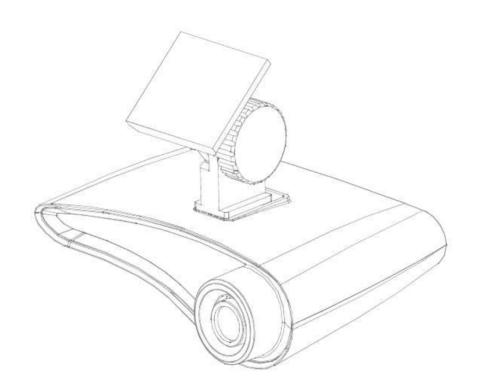


FCC TEST REPORT Report No.: EMC-FCC-R0158

| User Manual |
|-------------|
| |

User Manual Semisolution. Inc.





Please read all instructions and warnings on this manual thoroughly and follow operational instructions on this manual before you install or use it.

Precautions

Please read below to make sure you use the product properly and safely, so there would be no damage done before or while using it.

Warning

- Keep the product away from humidity, water or any other liquid, metal and other conductible materials.
 - liquid and metal can cause fire or electric shock.
- Use dry cloth when removing dust stain or other alien substances. If severely contaminated use cloth slightly moistened with neutral detergent. Do not use volatile substances such as paint thinner, alcohol, benzene or insecticide.
 - It may cause damage to the appearance and operation of the product.
- Always use dry cloth when cleaning the product, Do not use water, chemical substances or soap.
 - It may cause electric shock or malfunction.
- Do not disassemble, remodel or repair the product. The product's servicing is allowed only to authorized Semisolution service personnel.
- It may cause electric shock or malfunction.
- Do not place anything heavy on the product.

Installation and Operation

Please read below and follow instruction.

- Disconnect power cord during the installation.
- Make sure you have enough space for connection when installing.
- Keep it away from water, humidifier, heater or burn.
- Keep it away from the direct sunlight, strong light or dust; install it in a place of clear view.
- Do not install near to magnetic material or if there's risk of electric shock.
- Install the product with proper temperature and humidity. (from 0°C (32°F) to 40°C (104°F) is recommended)
- Make sure to keep ventilated while using the product. Avoid pillar or furniture that may block ventilation, when installing the product.
- Do not install it in a place with strong electromagnetic waves.
- Make sure that you do not install it around possible risk. (Water, electric damage, insecure installation etc.)

This product is for indoor use and EMC(Electromagnetic compatibility) product. It can be used in all region. There is possibility of interference while receiving the video signal or wifi. The product is not design to replace human supervision on safety of lives.

Precaution - SD card

1. SD card is a consumable product. Please check it regularly, and if it is not working replace it.

When you are recording SD card is wearing out, therefore please check it regularly, and if it is not writing or reading you have to replace it. But if you format it regularly you can extend its life cycle. (once in 2 weeks recommended, if you use it 24 hours a day, once a week)

2. Using SD card provided by Semisolution is recommended.

When replacing SD card we recommend you to buy from us. If not there can be trouble with compatibility with the product and recorded video can be damaged.

3. When taking out SD card from the product, please turn it off first.

If SD card is took out while power is on, recordings in the card can be damaged and it can be the cause of malfunctioning of the product.

4. Do not disassemble or remodel SD card.

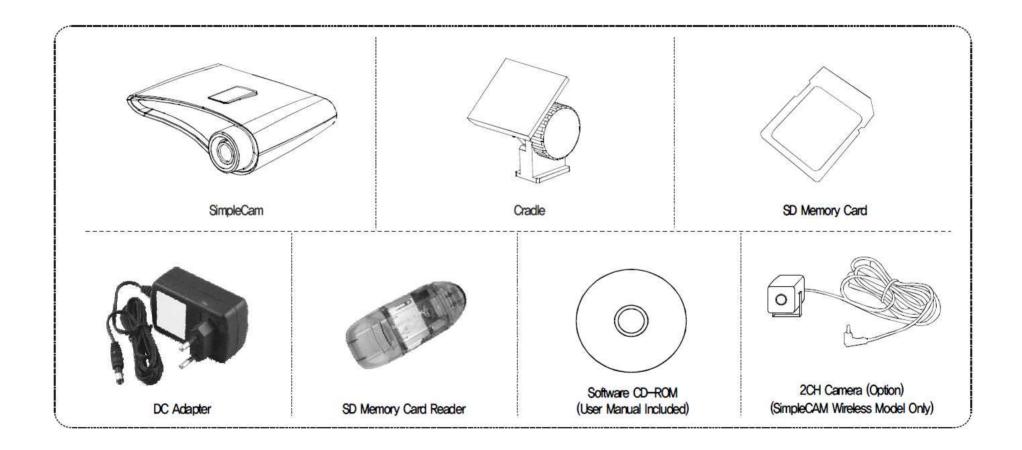
SD card can be damaged and it can cause malfunctioning of the product.

5. When keeping SD card separately, keep it away from humidity, dust and heat.

If exposed to the humid, dust and heat SD card can be damaged.

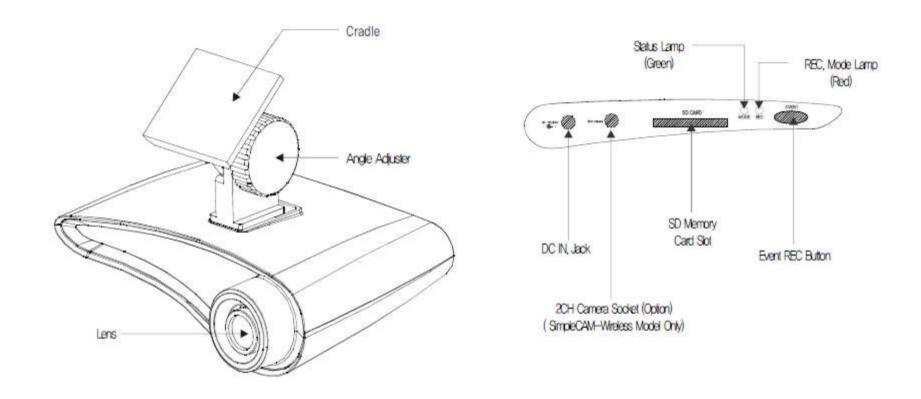
6. For important data please back up the data else where.

If you want to keep the data for long time please save it in other device such as hard disk or CD.



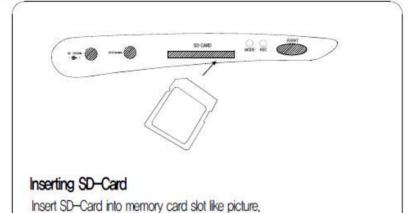
SimpleCAM User manual (REV:2012-11/20/V1.0) 5 / 26

SimpleCam Layout SimpleCAM

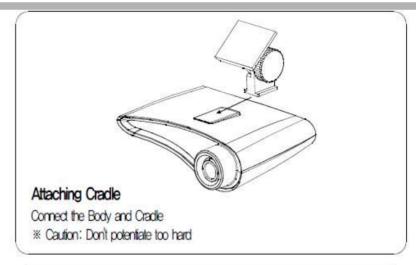


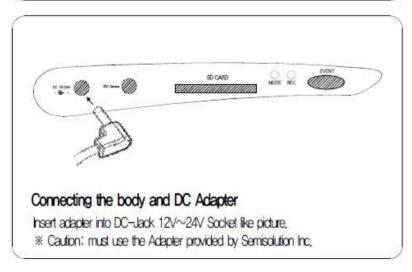
[SimpleCAM Side View] [SimpleCAM Rear View]

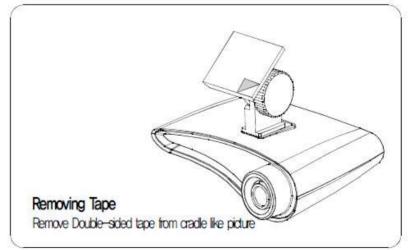
Product Installation SimpleCAM

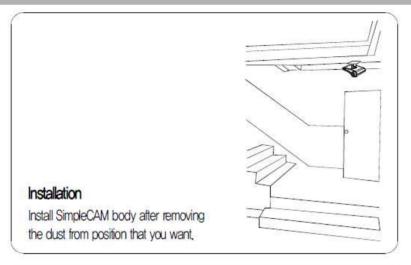


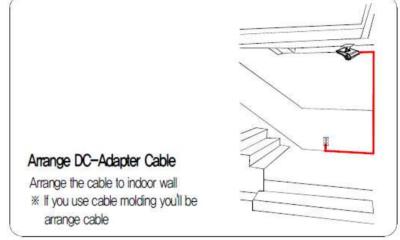
* Caution: Use the SD-Card recommended by semisolution Inc.

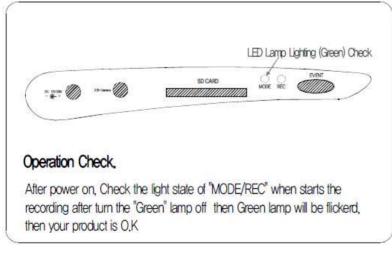


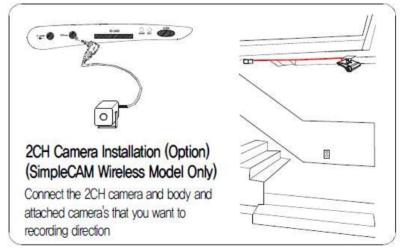












This product saves recorded video in AVI file and it can be played in general video player. But with the SimpleCam PC player set up, besides from playing video you can also enjoy various additional functionalities, manage files and set configuration.



Setup_SimpleCam.exe (Setup_SimpleCam_wireless.exe)





1. Start Setup

Insert provided CD into CD-ROM drive and double click Setup_SimpleCam.exe(Setup_SimpleCam_wireless.exe)

You can also download it from (www.camsloution.co.kr).

2. Setup

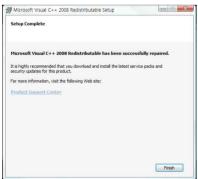
Start Setup by dicking "Next" button.

3. Assign Setup folder

Assign "Setup folder" and click "Next" button to continue setup process.





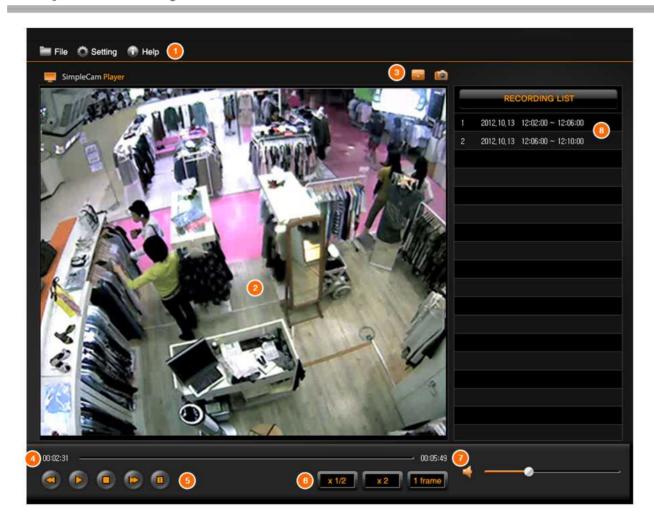


4. Setup completed

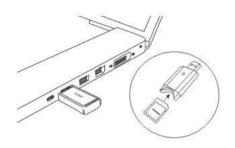
If setup is completed, click "Finish" button and the setup is completed.

Microsoft Visual C++ 2008 Redistributable setup

- 1. After completing SimpleCam setup, automatically Microsoft Visual C++ 2008 Redistributable will be installed. Click "Next" button and start the process.
- 2. Click "Finish" to complete Microsoft Visual C++ 2008 Redistributable setup.



- 1. Program menu
- : file, setting, Help button
- 2. Video play screen
 - : Plays video
- 3. Additional functionalities
- : Adjust video, Capture button
- 4. Video play time
 - : Shows time of the video.
- 5. Video play control buttons
 - : To first part, Play, stop, next video, pause
- 6. Playing speed control button
- : X1/2, X2 faster, 1 frame each
- 7. Volume control
- 8. Video list
 - : Shows video files recorded.



1. Connect to PC

Separate SD card from the product, insert SD card into the reader like shown in the picture.

Please check front and back side of the SD card and make sure you insert SD card in the direction that the arrow is pointing at.



2. Click the icon

Double dick SimpleCam Player icon to start player.



3. Start the player

You will see the player.

** This plays high resolution video. Therefore if you play it in a PC with low specification it may fail to play it properly.

If it is not working upgrading your PC is recommended.

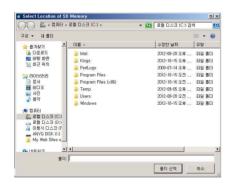


4. Select Location of SD card

Check connection between SD card to PC and dick "OK" button.

If you dicked "Cancel" you can bring video files by dicking "File" .

(Order: File -> assign SD card drive -> dick info.semi file)



6. Assigning SD card drive

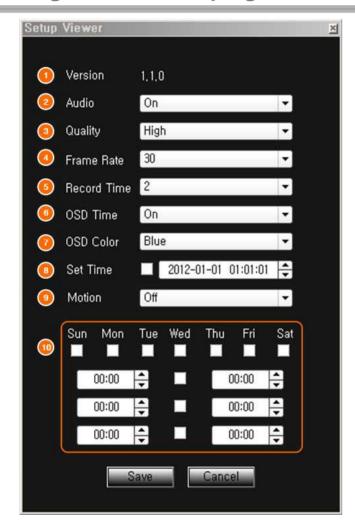
Assign SD card drive and click "select folder"



7. Check Recording list

Double dick the file you want to play.

X If you double dick another file, it will be played.



- **1. Version :** : Shows version of SimpleCAM player.
- 2. Audio: If you want to save sound (ON / OFF)
- 3. Quality: Set quality of video recording (High / Medium / Low)
- 4. Frame Rate : Set Frame Rate.

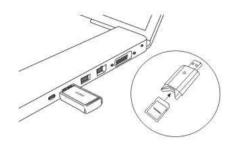
Frame Rate : frequency at which an imaging device produces unique consecutive images called frames

If you select "High", the quality is better and file's capacity gets bigger.

- 5. Record Time: Set storage time per file(minute) (1 minute~ 5 minute)
- **6. OSD Time**: If you want to save time of the recording f(On/Off)
- 7. OSD Color: Set information of color saved in the video.
- 8. Set Time: Set present time: "Year / Month / Date / Time"
- **9. Motion**: Set Motion sensor function

(Records only when there's movement, enables effective storage)

- 10. When using Motion sensor, set applicable schedule.
 - Set Day (Multiple choice)
 - Set time (Multiple choice)
 - ex) If you check Sun and 12:00 \sim 14:00 : Motion sensor saves only on Every Sunday from 12 to 14



1. Connecting PC to SD card

Separate SD card from the product, insert SD card into the reader like shown in the picture.

Please check front and back side of the SD card and make sure you insert SD card in the direction that the arrow is pointing at.



2. Click the icon

Double dick SimpleCam Player icon to start player.



3. Start the player

You will see the exclusive NVR S/W on your screen.

** This plays hight resolution video. Therefore if you play it in a PC with low specification may fail to play it properly. If it is not working upgrading your PC is recommended.



4. Setting

NVR S/W upper left side click "Setting" button.

If you do not insert SD card or if the card is damaged, you will see

"Check your SD card. Please Reference the manual. please".



5. PC NVR Setting

1. Save Location: Click the folder that you will save the video.



6. SimpleCam Setting

- 1. User Name & Password: Enter User ID / Password for SimpleCAM Wireless access.
- 2. IP Address: Set IP of wireless AP(Access Point). 3. Net Mask: Set Net Mask of wireless AP
- 4. Gateway : Set AP's Gateway.
 - e. g.1) When IP line sharer's access address is (LAN IP) 192.168.1.1

IP address: 192.168.1.100 Net mask: 255.255.255.0 Gateway: 192.168.1.1

For details about the network settings and password and IP address, please contact your network administrator or service provider

- 5. mirror mode: Vertically flips over the video image against the horizontal axis.
- 6. Audio: If you want to save sound (ON / OFF)
- 7. Quality: Set quality of video recording (High / Medium / Low)
- 8. Frame Rate: Set Frame Rate.
 - ** Frame Rate : frequency at which an imaging device produces unique consecutive images called frames

If you select "High", the quality is better and file's capacity gets bigger.

- 9. Record Time: Set storage time per file(minute) (1 minute~ 5 minute)
- 10. OSD Time: If you want to save time of the recording (On/Off)
- 11. OSD Color: Set information of color saved in the video.
- 12. Set Time: Set present time "Year / Month / Date / Time"
- 13. Motion: Set Motion sensor function

(Records only when there's movement, enables effective storage)

- 14. When using Motion sensor, set applicable schedule.
- Set Day (Multiple choice)
- Set time (Multiple choice)
 - e. g.) If you check Sun and $12:00 \sim 14:00$: Motion sensor works and saves only on Every Sunday from 12 to 14



7. Schedule save Setting

- 1. Click Schedule Save Setting
- 2. Set time: Save by schedule assigned by the user.
- Day Setting (Multiple choice)
- Time Setting (Multiple choice)
- e. g.) Sun check , Time set is $12:00 \sim 14:00$: Every Sunday from 12:00 to 2:00 will be recorded.

8. Setting wireless network (WiFi)

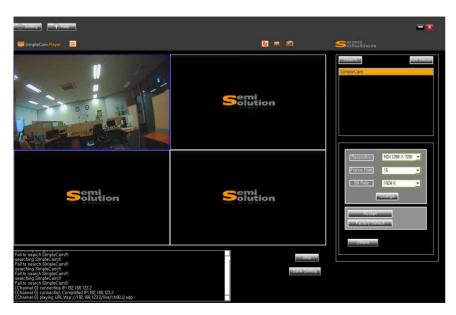
- 1. SSID(Service Set Identified): Enter name of the AP you are using.
- 2. Encryption type: Enter the password of AP's password type.
- 3. Encryption Algorithm: Select type of algorithm of AP's password type.
- 4. Encryption Key: Enter password to access AP
- e. g.1) If your AP is non-secured AP:
 - Encryption Type : Open
 - Encryption Algorithm: None

If you entered a wrong password or algorithm you cannot access the network whatsoever.

** For details about the network settings, password and IP address, Contact your network administrator or service provider.





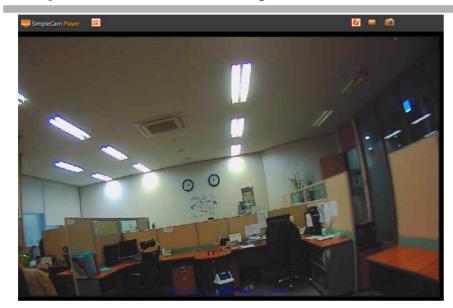


1. Playing video

- 1. Click Search button, and Setting wireless network (WiFi) (# 6 from page 17) and verify SimpleCAM Wireless IP
- Select IP and double click.If IP does not appear when you click Search, click Add Stream for manual input.
- 3. Enter Username and Password you assigned in #5 PC NVR setting (page 16)

2. Watching Live video

- 1. You will see video when you enter Username and Password like you can see in the picture.
 - 2. You can extend screen if you double dick the video.
 - * If 2CH camera is connected, you will see 2 videos.
 - ※ If you select 4 of 1CH camera IP you will see 4 videos (SimpleCam + 2CH Camera can show maximum 4 videos.)







3. Saving Live video

- 1. Double dick the video being played.
- 2. Click icon And you will see red "REC" is marked

 And the file will be saved in a folder you assigned in "PC NVR setting"
- 3. If you dick icon one more time REC mark will disappear and saving stops.

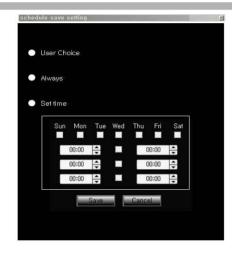
 You have to finish saving video in order to prevent video from being damaged.

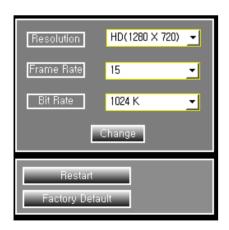
 ** Saved folder and file rules
 - A) Saved folder: Year_Month_Date (e. g. 2012_10_22)
 - B) Saved file: Camera channel_Year_Month_Date_hour_minute_second (e. g. CH0_2012_10_22_14_30_12.AVI)
- 4. If you dick icon you will save the steel cut.

4. Play saved video, delete file

- 1. Click 🎫
- 2. Select the date you wish to play
- 3. Select the file you wish to play
- 4. If you dick Delete File icon the file will be deleted.

SimpleCAM Wireless Play Video (Continued)





5. Schedule saving function

Click Schedule Save Setting

1. User Choice: Save video only when user choose to save.

2. Always : Always save in every 2 minutes.

3. Set time: Save by schedule assigned by the user.

- Day Setting (Multiple choice)

- Time Setting (Multiple choice)

ex) Sun check , Time set is $12:00 \sim 14:00$: Every Sunday from 12:00 to 2:00 PM will be recorded.

6. Setting quality of the video

1. Resolution: Select quality of video.

When Resolution is higher, quality of the video gets better and capacity of the data sent is bigger.

2. Frame Rate: Select number of frames being sent.

** The more number of Frame Rate the smoother movement in the video gets, but capacity of the data being saved and sent would increases.

3. Bit Rate: Select amount(Bit) of the data processed per second.

** The bigger Bit Rate the smoother movement in the video gets, but capacity of the data being saved and sent would increases.

7. Camera restart

1. Restart: restart camera

2. Factory Default: Initialize Camera setting

Trouble shooting

SimpleCAM

| Product is not working at all. | Check if the power adaptor is connected. Make sure to use the cable provided. If used with unidentified cable, it may damage the product. |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality of recorded video is bad | Check if the lens is dirty. The video from the camera will be affected by the environment of the installation site of the camera. The video from the camera can be delayed according to a network delay. Please check if the camera is installed in a place of proper wireless internet communication. |
| There is no video recorded on SD card. | remove the SD card being used, and insert it again. Check if SD card is LOCKED. Format the SD card being used and try it again. If you used SD card for too long replace it with new SD card. |

| Where can I download SimpleCam exclusive Player? | You can find CD-ROM in the package. Also you can always download it from www.camsolution.co.kr. |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Can I play it from other general player? | This product saves recorded video in AVI file and it can be played in general video player. |
| What happens when SD card capacity is full? | Recording is possible even if SD card capacity is exceeded. The oldest recordings will be first to be removed and new video will be recorded. |
| Can I use any SD card? | Using authorized SD card is recommended. If not available, use SDHC product above Class6. |
| LED light from recorded video is blinking when I play it. | In the eye of the human LED light seems like it is on continuously but it keeps blinking thousands times a second. Therefore if recorded in certain frame, it may appear to be blinking. |

Product Specification Simple CAM

| PRODUCT | SimpleCAM | SimpleCAM Wireless | | |
|-----------------|--------------------------------------------------------------|----------------------------------------------|--|--|
| Video Codec | H,264 | | | |
| Audio Codec | RAW WAVE | | | |
| Max. REC Time | Max 8 Hour(4G) ~ 32G Extensible Max 64 Hour(16G)~32G Extensi | | | |
| Image Sensor | VGA CMOS Sensor | HD CMOS Sensor | | |
| Max, Illumation | 2,93V/Lux.sec | 1.8V/Lux.sec | | |
| Lens Angle | 120° | 121° (Diagonal) | | |
| Max. Pixels | 0.3 Mega Pixel | 1 Mega Pixel | | |
| Data Storage | Max 32G(SDHC) | | | |
| Resolution | 640X480(1CH) 2CH: Front 720P(HD), Rear 720X480 | | | |
| Max, Frame | 30Fps | | | |
| Display | 2LED | | | |
| Viewer(S/W) | Execlusive Viewer, SmartDevice (F | or Android, IOS)APP: SimpleCAM Wireless Only | | |
| Wireless LAN | NO | YES | | |
| Power | 12V~24V/2W | 12V~24V/3W | | |
| Built-in Battey | Super Capacitor | 110mAh (Lithium Polymer) | | |
| Size | 119X86X39mm | | | |
| Weight | 119.8g Full Package: 372,82g | Set 120g Full Package: 373,02g | | |

Limited Warranty Simple CAM

Semisolution warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL END-USER PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of the original purchase for the period shown below. (The Warranty Period)

| Model | Serial No. | Parts | Labor |
|-------|------------|-------|-------|
| | | 2 YR | 2 YR |

This LIMITED WARRANTY IS VALID ONLY IN THE UNITED STATES.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, Semisolution will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement service shall be rendered by Semisolution during normal business hours at Semisolution authorized service centers, Parts used for replacement are not warranted only of the remainder of Warranty Period.

What you must do for our warranty service:

Box the product carefully, preferably in the original carton and ship to the nearest Semisolution authorized service center, It is recommended that you insure the product against loss or damage. To obtain the address of the nearest authorized service center, please call +82-31-627-5300.

Service locations can also be obtained from our website at http://www.semisolution.com.

Please be sure to include a copy of your bill of sale to substantiate warranty (if applicable) and a note detailing the problem.

If you have any questions concerning your Semisolution Product,

Please contact our Customer Relations Department at +82-31-627-5300.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter. A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

Semisolution Inc.,

Customer service center: +82-31-627-5300 Fax. +82-31-627-5303 Homepage: www.camsolution.co.kr / www.semisolution.com Heungdeok U-Tower, Suite 2005 1029, Yeongdeok-dong, Giheung-gu, Yongin-si, Gyeonggi-do, 446-908, Korea