

IBS-01 Beauty Scope

SKIN & HAIR ANALYSER

USER'S MANUAL



Version 5, May of 2014

USER'S MANUAL

Congratulations on your purchase of Video Microscope with multi-function, e.g. 1/2/4 image freeze, negative / zoom functions, Sebum / Moisture / Elasticity / Pigment auto analysis.

We believe the versatility and ease of use of this product will lead you to obtain more success in business deals and create more profit for you.

The Video Microscope is guided cool light surrounding the lens and automatically provides the best illumination to enable you to obtain the optimum viewing angle and color of the target object on the video monitor.

Image retention on hard copy and image storage are possible by simply connecting the **video output** of Video Microscope directly to a Color TV monitor, to an optional Color Video Printer, Video Tape Recorder (VTR), or **USB output** to Personal Computer/Laptop.

Model	Available pages
IBS-01Pro	Page 2-9, Page 16-39
IBS-01Pro(SMEP)	all (Page 2-48)

1. ACCESSORIES

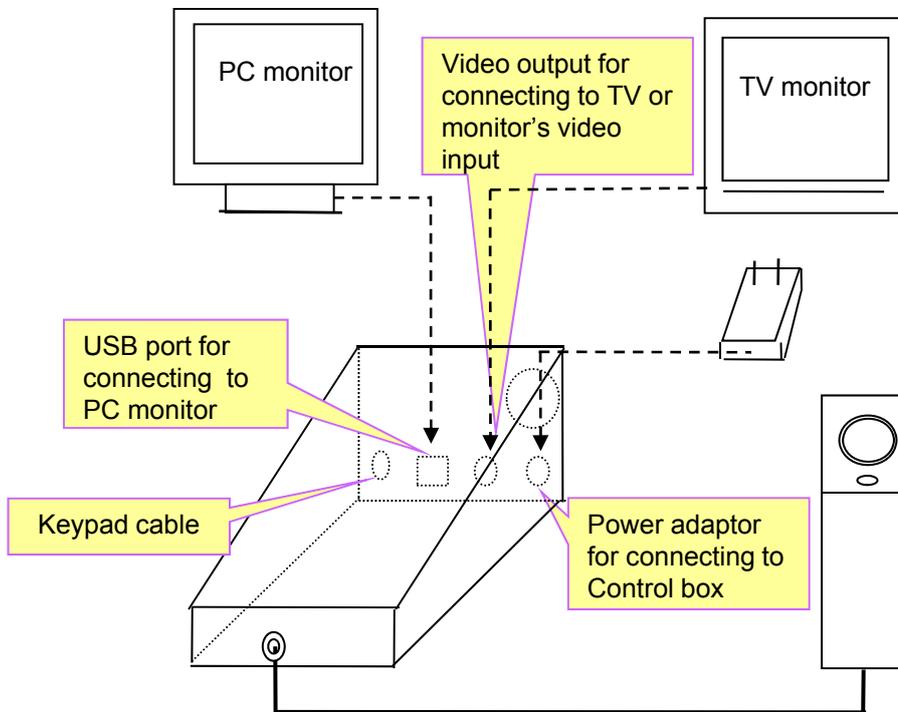
1-1 Standard accessories:

ITEM	QTY	DESCRIPTION
1	1	Control box + Handy probe (resolution: 3,000,000 pixels)
2	1	Probe stand
3	1	1 & 2 & 4 split frames freeze function <i>Model: IBS-01Pro available</i>
		1 & 2 & 4 split frames freeze, 4 in 1 analysis (including test bars/test papers) <i>Model: IBS-01Pro(SMEP) available</i>
4	1	Negative / Zoom function
5	1	AV signal cable (RCA-RCA video cable)
6	1	USB cable, USB driver & New Kowa camera image capture program
7	1	Keypad cable, for PC freeze function
8	1	Power adaptor (100V – 240V)
9	1	User's Manual
10	1	free SMEP Simple software <i>Model: IBS-01Pro(SMEP) available</i>

1-2 Optional accessories:

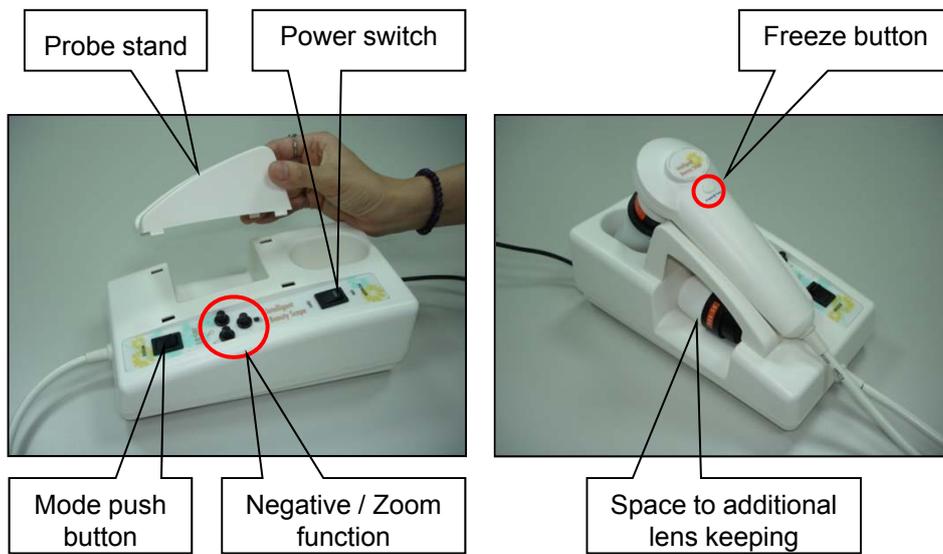
ITEM	DESCRIPTION
1	IBS-01: Lens 1x focus adjustable (for full face/body, half body, partial face)
2	IBS-50: Lens 50x (for skin inspection)
3	IBS-50RN: Lens 50x polarized (for surface/deeper layer skin check)
4	IBS-200: Lens 200x (for hair, scalp inspection)
5	IBS-650: Lens 650x (for hair cuticle inspection)
6	IBS-Iris: Iridology Lens (for iridology analysis)
7	IBS-320: Microcirculation lens
8	IBS-50RN(UV): Lens50x UV polarized (for acne inspection)
9	BX003 Carrying case
10	SMEP+CMS (Customer Management System) software offers 4 in 1 (sebum/moisture/elasticity/pigment) skin diagnosis auto analysis <i>Model: IBS-01Pro(SMEP) available</i>
11	Pro Capture software (for history / skin / hair / iris / microcirculation database comparison & customer management system)
12	Kowa Ma software (for skin/ hair image store, before / after comparison & customer management system)
13	Pro Video Master software (for skin/ hair /acne/microcirculation image store / video recording, comparison & customer management system)

2. SYSTEM BLOCK DIAGRAM

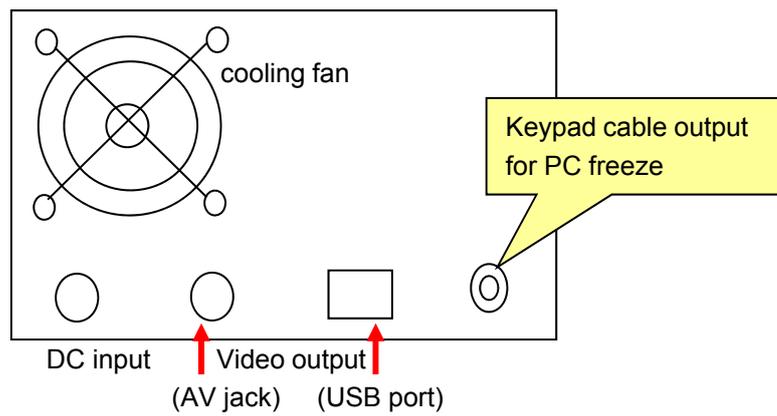


3. FRONT / REAR PANEL & PROBE

(FRONT PANEL)



(REAR PANEL)



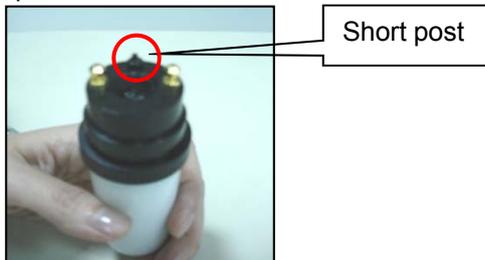
4. ATTACHING LENS TO HANDY PROBE

4-1 ATTACHING LENS TO HANDY PROBE

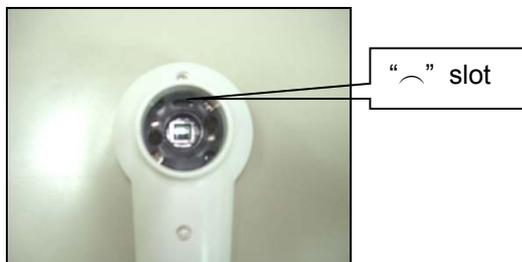
(1) Take off the anti-dust cover of the handy probe.



(2) Find the short post on the lens.

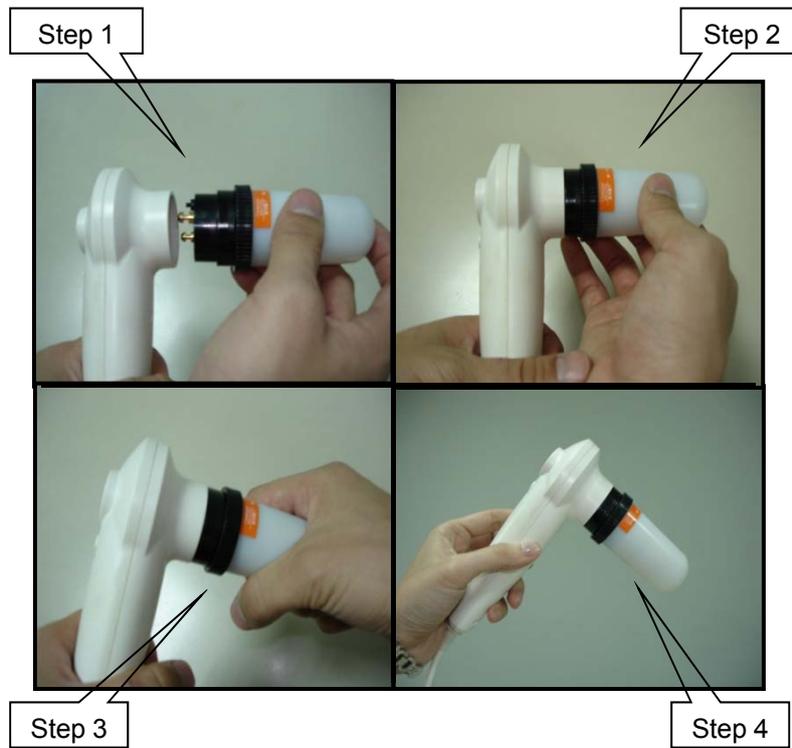


(3) Look at the front side of handy probe, you will find there's a “∩” shape slot.



(4) Match (plug in) the post to the “∩” shape slot to ensure they are fully combined. Turn clockwise to screw on the lens, anti-clockwise to screw off the lens.





4-2 Place the probe stand on the control box.



5. OPERATION

- 5-1 Complete the installation in accordance with the system block diagram. Turn the power switches of both the unit and your monitor to "ON" position.
- 5-2 Lens with a contact type illumination head is intended to be placed on or held just above the viewing object, Then you will get a vivid image on the monitor.

6. MODE / FREEZE FUNCTION

(Operation only available under "TV" mode)

(A). Selectable Mode Function Statement

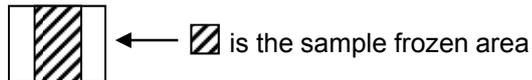
Standard mode

MODE 1  : Single (1) frame freeze

(* Notice: the frozen sample is the real size picture on screen)

MODE 2  : Left/right (2) split frames freeze

(* Notice: the frozen sample is at the vertical central part of the real size)



MODE 4  : Quad (4) split frames freeze

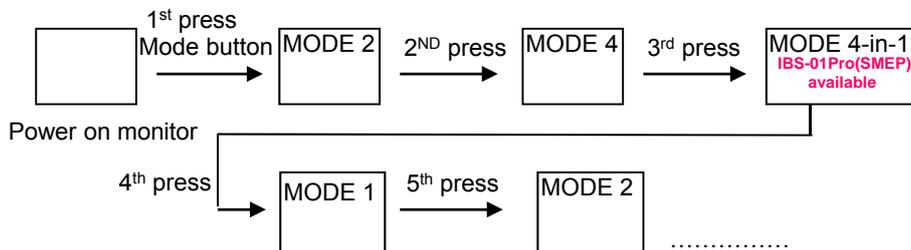
(* Notice: the frozen sample is the full frame on screen)

MODE 4-in-1: Sebum/Moisture/Elasticity/Pigment test

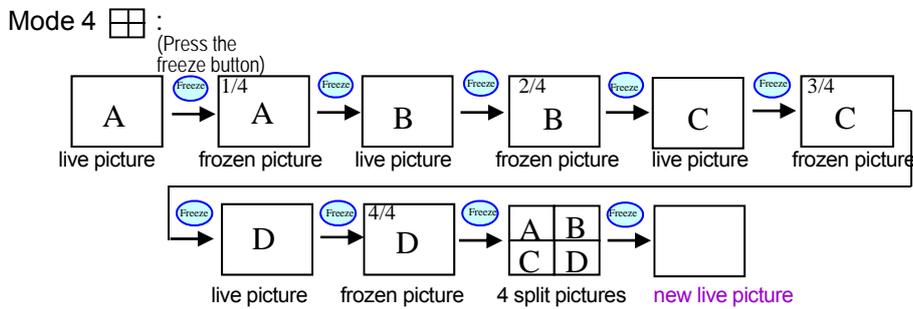
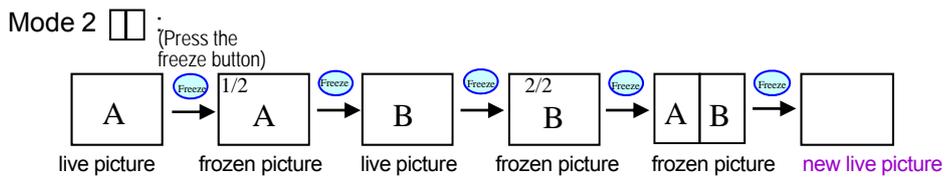
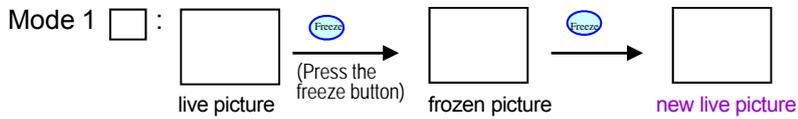
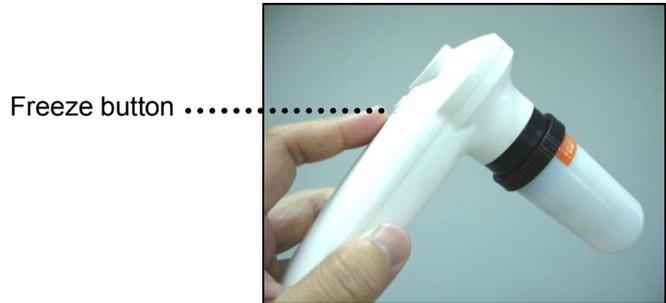
*** Only IBS-01Pro(SMEP) available**

(B). Mode Function Setting

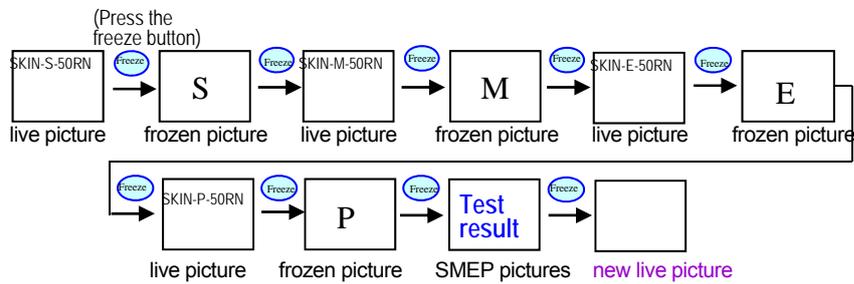
After powering on the unit, the original setting is single frame freeze. You can press "Mode" push button switch (on the lower right side of the unit) to choose various modes. Here is the procedure diagram:



(C). Mode / Freeze Function Operation



Mode 4-in-1  : **Only IBS-01Pro(SMEP) available**



7. NEGATIVE / ZOOM FUNCTION

(Operation only available under “TV” mode)

(A) Negative function:

Press the  button to get picture in negative film format.

Press  button again to release negative picture (recovering to original picture).



Original picture



Negative picture

(B) Zoom function (from 1.0x – 4.0x):

 + enlarge to (1.1x, 1.2x, 1.3x,4.0x).

- recovering image (.....1.3x, 1.2x, 1.1x, 1.0x).



Original picture (1.0x)



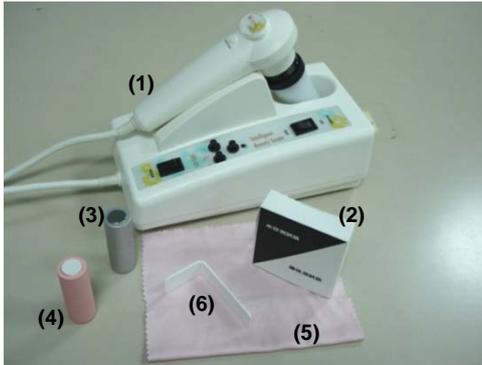
Enlarge picture (1.4x)

For detailed operation, please refer the list below:

		NEGATIVE	ZOOM
Single frame freeze	Live	V	V
	Freeze	X	V
Left / right (2) split	Live	V	V
	Freeze	X	X
Quad (4) split	Live	V	V
	Freeze	X	X

8. 4-in-1 (Sebum/Moisture/Elasticity/ Pigment) analysis

--- Push the mode button to 4-in-1 analysis function



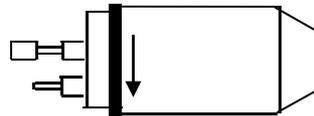
- (1) IBS-01Pro(SMEP) Main unit
- (2) Moisture/Elasticity test paper
- (3) Sebum test bar (silver color)
- (4) Moisture/Elasticity test bar (pink color)
- (5) Cleaning tissue
- (6) Acrylic plastic supporter

(1) Usage of Sebum test bar (silver color)

※ Sebum test



- a. Be sure to clean the **Sebum test bar (metal side)** with **cleaning tissue** and alcohol each time before use.
- b. Touch the sebum test bar (**metal side**) to the skin part you want to test. (**Suggested test part: forehead**)
- c. Set IBS-50RN lens to the normal (texture) inspection mode.



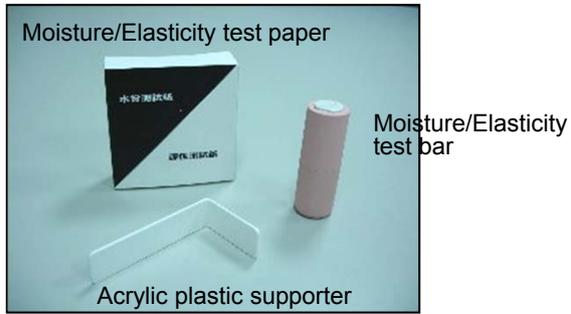
Texture / normal inspection
(Surface inspection)



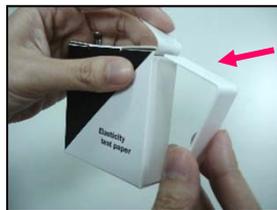
- d. Contact the lens to the metal side & freeze picture (press freeze button).
- e. Be sure to clean the Sebum test bar (metal side) with the cleaning tissue and alcohol each time before use.

(2) Usage of **Moisture/Elasticity test bar (pink color)**, test papers and acrylic plastic supporter.

f. Usage to get the test paper.



Tear the sticker of the test paper on white box.



Insert the white acrylic plastic supporter into the arrow area.



Pull one round white test paper out.



Tear the upper transparent sticker apart.



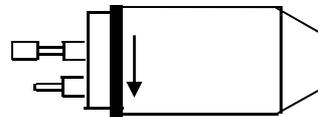
Touch properly the white plate of **moisture/elasticity test bar** to the white side and the black sticker paper will be on the top of test bar.





※ Moisture test

- g. Touch the paper side to the skin part you want to test.
(Suggested test part: lower cheek)
- h. Set IBS-50RN lens to the normal (texture) inspection mode.



Texture / normal inspection
(Surface inspection)

- i. Contact the lens to the paper side and freeze picture (press freeze button).
- j. Change the moisture test paper after each test.

- k. Moisture/Elasticity test bar (pink color), it is designed with a gap in the surface, if you would like to change the test paper, please tear it starting from the gap to take off the used test paper easily.

※ Elasticity test

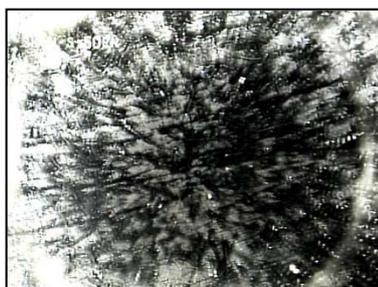
- l. Repeat procedure f. Touch the paper side to the skin part you want to test.
(Suggested test part: upper of the side neck, see picture aside)
- m. Follow the procedures of usage “h”, “i”, “j”, “k”.

(3) 4-in-1 test procedures:



Step 1: (Sebum test)

When you power on both TV monitor & **SMEP Microscope**, and set the mode switch to SMEP (4-in-1) test, you will find “**SKIN-S-50RN**” appears (live picture) on the screen.



Step 2:

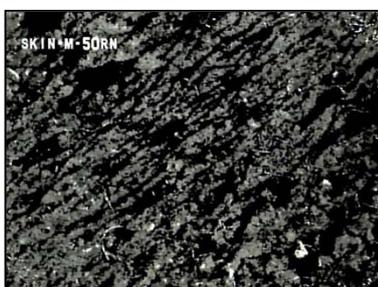
Follow the procedures of usage “a”, “b”, “c”, “d” to finish the test.
(After pressing freeze button, the sebum test is completed.)

Follow the procedures of usage “e” to clean the test bar (metal side) after each test.



Step 3: (Moisture test)

After Step 2, press freeze button, the screen will automatically appears “**SKIN-M-50RN**” (live picture).



Step 4:

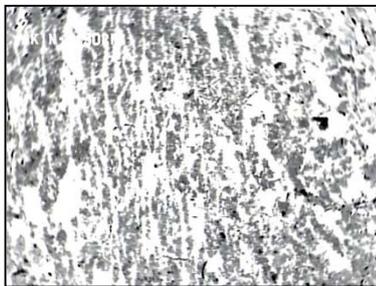
Follow the procedures of usage “f”, “g”, “h”, “i” to finish the test.
(After pressing freeze button, the moisture test is completed.)

Change the test paper after each test.



Step 5: (Elasticity test)

After Step 4, press freeze button, the screen will automatically appears **SKIN-E-50RN** (live picture).



Step 6:

Follow the procedures of usage “f”, “l”, “m” to finish the test. (After pressing freeze button, the elasticity test is completed.)

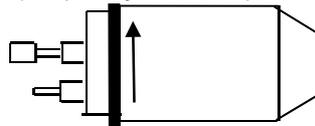
Change the test paper after each test.



Step 7: (Pigment test)

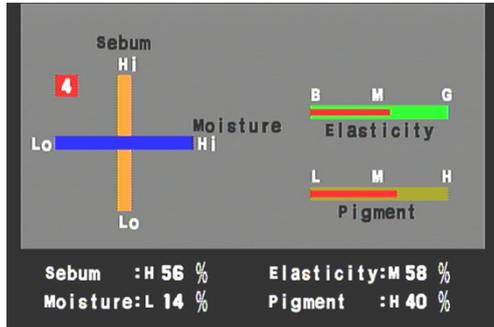
After Step 6, press the freeze button again, the screen will automatically appears **SKIN-P-50RN** (live picture).

Melanin / Polarized inspection
(deeper layer skin inspection)



Step 8:

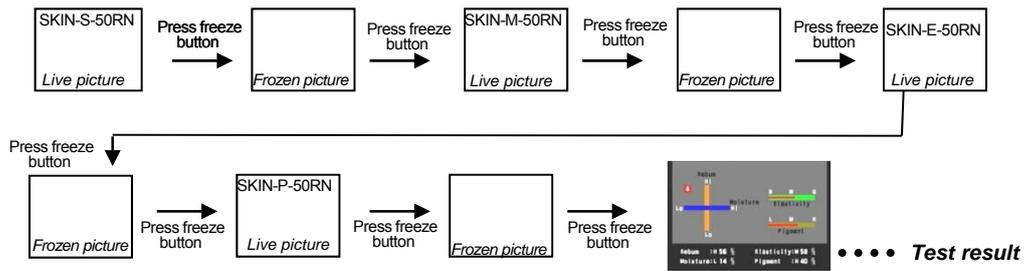
Set lens to melanin (polarized) inspection mode. Directly contact the lens to the skin part (**Suggested test part: upper cheek**) and freeze picture by pressing freeze button.



Step 9:

Now press the freeze button again, the whole test results of SMEP with pictures will be automatically shown on screen.

If you want to execute a new test, press again the freeze button and restart the procedures.



S: Sebum
M: Moisture
E: Elasticity
P: Pigment

H: High
M: Medium
L: Low

G: Good
M: Medium
B: Bad

9. OPERATION OF OPTIONAL LENSES

(1) 50x Polarized lens

You can rotate the black rubber ring anti-clockwise to make surface skin inspection; rotate the black ring clockwise you can make deeper layer skin inspection.



(2) Normal 50x and 200x lens

The lens has been well adjusted the focus. You can slightly contact skin or hair for image capture.



(3) 1x focus adjustable lens (for styling purpose)

The focus range for this lens is adjustable. You can rotate the black ring clockwise or anti-clockwise to get the right focus of full face/body, half body, or partial face).

*** This lens does not consist any inside LED lamp, therefore getting enough environmental outer light source is required.**



(4) 650x lens (for hair cuticle inspection)

The focus for this lens is adjustable. You can rotate the black ring clockwise or anti-clockwise to get the right focus to inspect the hair cuticle.



(5) 50RN(UV) lens

This lens is specially designed for ACNE inspection. It needs to be applied under "Pro Video Master" software.

* Under the UV light of 50RN(UV) lens, the acne will appear in fluorescent brown or red color. It is very useful in observation.



(6) Iris lens (for iridology analysis)

The focus range for this lens is adjustable. You can rotate the black ring clockwise or anti-clockwise to get the right focus of the iris image.



Anti-infection cap, please attach it on the top side of the lens.



The operation of iris diagnosis.

(7) Microcirculation lens --- for observing the thickness, shape of the blood vessels, the speed of blood flow of the nail-tip.



(a) Suggested test part: left ring finger, see the picture for available area.



(b) Operation method:

Please apply penetrating oil (vegetable oil) on the test part in order to get clearer image.

Method 1: Hand hold operation
You can hold the handy probe, contact the lens to the available area of left ring finger
(Refer to operation in next page)

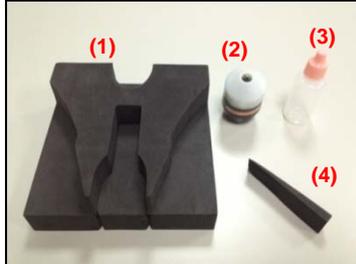


Method 2: Easy stand operation
You can also fix the handy probe on a stand, adjust the working distance to get right



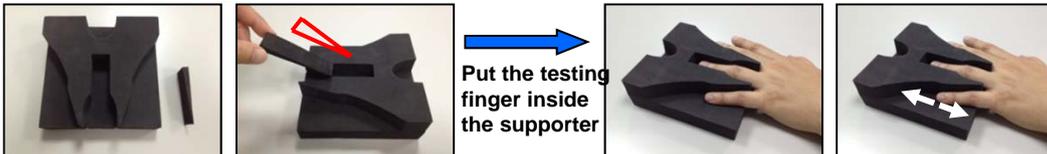
320x Microcirculation Lens Application

1. Standard package



- (1) Finger supporter (Probe stand) ×1 pc
- (2) 320x Microcirculation lens×1 pc
- (3) Empty bottle ×1 pc
(Please add vegetable oil)
- (4) Slope plate to adjust finger height ×4 pcs
- ※ **Optional: “Pro Video Master program”**
which gives good **image capture & video recording for microcirculation condition observation**

2. Usage of Finger supporter



Please insert the slope plate in the supporter (If the finger is thicker, the slope plate might be unnecessary.)

You can move the testing finger backward & forward to find the best view position.
(Ref: 3. Operation of microcirculation inspection)

3. Operation of Microcirculation Inspection



Please apply vegetable oil on the finger (suggested test part: left ring finger, just near to the nailfold), oil applied area about 1cm².

Hold the IBS-01Pro handy probe with 320x lens, contact the lens to the applied area.

You can get right focus & clear image by adjusting the probe in a slight slope or moving finger backward & forward

4. The operating position between the operator & the tested



Please hold the handy probe in a parallel direction of the tested finger, then the microcirculation image will be in forward direction to facilitate the microcirculation shape and dynamic observation.

5. Put the handy probe back to probe stand



*TROUBLE SHOOTING

	TROUBLE	SHOOTING
1	Turn on the power switch, but no function, no light, no fan working.	Check whether the AC adapter is properly connected.
2	The control box is in operation, but the handy probe doesn't work (the handy probe cannot offer light or image).	<ol style="list-style-type: none"> 1). Check the cable connection between the control box and the handy probe. 2). Check whether the lens is locked to its right position. (Make sure if the lamps inside the lens is light.) 3). Check if the AV signal cable (or USB cable) between the control box and monitor (or PC USB port) is well-connected.
3	No image on the monitor screen.	<ol style="list-style-type: none"> 1). Check whether the control box and monitor are powered on. 2). Check if the AV signal cable (or USB cable) between the control box and monitor (or PC USB port) is well-connected. 3). Check whether the lens is locked to its right position. 4). Connect the unit to another monitor to judge the unit or monitor is out of order in order to repair it.
4	How to clean if there are dust pots on the camera of the handy probe ?	<p>Take off the lens, you can blow out the dust by using a small air pump or wipe the small glass of the camera (inside the handy probe) with a cotton bar. *Please hold the handy probe toward ground direction to avoid new dusts.</p> <p>If the camera gets mildewed under humid condition, please contact the engineer to clean it.</p>
5	The freeze function doesn't work.	<ol style="list-style-type: none"> 1). Check if the freeze button is working well under TV connection. 2). If step 1). is OK, please check if the keypad is connected to PC and works nicely under PC connection.
6	How to adjust when the image color is out of harmony?	<p>Please adjust following buttons of the monitor:</p> <ol style="list-style-type: none"> (1) TINT (2) SHARPNESS (3) BRIGHTNESS (4) COLOR
7	While using the polarized lens to inspect surface skin (or deeper layer skin), why the lower part of the screen becomes darker (or brighter)?	<p>It's because you do not rotate the black rubber ring to the bottom of its direction. So some light is covered (or some light is opened). You should completely rotate the black rubber ring of the polarized lens anti-clockwise (or clockwise).</p>

* CONNECTION TO PC

(I). USB Video Image Driver --- Wbvidcap

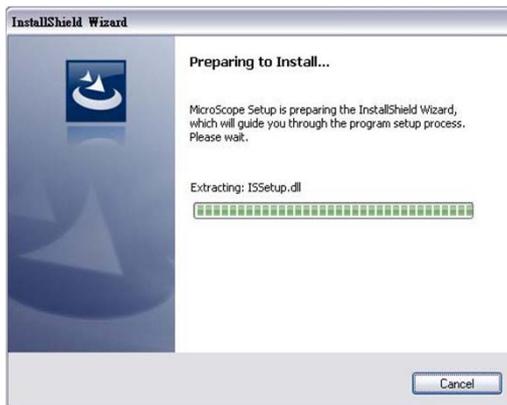
- * System requirement: a. IBM compatible PC
 - b. CPU: P4 with 40G HDD 1.6GHz or up
 - c. RAM: 512M or above
- * Required OS: Windows XP or Windows VISTA or WIN 7 & 8

1. Installation of Wbvidcap

*** Remark: Do not connect the scope to PC while USB driver is not well installed.**



- (1) Power on your IBM compatible PC. Insert the USB Driver CD-R into the CD-ROM drive.
- (2) The CD-R will auto-run Or click "My computer" → CD-ROM → "Setup.exe".
- (3) Click "USB Driver and Application".



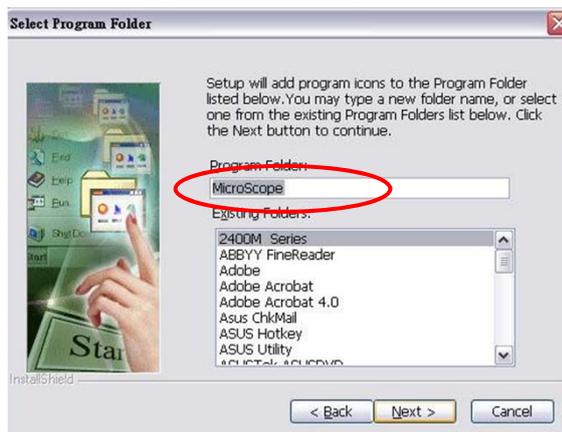
- (4) Follow the instructions to install the setup program.



(4-1): Click "Next".



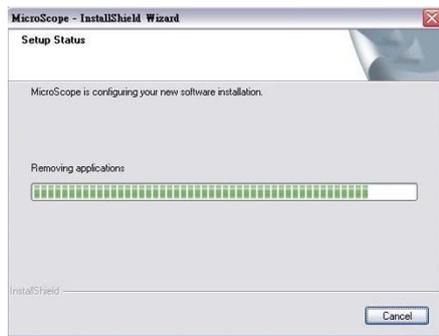
(4-2): Click "Next".



(4-3): Click "Next".



(4-4): Click "Next".



(4-5): When the setup is finished, PC will automatically execute the next procedure.

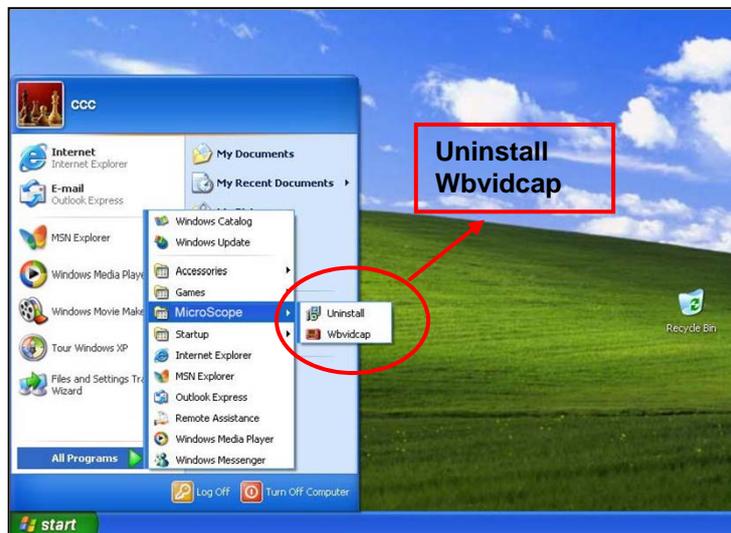
(4-6): Select "Yes, I want to restart my computer now" and then Click "Finish".



(5) The computer is restarting to add this "Wbvidcap" driver in "PROGRAM" system.

(6) To make sure "Wbvidcap" driver is setup, Click "Start" icon → "All Programs" folder → "MicroScope" folder →

Uninstall
Wbvidcap



2. Steps of hardware installation

(1) Step 1

When the computer is restarted, please connect the scope as per the following instructions and power on the scope:

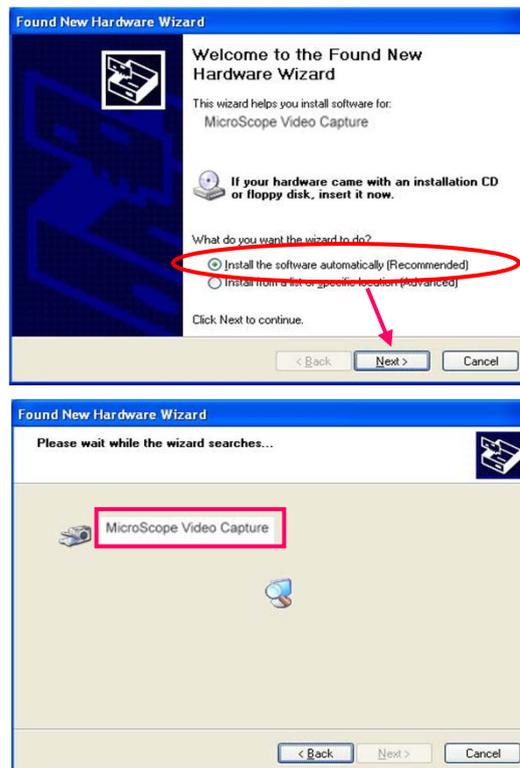
(1-1) Please plug the USB cable one side to scope and the other side to any USB port of the computer.

(1-2) Make sure the scope is powered on and wait for 5-10 seconds to let the computer recognize scope signal.

(1-3) Please execute the same procedures in step 2 & step 3 to let all computer USB ports useful under scope connection.

(2) Step 2

When the computer recognizes the scope signal, monitor screen corner will appear a hint “**Find New Hardware Wizard**”. After searching for several seconds, there will continuously appear the following small windows. Please operate as per the instructions:





Till now, **MicroScope Video Capture** has also been found.

(3) Step 3

Now the **MicroScope Video Capture** has been found. Please wait for 5 seconds and monitor screen will continuously appear some small windows. Please operate as per the instructions:





Till now, **MicroScope Bulk Device** has also been found.

Reminder: Please execute the same procedures in step 2 & step 3 to let all computer USB ports useful under scope connection.

3. Connection (Usage) of USB and Beauty Scope

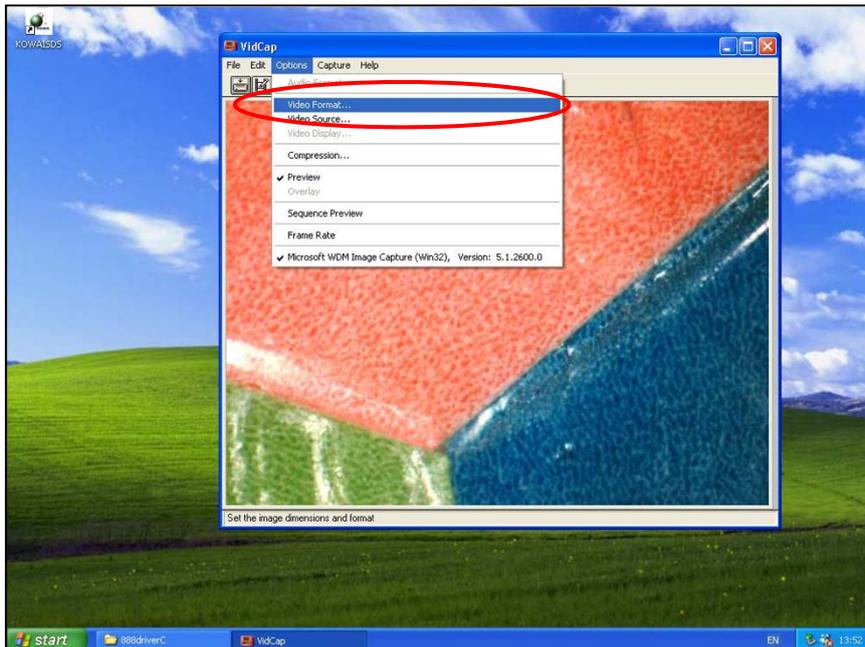
When you are using USB cable to connect the Microscope unit and PC, the operation procedures are as follows:

- 1). Make sure the USB cable has been well connected to USB output of Microscope unit and the USB port of PC.
- 2). Power on Microscope unit.
- 3). Click "Start" → "All Programs" folder → "MicroScope" folder → "Wbvidcap"
Then the image can be observed from PC monitor.

A. CONNECTION:

A-1 Image size

When you are observing the image, the image size is possible to be 640 x 480 or 320 x 240. You can click the "Option" button "Video Format" to change the image size to be your desired 320 x 240 or 640 x 480.
(Please refer to the following drawings)



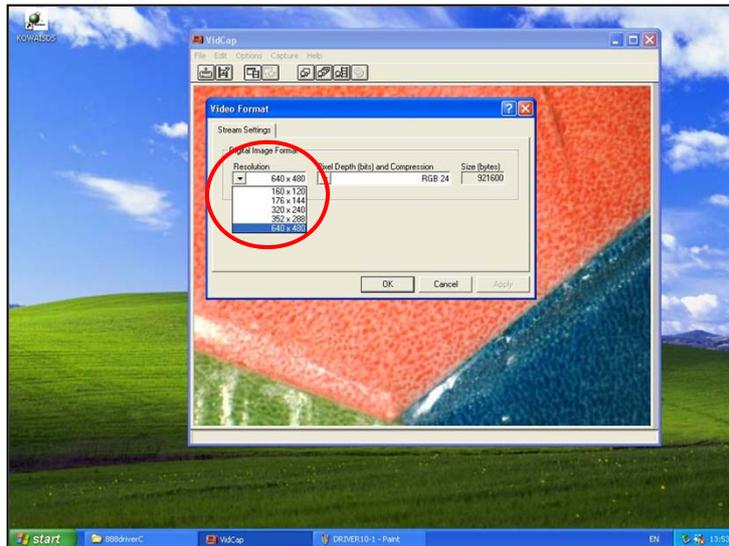


Image size: 640 x 480.

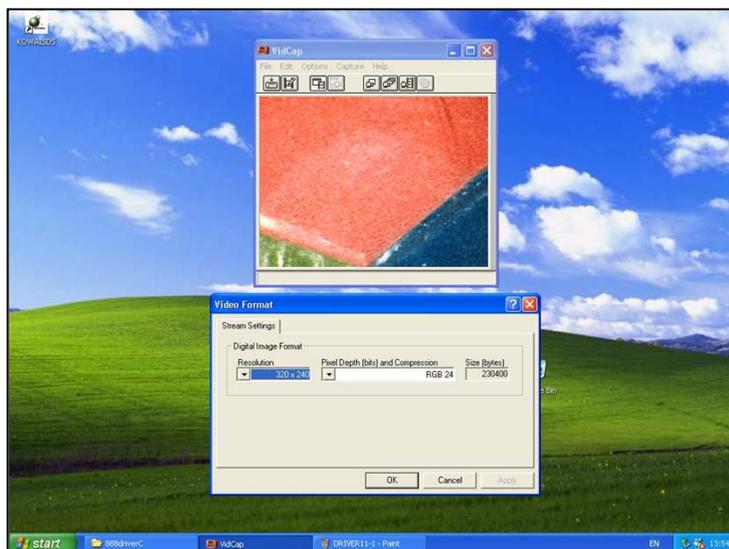
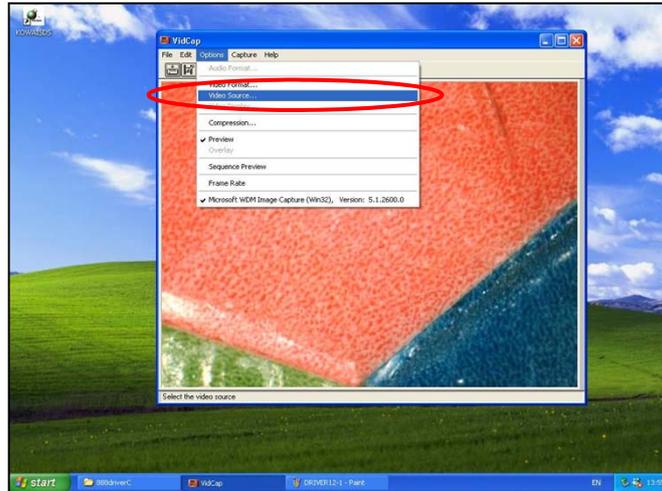


Image size: 320 x 240.

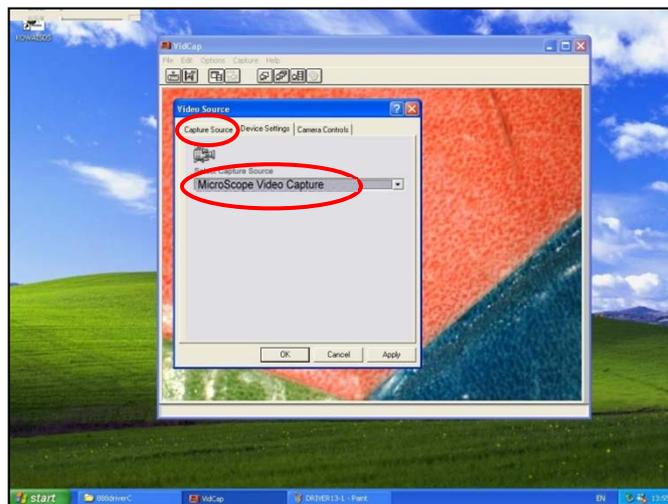
A-2 Video Source selection & Color adjustment

If you want to select correct video source or adjust your preferable colorful image, you can click “Option” button --- “Video Source”



Video Source selection

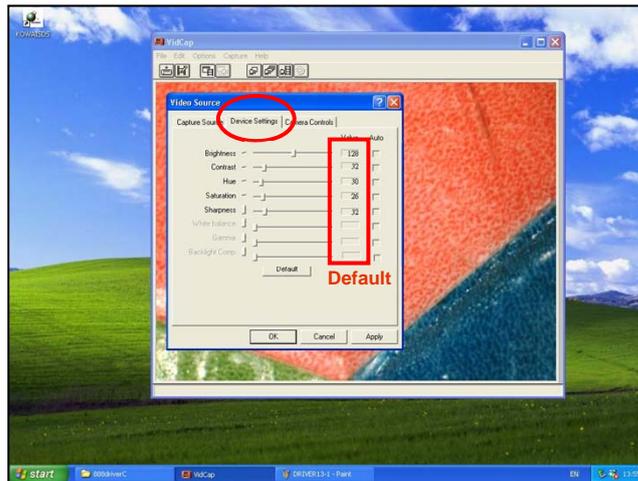
After clicking “Capture Source”, you should select the correct video capture source to be “MicroScope video Capture”. Click “Apply” and then “OK” and confirm the setting.



Color adjustment

After clicking “Device Setting”, you can change the brightness, contrast, sharpness, etc. to your desirable value. Click “Apply” and then “OK” and get your desirable color image.

If you want to change back to the original color setting, you can just click “Default” and then “OK” to get the original color image.



B. DISCONNECTION:

- B-1: If you want to leave “Wbvidcap” operation, close Wbvidcap window firstly and then power off Microscope unit.
- B-2: If you want to return to AV output,
 - a. Close “Wbvidcap” operation, release the USB connections.
 - b. Complete the AV connection between Microscope unit and TV monitor.
 - c. Re-power on the Microscope unit and the image will be seen from the TV monitor.

*** Notice:**

- 1). *When Microscope unit is working with PC under Wbvidcap driver, the output of AV signal will be shut down automatically.*
- 2). *When Microscope unit is working with PC, if you do not connect the Keypad cable (ref: page 36), the freeze button on the handy probe is not functionable.*

(II). TWAIN Driver --- Wcam (only available on 32 bit PC)

1. Why shall we install “WCam” of TWAIN driver?

Answer: The original USB driver of this Microscope unit only provides you to get the image picture. If you want to save the picture, you should install “WCam” of TWAIN driver.

2. Installation of WCam

*** Remark:**

- a. Please make sure the USB driver of this Microscope unit has been well installed.
- b. Please do not make any connection between Microscope unit and computer before software installation.

- 2-1. Power on your IBM compatible computer.
- 2-2. Insert the USB Driver CD-R disk to CD-ROM drive.
- 2-3. Then you can follow the instruction on the USB Driver setup screen to continue the installation process.
- 2-4. Click on “TWAIN Driver”.



2-5. The program will run automatically.

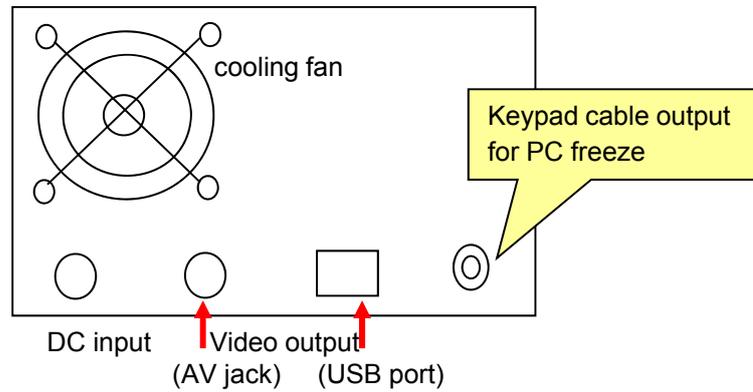


2-6. Click on "OK" to restart the computer. (To complete the installation, the system must be restarted.)



3. Hardware Connection

(The connection is only available when your Microscope unit is equipped with the “Keypad cable” --- PC freeze function. And you can freeze the picture by pressing “Freeze” button on the handy probe.)



See the picture, please just connect the USB of Keypad cable (which is at the rear side of Microscope unit) to the USB port of the PC.



(III). New KOWA camera --- Image capture program

*** Remark:**

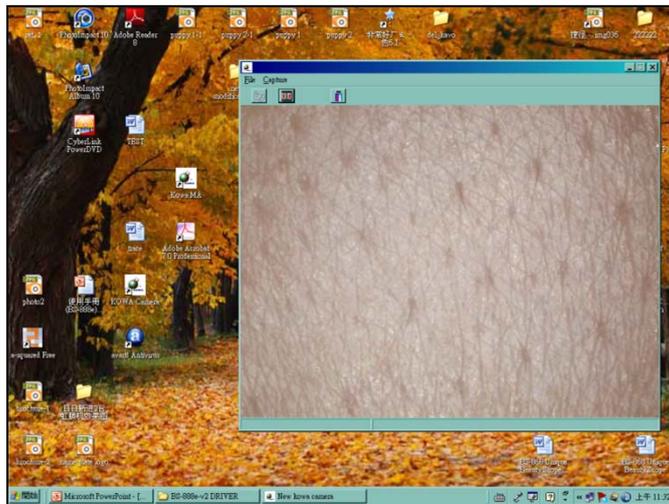
- a. This program can help you to capture and save images.
Please make sure the USB driver & TWAIN driver have been well installed.
- b. Please also connect the USB cable between Microscope unit and computer and power on the unit.
- c. You can directly click **“New KOWA camera”** and it will be moved to the main screen (desk) of PC.



Now you can go to the main screen (desk) of PC, please double click “New KOWA camera” icon to enter the window.



1. As you can see, you can get/freeze image from the window. There are 4 ways to capture image:
 - (a) Press "Enter"
 - (b) or press "space" key of the keyboard
 - (c) or press "Freeze" under "Capture" options.
 - (d) press "Freeze" button on handy probe (* when "Keypad cable is connected").



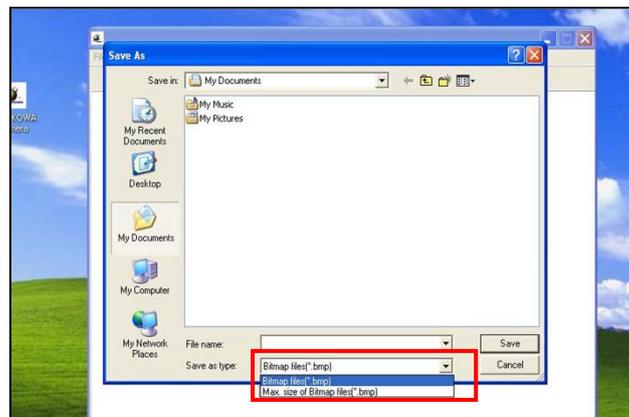
2. When you get/freeze the image, the image will automatically enlarge to as large as the screen height allowed. When you press "Enter", the frozen image will return to the original size.



3. You can also save the image in “jpg” or “bmp” types.



4. Please save the image to your assigned folder and input the file name, and you can also select the original size or max. size to save the image.



* Operation under other environments

The above is just one of the operation examples under “New KOWA camera” image capture program. If you have other image software (such as Photoshop, PhotolImpact, or Scanner driver software) in your computer, you can also get image and save picture under any image software environment.

(IV). SMEP Simple software

Free software for IBS-01Pro(SMEP)

* Remark :

This is a free software for IBS-01Pro(SMEP). Please make sure the micro scope you purchase is with 4-in-1 (Sebum/Moisture/Elasticity/Pigment) auto analysis function, otherwise the operation statement (page 40-48) is not available.



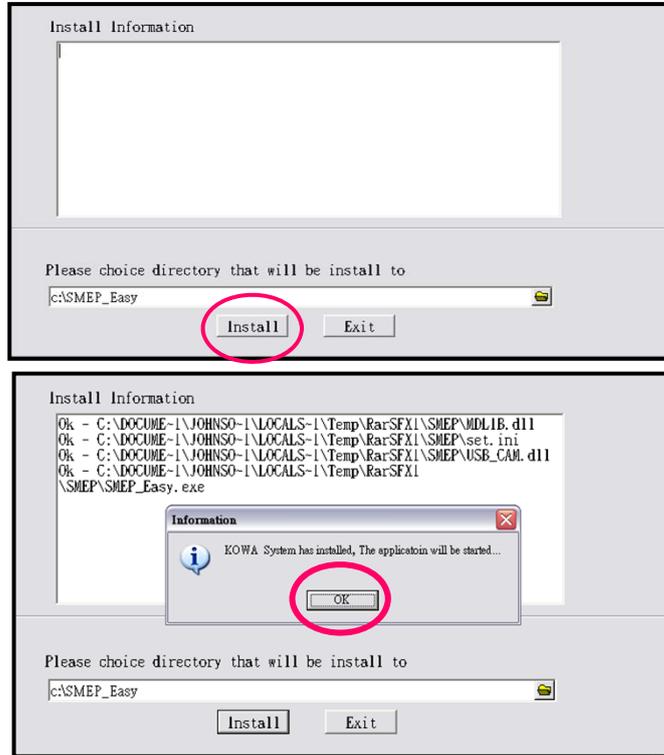
Please double click "SMEP Simple Software Install" to install the software.

- › Click 32 bit or 64 bit according to your computer specification to start installation.



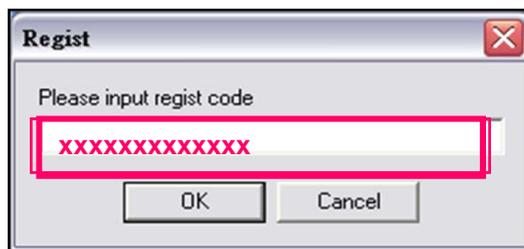
Then select the language version you need.





When the installation is completed, press “OK” to first entry of the software.

For entering the software at the first time, you should input the private password (regist code) for your right unit.



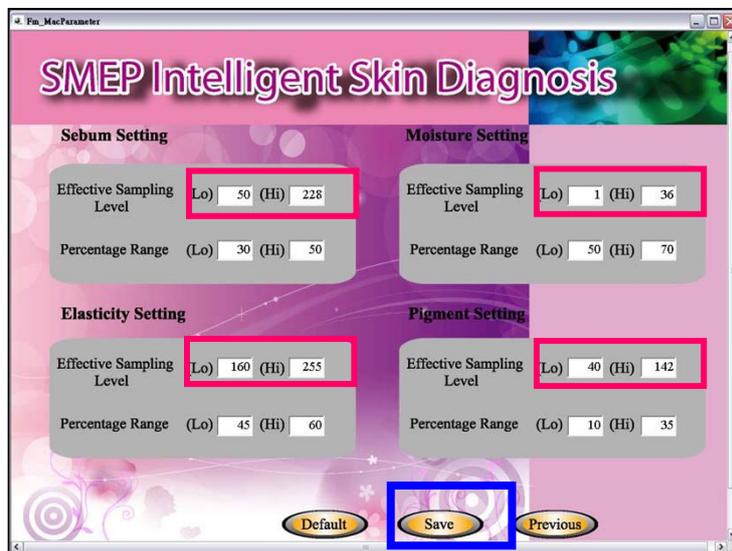
Afterwards you can double click “SMEP Simple” icon on the main screen (desk) of PC to enter the software.





Each main unit has been passed the accuracy correction. Each individual unit has its own setting values (as per the parameter paper with the its package). **When you enter “SMEP Simple” at the first time, please make correction in advance.**

Press “Correction” and input the setting values in the red areas. And the press “Save” to complete correction.



* This page display the public default values. If you think necessary, you can use the default values or your assigned setting values.



When you enter the software you can begin the “Sebum” test right away.

(1) While getting the sampled image, please press “Capture” to freeze the image.



(2) Press “Analysis” .



(3) Analyzing now.



(4) Sebum analysis is completed. Press "Moisture" to operate moisture analysis.

Please follow the procedures step by step to operate Moisture, Elasticity, Pigment analysis.

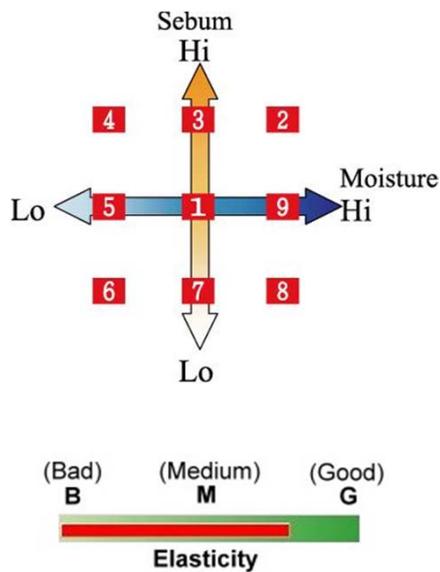






When the S.M.E.P. test is completed, press “Result” the whole result table will appears at the left side of the page.

“Elasticity” and “Pigment” test results are appeared in bar charts; “Sebum” and “Moisture” test results are appeared in a certain number in a quadrant area. The numbers signify different skin types :



Number	Skin Type
1	Normal skin
2	Oily combination skin
3	Normal oily skin
4	Oily skin with dry surface
5	Dry skin
6	Very dry skin
7	Normal dry skin
8	Combination skin
9	Ideal skin



If you want to save the test result, you can save the image in “jpg” types to your assigned folder and input the file name.

Press “Exit” to close the SMEP Simple system.