General User's Guide

- 1. Product Introduction
 - 1.1 Description
 - 1.2 Required system conditions
 - 1.3 Components
- 2. Warning
 - 2.1 Warning at installation
 - 2.2 Safety instruction
- 3. CD Installation Introduction
 - 3.1 CD S/W Installation
 - MW-201/MW-202
 - MW-850/MW-1350
 - 3.2 Recognition driver on windows 2000/XP
 - MW-201/MW-202
 - MW-850/MW-1350
 - 3.3 Recognition driver on windows 98/98SE/ME
 - MW-201/MW-202
 - MW-850/MW-1350
 - 3.4 Remove software/driver
 - MW-201/MW-202
 - MW-850/MW-1350

- 4. WebCAMeye Usage
 - 4.1 Name
 - 4.2 Focus adjustment
 - 4.3 Set up the options
- 5. WebCAMeye S/W Usage
 - 5.1 WebCAMeye Usage instruction
 - 5.2 eyeChat Usage instruction
 - 5.3 eyelmage Usage instruction
 - 5.4 eyeCatch-Server Usage instruction
 - 5.5 eyeRemote-Client Usage instruction
 - 5.6 eyeViewer-Player Usage instruction
- 6. FAQ

Warrenty

This product comes with in a limited two-year warranty.

WebCAMeye camera products are intended to be used in a lawful manner. Certain uses of digital PC camera products may be prohibited by local laws in some countries or states, such as the surreptitious recording of audio and/or video communications for certain purposed. If you have any question about whether a proposed use of your product is lawful, you should consult a local legal authority be proceeding.

1. Product instroduction

1.1 Description

| Item | MW-201 | MW-202 |
|------------|--|----------|
| Sensor | 1/4" CMOS | |
| Pixcels | 33 mega Pixels | |
| Resolution | VGA(640 X 480) | |
| Lens | F=2.8, f=4.5 | |
| Focus | 2.0cm~ infinity | |
| FPS | 30FPS(CIF), 15FPS(VGA) | |
| Functions | Automatic Exposure, Auto White balance, auto | |
| | COMS reset level control | |
| Interface | USB 1.1 | |
| Snap-shot | support | |
| Mic | - | Built-in |

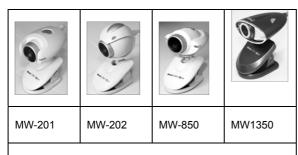
| Item | MW-850 | FMW-1350 |
|------------|--|-------------------|
| Sensor | 1/4" CMOS | 1/2" CMOS |
| Pixcels | 33 mega Pixels | 130 mega Pixels |
| Resolution | VGA(640 X 480) | XVGA(1280 × 1024) |
| Lens | F=2.8, f=4.5 | F=2.8, f=4.5 |
| Focus | 2.0cm~ infinity | |
| FPS | 30FPS(VGA) | 30FPS(VGA), |
| FP3 | | 15FPS(XVGA) |
| | Automatic Exposure, Auto White balance, auto | |
| Functions | COMS reset level control | |
| Interface | USB 2.0 | |
| Mic | Built-in Mic | |
| Snap-shot | support | |

1.2 Required system conditions

| Item | MW-201 MW-202 | |
|--------|---|--|
| O/S | Windows 98, Windows 98SE, Windows ME, | |
| | Windows 2000, Windows XP | |
| CPU | Above the Pentium III 800Mb | |
| MEMORY | Above 256M | |
| HDD | 200M surplus space | |
| | (in case of installing the software) | |
| VGA | Above the 800 × 600 × 24bit | |
| USB | Need IBM or compatible PC which has more than | |
| | 1 surplus port | |

| Item | MW-850 MW-1350 | |
|--------|---|--|
| O/S | Windows 2000, Windows XP | |
| CPU | Above the Pentium III 800 Mb | |
| MEMORY | Above 256M | |
| HDD | 200M surplus space | |
| | (in case of installing the software) | |
| VGA | Above the 800 × 600 × 24bit | |
| USB | Need IBM or compatible PC which has more than | |
| | 1 surplus port | |

1.3 Components



- A. WebCAMeye PC Camera
- B. Installation CD
- C. User's Manual (Warrenty Card)
- D. Tripod (option)

2.Precautions

2.1 Warning on installation

- Must install the drive of CD before you connect the pc camera to the computer
- Must install the PC camera on the plain surface firmly in order for the camera not to be come off.
- Must get rid of dust & humidity on the surface which you install the pc camera.
- The problem can be caused if you use expended USB cable to connect PC & PC camera
- Please be careful not to pull excessively the USB cable of PC camera since it can damage (the cable).

2.2 Safety instructions

- Please install the pc camera away from children's hands.
- Please tie up the connecting cable of PC & PC camera short to prevent anyone being entangled by the cable.
- Please disconnect the pc camera in case of long term disuse of camera.
- Please not turn iris too much since it can damage lens or takes the lens out of the body.

3. Installation instructions

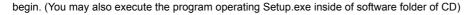
3.1 CD S/W installation

You should install the software of CD before you connect WebCAMeye to your computer.

1. The following menu will appear automatically when you insert the CD. (In case that it does not appear automatically, you should operate Setup.exe on CD.)



2. The install program will be executed when you click "software" button. WebCAMeye - Installshield wizard will





In case that you have used other pc camera, you should get rid
of its driver before you install WebCAMeye pc camera driver.

3. Please click the "NEXT" button.



4. Please click the "INSTALL(I)" button.



5. Please click the "FINISH" button when the installation is completed and appear the following page.



6. Please return to the first page.



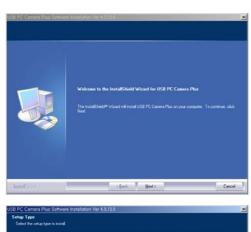
7. Please click the "Driver..." button. Please click the "Model Name(MW-1350, MW-850, MW-202, MW-201)" button.



8. Please click the "Next(N)" button

All the introduction pages has been standardized to Window XP but it is compatible for other OS following same procedure (subroutine).

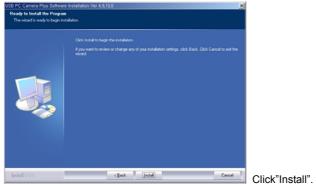
► MW-201, MW-202

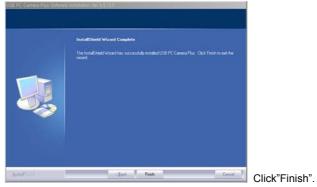


Click "Next".



Click "Next".





"WebCAMeye" and "USB PC Camera Plus" will be added on Start Menu.

► MW-850, MW1350



 $oldsymbol{\perp}$ Select language and click "OK".





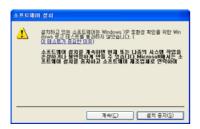






"WebCAMeye" and "USB2.0 web camera" will be added on Start Menu.

• Please click the "CONTINUE(C)" button when the following page appear while installation. (it will not always appear depending on the OS)

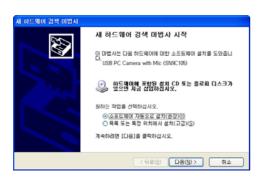


• Above "Windows logo test" warning normally appear when they didn't request certifying to Microsoft but it has no relation to using our product.

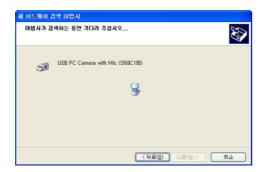
• The following page will appear when the installation is fully completed. Please click the "Finish" to reboot.

3.2 Recognition driver on windows 2000/XP

- ► MW-201/ MW-202
- 1. Connect the WebCAMeye to spare port of PC. The following page will appear on the recognition procedure.



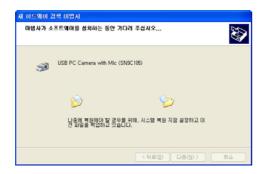
2. Please install the software automatically and click "NEXT(N)".



3. In case that the following page can appear while installing, please click "CONTINUE(C)"



4. It will install continuously.



5. The following page will appear after the installation is completed.



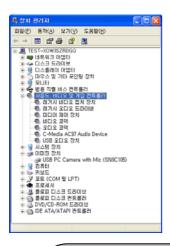
5. When the above page is appear, please click "YES" and reboot.



- 7. Please check if the PC camera is recognized.
- Sound, Video, Game controller: USB Audio Device(SN9C-105)
- Imaging Device :

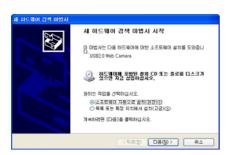
MW-201: USB PC Camera (SN9C-102)

MW-202: USB PC Camera with Mic(SN9C-105)

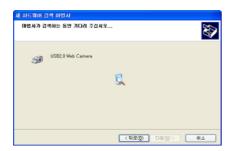


Device Manager
 start ⇒ setting ⇒ control panel ⇒ system ⇒ hardware ⇒ device manager
 Introduction pages are all of Window XP but it will be installed in the same
 procedure on Window 2000.

- ▶ MW-850, MW-1350
- 1. Connect the WebCAMeye to spare port of PC. The following page will appear on the recognition procedure.



2. Please install the software automatically and click "NEXT".



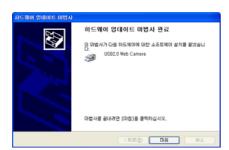
3. In case that the following page can appear while installing, please click "CONTINUE"



4. It will install continuously.



5. The following page will appear after the installation is completed.



- 6. When the above page is appear, please click "YES" and reboot.
- 7. Please check if the PC camera is recognized.
- Sound, Video, Game controller : USB Audio Device
- Imaging Device : USB Web Camera



• Device Manager

start ⇒ setting ⇒ control panel ⇒ system ⇒ hardware ⇒ device manager

 Introduction pages are all of Window XP but it will be installed in the same procedure on Window 2000.

3.3 Recognition of the driver on Windows 98/98SE/ME

- ▶ MW-201, MW-202
- 1. Connect the WebCAMeye to spare port of PC. Recognition procedure will be completed automatically.
- 2. Please check if the PC camera is recognized on Imaging Device of Device Manager.
- sound, video / game controller :

(MW-201) USB audio device

- image device :

(MW-201) USB PC Camera (SN9C102)

(MW-202) USB PC Camera with Mic (SN9C105)



- ► MW-850, MW-1350
- 1. Connect the WebCAMeye to spare port of PC. Recognition procedure will be completed automatically.
- 2. Please check if the PC camera is recognized on Imaging Device of Device Manager.
- sound, video / game controller :

(MW-201) USB audio device

- image device :

(MW-201) USB PC Camera (SN9C102)

(MW-202) USB PC Camera with Mic (SN9C105)



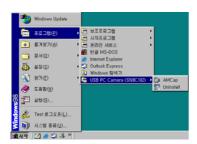
• Device Manager

 $\textbf{start} \, \Rightarrow \textbf{setting} \, \Rightarrow \textbf{control panel} \, \Rightarrow \textbf{system} \, \Rightarrow \textbf{device manager}$

 Introduction pages are all of Window 98SE but it will be installed in the same procedure on Window 98/ME.

3.4 Remove software & Driver

- ► MW-201/MW-202
- 1. Remove Driver
- : start menu \rightarrow program \rightarrow USB2.0 PC Camera \rightarrow "Uninstall" click



2. Select "Remove" and click the "Next" button.



3. Please click the "Yes(Y)" button.



4. Please click the "Finish" button and reboot.



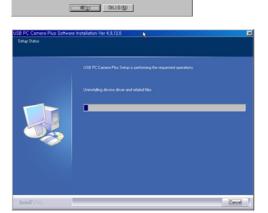
- ► MW-850/MW-1350
- 1. Remove Driver
- : start menu ightarrow program ightarrow USB PC Camera Plus ightarrow "Uninstall" click



2. If you want to remove the driver, select "Remove" and click "Next>" button



3. Please click "Yes(Y)" button.



4. Please click "Finish" button.



4. The usage of WebCAMeye

4.1 Name

MW-1350



4.2 Focus adjustment.

The image should be focused adjusting the Iris by hand for WebCAMeye. So the image can be out of focus because of the PC camera location. In that case, please adjust the focus as following instructions;

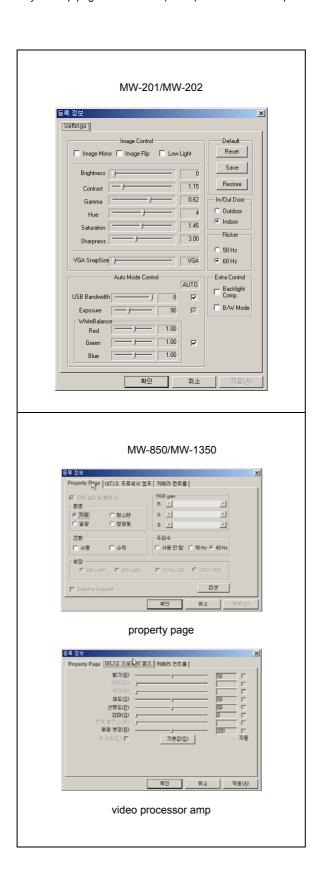
- A . Turn the iris to the right : Adjust the focus of long distance.
- $\ensuremath{\mathsf{B}}$. Turn the iris to the left : Adjust the focus of short distance.

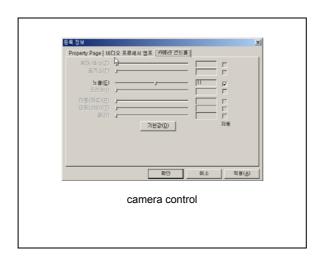


You should be careful not to turn the iris too much, which can cause the extracting the lens from the body. In case that the lens is taken out, dirt can enter between sensor & Lens so you should insert lens turning it to the opposite direction.

4.3 Set up the options

WebCAMeye set up page is as follows (Example : Camera Set up menu of WebCAMeye S/W set up button.)





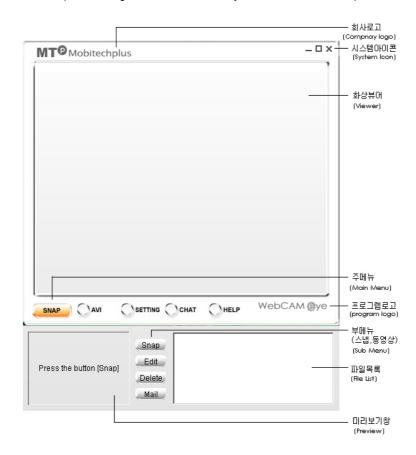
5. WebCAMeye S/W usage.

5.1 WebCAMeye usage.

This software is developed mainly for PC camera and is valid for showing the present image taken by PC camera, saving function of the photos & the moving image as well as sending the photos by e-mail and connecting the eyelmage Y eyeChat.

A. Viewer function.

Show the present image on the screen and adjust the clearness & set up the camera.



WebCAMeye

· Adjust the clearness.

There are two ways to adjust the clearness. One is to press the right button

of mouse placed on the screen and the other is to adjust it in the program set up box of set up button.

· Adjust screen size freely.

Except the clearness adjustment, all the other size is supposed to be adjusted by pulling the corner of screen to ideal size.

• Display the full screen.

You can display the image data on the full screen. It is useful to enlarge images or for surveillance monitor. The full screen image will be quite unnatural at low clearness. The image speed will be slow since the full screen image requires higher system capacity.

- Camera set up and Program environment set up. You can open PC camera control box or open the conversation box to set up program environment of WebCAMeye.
 - Program set up has three functions, appointing the saving folder, appointing the expansion name of saving file of taking a photo and appointing the present image clearness.

B. Photographing function.

If you press "PHOTO" button on WebCAMeye, the following screen will appear.

- Photographing: You can save the photo to BMP or JPG file. (It is possible to select at the program set up box)
- · Adjustment: Connect the selected photo to the editing program. (BMP type is by Eyelmage and JPG type follows

Window set up)

- Remove: Send the selected photo to the waste box
- Mail: Attach the selected photo to the e-mail.

You must set up mail program to send it by e- mail

C. Saving function of video image.

("AVI" button on WebCAMeye)

- Recording: Save the video image by AVI file. (If you want to stop the recording, please press "save" button.)
- Play: Show the selected image.
- Delete: Send the selected image to the waste box. D. Connecting function of related program.
- · Chatting button.

You can chat person-to-person operating the eyeChat program without opening the start menu.

• eyelmage connecting function.

eyelmage does not support JPG file.

Please be noted that the ordinary window program will be operated when you press "Edit" button after select JPG file or do the double click on JPG file.

5.2 Usage of eyelmage

eyelmage, as an image managing program, is an image processing base tool which produce new data through processing various image files. It has similar function with the filter function of the Photoshop. It provides various functions like reversing images, adjusting image size & distorting colors.



A. Applied functions.

- RGB, HSI, YIQ, CMYK
- Wavelet Transform (Walsh, Haar 2, Daubechies 4)
- Fast DCT (Zonal Coding)
- \bullet Arithmetic Operation(+, , /, *, Darkest, Lightest, Average, Difference, OR)
- Geometric Operation (Translation, Rotation, Scaling, Mirror, Flip)
- Morphological Operation (Erosion, Dilation, Opening, Closing)
- Analysis (Sum, MSE, RMSE, PSNR, Std Dev., Min/Max, SSD, SAD, MAD, ...)
- Filter Mask : Blur, Sharpen, Emboss, Edge Detect
- Histogram (Equalize, Stretch)
- Image information
- File type(BMP, RAW, PGM)

5.3 Usage of eyeChat

eyechat that is developed for P2P video chatting is a chatting program for chatters to communicate watching each other through the screen using PC camera. It is regarded as total chatting software providing Text & file exchanges and vocal conversation at the same time.



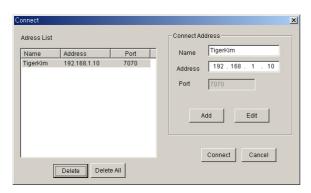
A. Remote connection.

They can connect each other pressing connecting button If they know IP address of each other. It will be easier to connect each other if they save their IP address at the connecting list of conversation box to connect.

Connect List addition.

If you press "Connect" button on eyeChat, the below page will appear.

a. Please enter user's data of remote place at Connect information.



- Name : User's name of remote place.
- IP address : Computer network user's IP address of remote place
- Port No : port number
- b. It will be registered to the Connect List when you press "ADD" button

- Revise on the Connect List.
- a. Please click the name of Connect list.
- b. Please revise necessary part of the connecting information.
- c. It will be revised when you press "revise" button.
 - Delete on the Connecting List
- a. Please click the name to delete.
- b. The name will be removed when you press "delete" button.
 - Delete all of the connecting list.
- a. Please press "delete all" to delete all.
 - Connecting.

It will be connected when you press "Connect" button after selecting the desired name of the Connecting list. However it will be connected only when the desired person is also operating eyeChat.

Port number is always 7070. Please don't use 7070 port at other software.

B. Sending data

• Sending the picture & voice.

The picture sending & voice sending box should be checked to send your picture & vocal data. Likewise your conversation partner's ones also should be checked to receive his picture & voice.

· Sending the Text

You should write text on the WRITING segment and press "Enter" then your text with your ID will appear on the text window of your conversation partner. Likewise the text of your partner will appear on your text window.

• Sending files

If you press "sending file" button, the below window will appear on to select the file to send. When your partner select the file, the below window will appear on your partner's side.



Please press "YES" button to receive the file.

• It is possible to enjoy video chatting while sending files.

6. FAQ

Q What can I do if I don't have Window CD even though it requires to insert window CD.

A Window CD is necessary. You should prepare installed window CD like Windows 98, Windows 98SE or Windows ME to complete the installation properly.

Q The Hardware recognition warning appears at installing on Window 2000 & Window XP.

A When you install it on Window 2000 or on XP the warning message " can appear. It is recommended to ignore it and continue to complete the installation. In case that you don't want to see this message, please follow as the below screen.;





Q Can not see the screen on video chatting site.

A Please check the set up conditions of Camera & Clearness menu. You should check the camera if it recognizes image without problem and adjust the clearness properly. If the program of screen chatting site is automatically installed when you enter the site to connect,

Sometimes it is problems of over connecting according to the chatting sites. In that case, you should wait for a while and try to reconnect.

Q The screen is dark.

A First of all, you should check if the PC camera is properly connected to PC through USB port. If everything is ok, please refer to the followings;

| Windows 98/98SE/ME |
|--------------------|
|--------------------|

| Windows 2000 | Start ⇒ Setting ⇒ Control Panel ⇒ System ⇒ Hardware ⇒ Device Manager |
|--------------|--|
| Windows XP | Start \Rightarrow Setting \Rightarrow Control Panel \Rightarrow Classic \Rightarrow System \Rightarrow Hardware \Rightarrow Device |
| | Manager |

- 1. In case that the imaging device is installed.
- a. You should open the imaging device to check if the camera name is properly selected.
- b. Please check if there is yellow exclamation mark.
- c. If there is yellow exclamation mark, please remove the driver and reinstall it.
- 2. In case that the imaging device is not installed and other uncertain device is installed.
- a. Please remove the uncertain device or others.
- b. Please remove the driver and reinstall it.
- 3. In case that noun of device is installed.

Mobitechplus Inc

http://www.mobitechplus.com

Address: 32-5 Songwol-Dong Jongno-Gu, Seoul 110-101, Korea CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment

WARNING

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.

INFORMATION TO USER:

This equipment has been tested and found to comply with the limit of 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:

- 1. Reorient / Relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit difference from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help