Features	
Image features	Digital zoom 3X, 10 steps brightness contrast
Image effect	Brightness, Contrast, sharpness adjustment
Annotation	10 text annotation (24 characters)
Timestamp / watermark	For snapshot / video recording (on/off)
Image management	User define pic / video folder available
Image display functions	Light boost, light off, mirror, grid, compare, wireless, particle free, dual view, light direction, negative, auto whie balance
White balance	Manual adjustable (default, calibration, custom)

Recording Management		
Storage media		SDHC up to 32G
Overlay		YY/MM/DD h:m. Battery capacity
Thumbnail image display		9 Grids album mode
Still image	Resolution	2560x1440 (S-HD); 1280x720 (HD)
	Recording format	.jpg
Video	Resolution	1920x1080
	Recording format	.mov/H.264
	Audio input	Built-in microphone (on/off)
Frame rate		30FPS

Accessories		
HDMI cable (AV-out)	1.8m. TYPE D, HDMI 1.4a	
USB cable (data transfer)	1m. TYPE C to standard TYPE A	
USB charging cable	1m, USB-DC jack (for power bank) It is recommended to use a 5V~12V, 2A mobile power bank. An output under 2A will not charge the battery and only provide operation power supply	
SD card	32G	
DC power adapter	100V~2401V, 12V 2.5A 50~60 Hz	
Shoulder strap	Polyester	
Hand strap	Polyester	
Sun visor	Steel / Plastic	
Insulation cap	Ø20mm, 90mm rubber	
Rigid sleeve	Grip material: Rubber/ Aluminum/ Plastic Tube material: Stainless steel	
	for 6.0mm probe:	for 3.9mm probe:
	OD: 8mm / ID: 7mm Protection ring: OD: 10mm Extension join rin: 11.2mm	OD: 6mm / ID: 5mm Protection ring: OD: 8mm Extension join rin: 10mm
Trolley case	HDPE EVA with storage reel	

MIL-STD compliance

Item	Standard (Method)	
Vibration Test (Packaged)	MIL-STD-810G-CHG-1 Method 514.7	Procedures I
Transit Drop Test (Packaged)	MIL-STD-810G-CHG-1 Method 516.7	Procedures IV
Salt Fog Test	MIL-STD-810G-CHG-1 Method 509.6	
Humidity Test	MIL-STD-810G-CHG-1 Method 507.6	Procedures II
Explosive Atmosphere	MIL-STD-810G-CHG-1 Method 511.6	Procedures I

Accessories

Power adaptor

USB charging cable
(For power bank)

HDMI TYPE D

TYPE-C

Shoulder strap

Hand strap

Sun visor

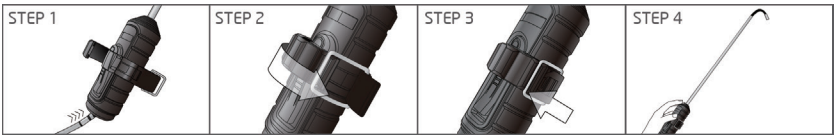
Insulation cap

Trolly case

Rigid sleeve

* Also included: Cleaning set, SD card, User manual.

- Working with Rigid Sleeve

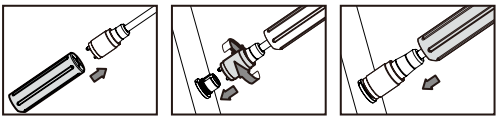


Note:

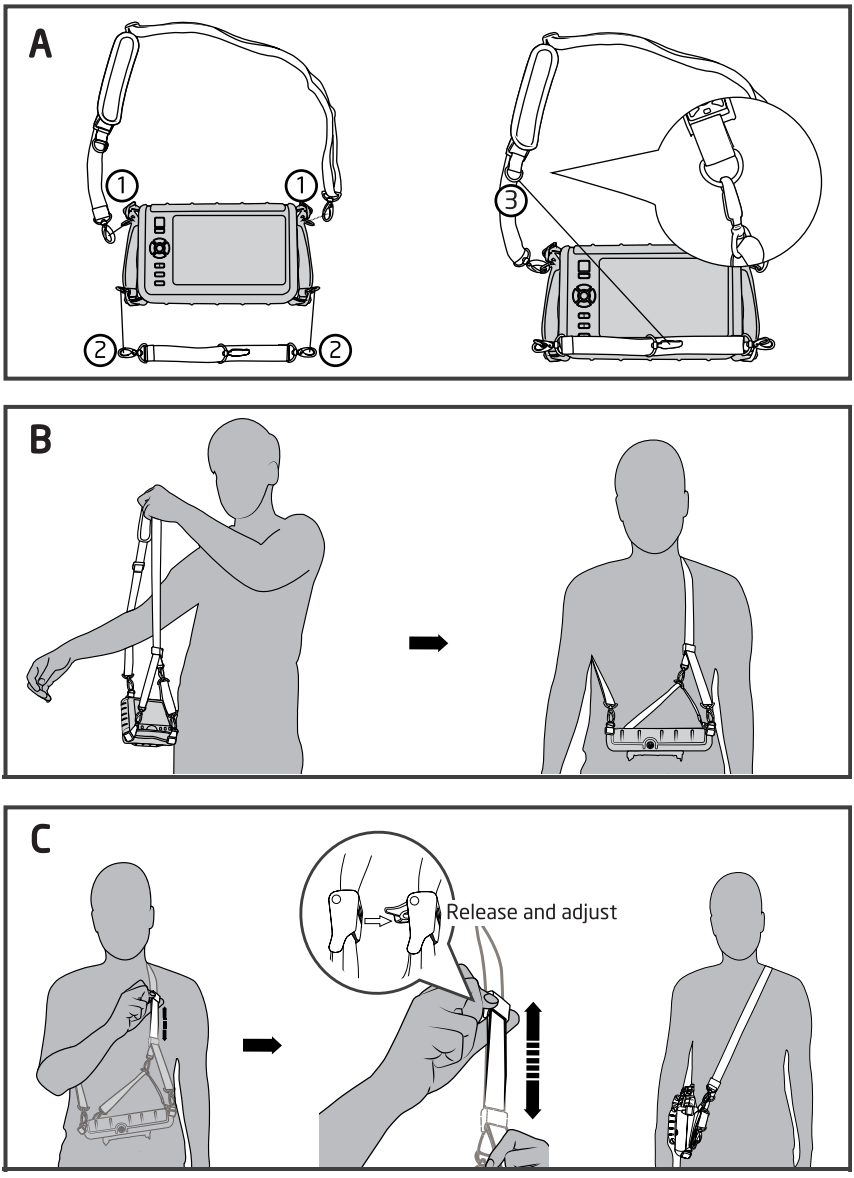
Do not buckle the ring when out of using. The inside rubber will be deformed when the lock ring is buckled, and thereby affects the insertion of the probe tube.

The rubber takes about 24 hours to recover after being released.

- Insulation cap



• Shoulder strap



X2000 Basic Troubleshooting

- Do not use the equipment if there are any obvious malfunctions or damage and contact Mitcorp for repairs.
- Do not use the instrument when you suspect even the slightest irregularity
- This troubleshooting guide is for basic problems only · if the problem cannot be resolved through the described action, please stop using the product and contact Mitcorp for assistance.

Common Issues: Main System

Defect	Possible Cause	Recommended action
Cannot power on	1. Out of battery	Please connect the power cord to charge
	2. The probe is not connected properly	Please screw on the probe connector tightly
	3. The environmental temperature is too low or too high	Please place the system in a normal temperature environment
	4. The Base Unit is broken	Please contact Mitcorp or your local distributor for repair
When there is no image / the image is freezing after powering on	1. Abnormal power on	Please reset the system
	2. The Probe doesn't connect properly	Please screw on the probe connector tightly
	3. A Hot-swap was performed	Please power on the console after connecting the probe
	4. The console or the probe is broken	Please contact Mitcorp or your local distributor for repair
Cannot record	No SD card	Insert SD card
Cannot activate Wi-Fi		
Color tone is not correct	White balance error	Check/ calibrate white balance
Flashing on display screen	Strong environmental radiation attack. (when using 2.8mm probe)	Please try figure out if there are high voltage/frequency heavy electronic equipment in operation environment and avoid it. (this product meets the Electromagnetic compatibility (EMC) EN 61000-6-3 test standard that intended be used in the residential, commercial and light-industrial environments.)

Common Issues: Insertion Probes

Defect	Cause	Recommended action
The probe doesn't articulate fully	1. The probe is rolled up	Please spread the probes out
	2. The probe is twisted	
	3. The probe was pulled with too much force	Please avoid pulling the probe excessively
	4. The probe head is interfered by another force	Please reserve the room for articulation
	5. The Probe head is broken	Please contact Mitcorp or your local distributor for repair
The image is unclear	1. The lens is dirty	Please clean the lens with the cleaning kit
Front LED light is off	1.Particle free feature is on	Please turn it off and check again
	2.Light off feature is on	
The screen is white	1. Light boost is on	

JAN-24-EN

Mitcorp

2F., No.75, Wenhua 1st Rd., Guishan, Taoyuan 333, Taiwan
T +886-3-328-7177 F +886-3-328-7176

e-mail: sal@mitcorp.com.tw
@ website: www.mitcorp.com.tw

2024 Medical Intubation technology Corporation (Mitcorp).
All rights reserved. Design and specifications are subject to change without prior notice.
Actual product and accessories may differ form illustrations. Errors and omissions excepted.
Reproduction in any manner without written permission of Mitcorp is strictly forblдden.