AVIS LED LIGHT SYSTEM
LED Color Viewer

IPL-L100 Series
User manual

Important Safety Precautions

Read these guideline before using product.

⚠ **Warning** Warning statements identify conditions or practices that could result in injury or loss of life.

⚠ **Caution** Warning statements identify conditions or practices that could result in damage to this product.

⚠ **Caution**

● Do not install the slope.

● Provide proper ventilation.

● Use proper power code.
  Use only the power code specified for this product and certified for the country of use.

● Do not operate with suspected failure, and call the head-office.
  If you suspect that there is damage to this product, have it inspected by qualified service personnel.

⚠ Warning

● To avoid fire.

● Do not operate in wet/damp conditions.

● Do not operate in wet hand.

● Do not operate in an explosive atmosphere.

● Disconnect the power code from plug firstly.

● Ground the product.
  This product is grounded through the grounding conductor of the power code. To avoid electric shock,
  the grounding conductor must be connected to earth ground.

● Do not shock or drop the product.

● Do not remove the product.

● Do not use unspecified accessories.

● Use this product with know-how.

Product Summary (Introduction)

 IPL-L100 series which it use the high brightness White LED and RGB LED offer the standard illuminant of images of camera and lens inspection.
 With the standard illuminant which provides an fixing color temperature and brightness differently, it will be able to express a many kinds color temperature and colors, and it is suitable for an image test because it will be able to express a many kinds chromatic coordinates of same color temperature to union of standard illuminant.
 It is not flicker because of using a digital constant current control method, and it will be able to change the brightness of illuminant freely, and test the shading without the chart due to high uniformity of the standard illuminant.
 It is suitable for the test of the camera and lens iris because of changing the degree of brightness with automatic.

 Also there is a possibility of checking LED brightness and a product internal temperature condition with LCD display, and it will be able to control the degree of brightness from 0 to 1,000 step.
 It will be able to control the standard illuminant color, color temperature, degree of brightness and FAN operations which it follows temperature from PC which it has built-in the AVIS controller software.
 It will store the degree of brightness and a color temperature condition in 32 kind forms and the user will be able to apply with automatic.

Use field of product

 CCTV Analog Camera / USB PC Camera / Mobile Camera / Web Camera / Digital Camera / Lens inspection etc.

Model definition

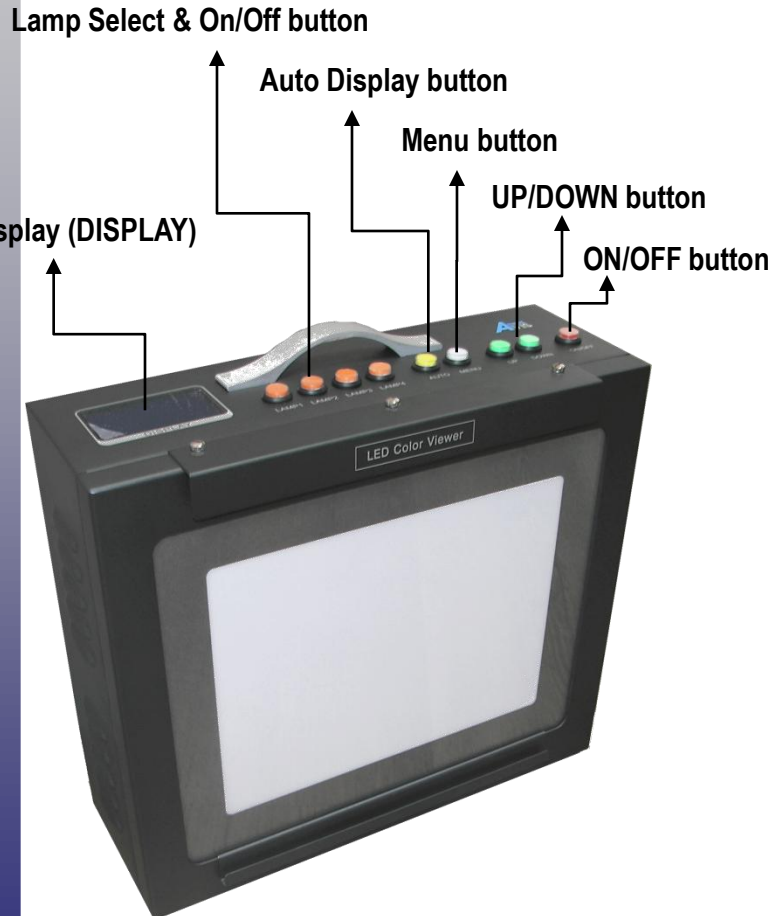1). IPL-L100W　：High brightness White LED / Color temperature variable

Feature of product

❑ White LED Light Support or RGB LED Light Support

❑ View Area : 190*250mm or Customizing

❑ Light Control button Function

❑ LCD Light Brightness Display

❑ Color Temperature : under2300k ~ over12000K (±5%)
               or Customizing

❑ Brightness : Over 30,000Lux(Surface) or Customizing

❑ Uniformity : Over 85%

❑ Automatic Temperature Controller

❑ RS232C PC Interface

❑ AVIS Light Controller Software (For RS232C)

❑ AC100~250V Input. 50/60Hz

advanced
AVIS
Advanced Vision Imaging System

IPL-L100 Function name & Description(Front)

Lamp Select & On/Off button

Auto Display button

Menu button

UP/DOWN button

LCD Display (DISPLAY)

ON/OFF button

LED Color Viewer

	LCD Display
	To express all operation condition of the product.
	View Area
	The illuminant of Lamp is displayed part.
🟠	**Lamp Select & ON/OFF Button (Lamp1~4/User1~4)**
	The button which selects the each lamp can do ON/OFF which corresponds. When it press above 2 seconds, the corresponding lamp will be selected and It will be able to control with UP/DOWN.
🟡	**Auto Display Button**
	When it press, it will operate turning the lamp sequentially. Auto mode will be able to designate A mode or B mode.
⚪	**Menu Button**
	This button is enter .
🟢	**UP/DOWN Button**
	This button is brightness control.
🔴	**ON/OFF Button**
	This button is ON/OFF control.

IPL-L100 Function name & Description(Back)
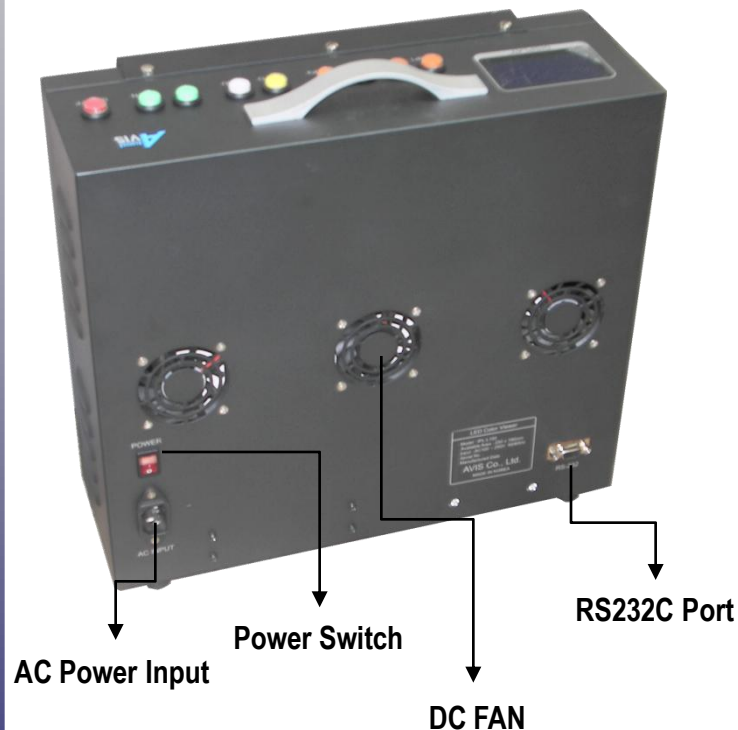
DC FAN
According to internal temperature, the FAN is operated with automatic and according to the temperature what user wants, it will be able to control FAN operation condition.

RS232C Port
It will be able to control the whole operation condition with PC which it connect the RS232 Cable.

Power Switch
It is the main power switch.

AC Power Input
It is AC power input terminal and the input voltage is AC 100~250V 50/60Hz.

AC Power Input
Power Switch
DC FAN
RS232C Port

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Option Mode Set

OPTION

Auto Mode Set
Fan Control
User Mode Set
Exit

○ **Menu button**
If you press the menu button, it will be able to select the option mode.

1. Auto mode set
2. Fan control
3. User mode set
4. Exit

Auto Mode Set

AUTO MODE SET
MODE : A

● **Auto mode operate two ways.**
Auto mode A : Auto mode A operate the lamp turn ON and OFF as waiting time by turns.
Auto mode B : Auto mode B operate the lamp turn ON and OFF as setting level and waiting time.(it will able to save 32 ways.)

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Auto Mode A Set

WAIT(Sec)
LAMP1 : 0000
LAMP2 : 0000
LAMP3 : 0000
LAMP4 : 0000

🟢 **- UP / DOWN button**
-Move cursor to left side when you press up button about 0.5second and then press down button.
-Move cursor to right side when you press down button about 0.5second and then press up button.
⚪ -If press menu button, display the save mode.

🟠 **Select LAMP 1,2,3,4**

Auto Mode B Set

LAMP   LUX
1   0000 %
2   0000 %
3   0000 %
4   0000 %
WAIT :   0005 Sec
NO   :   00
<Prev   Next>

🟡 **Auto button select Prev or Next menu.**

🟢 **- UP / DOWN button**
-Move cursor to left side when you press up button about 0.5second and then press down button.
-Move cursor to right side when you press down button about 0.5second and then press up button.
⚪ -If press menu button, display begin-end mode.

🟠 **Select LAMP 1,2,3,4.**
If you press LAMP4 twice, cursor move WAIT menu.

Product Use Method

Auto Mode B Begin / End Set

```
             No
BEGIN : 00
E N D : 31
```
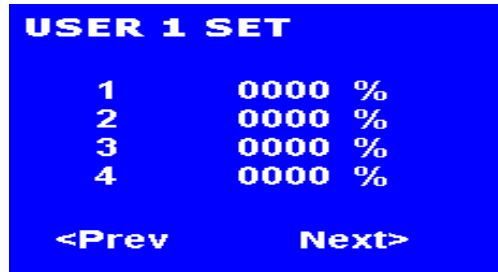
Auto Mode Save

```
SAVE ?
Yes / No
```

User Mode Set

```
User Mode
Disable/Enable
```

● **Auto mode B operate setting point from begin No. to end No.**

- UP / DOWN button
-Move cursor to left side when you press up button about 0.5second and then press down button.
-Move cursor to right side when you press down button about 0.5second and then press up button.

○ -If press menu button, display the save mode.

● **Save AUTO MODE A or AUTO MODE B.**
-Select Yes / No

○ -If you want to save, press menu button.

● **User mode set**
-User mode use that user specification save each lamp 1,2,3,4.
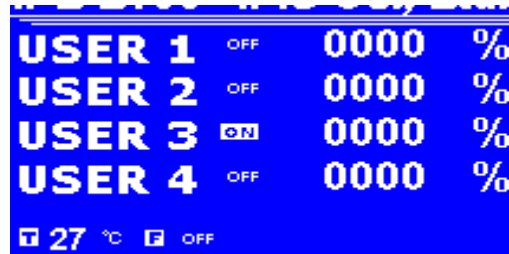-Select Disable / Enable.

○ -If press menu button, save the mode.

Product Use Method

User Mode Set

```
USER 1 SET

  1        0000  %
  2        0000  %
  3        0000  %
  4        0000  %

<Prev          Next>
```

Save Mode

```
SAVE ?
Yes / No
```

User Mode Display

```
USER 1   OFF   0000  %
USER 2   OFF   0000  %
USER 3   ON    0000  %
USER 4   OFF   0000  %

27 °C   OFF
```

- **UP / DOWN button**
  - Move cursor to left side when you press up button about 0.5second and then press down button.
  - Move cursor to right side when you press down button about 0.5second and then press up button.
  - Each lamp selecting press lamp 1,2,3,4.
  - Select Next or Prev when press AUTO button.
  - If press menu button, display the next mode.

- **Select LAMP 1,2,3,4.**

- **Save the user mode.**
  - Select Yes / No.
  - If press menu button, save the mode.

- **User mode Display**
  - After user mode save, display LCD Display.

Fan Operation Set

```
FAN Control

- Start(℃) 45
- Off  (℃) 40
- Speed     A
```

● **Fan operation condition set to internal temperature.**

- UP / DOWN button
-Move cursor to left side when you press up button about 0.5second and then
 press down button.
-Move cursor to right side when you press down button about 0.5second and
 then press up button.
○ -If press menu button, display the save mode.
-Fan speed control : A/B/C/D.

PC Control Program (Auto Mode)
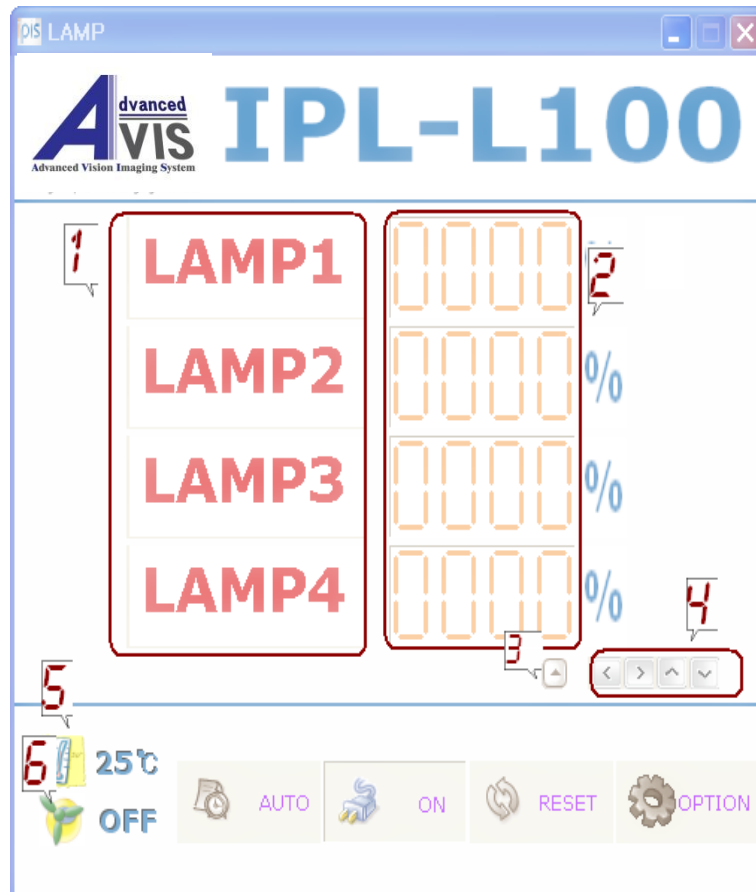
PC control program is able to control all of IPL-L100.

Function description
[1] Lamp is able to turn ON or OFF when click lamp1,2,3,4.
　　　Shot key – No. key 1(LAMP1), 2(LAMP2), 3(LAMP3), 4(LAMP4).
[2] Display Lamp of Light Lux.
　　　　Click – Control Lamp of Light Lux
　　　　Double Click – Set the point directly.
[3] Cursor
[4] Move cursor, Light Lux UP/DOWN
　　　Shot key –Move left or right.
　　　　　Move up or down (Light Lux UP/DOWN)
[5] Present temperature.
[6] Fan operation condition.

Button
AUTO – AUTO MODE operation / stop
　　　Shot key – **A** key
ON　　- Turn all Lamp ON/OFF
　　　Shot key – **P key**
RESET – System Reset
　　　Shot key – **R key**
OPTION – Auto mode set
　　　Fan operation set
　　　Operation set
　　　User mode set
　　　Communication port set
　　　System Setup
　　　Firmware Upgrade
　　Shot key – **O** key

Auto Mode A/B 설정

Auto mode setup (Mode A)

ITEM	Wait(Sec)
LAMP1	5
LAMP2	5
LAMP3	5
LAMP4	5

Read   Write

Auto mode setup (Mode B)

Begin 0 End 31

No	LAMP1	LAMP2	LAMP3	LAMP4	Wait(Sec)
04	5	6	64	64	5
05	6	7	80	80	5
06	7	8	96	96	5
07	8	9	112	112	5
08	9	10	128	128	5
09	10	11	144	144	5
10	11	12	160	160	5
11	12	13	176	176	5
12	13	14	192	192	5
13	14	15	208	208	5
14	15	16	224	224	5
15	16	17	240	240	5
16	17	18	256	256	5
17	18	19	272	272	5
18	19	20	288	288	5
19	20	21	304	304	5
20	21	22	320	320	5
21	22	23	336	336	5
22	23	24	352	352	5
23	24	25	368	368	5
24	25	26	384	384	5
25	26	27	400	400	5
26	27	28	416	416	5
27	28	29	432	432	5
28	29	30	448	448	5
29	30	31	464	464	5
30	31	32	480	480	5
31	32	33	496	496	5

Read   Write

Display setting point of IPL-L100, if start firstly.
Click each cell, and set the wait time.
Button
Read - Read setting point of product.
Write - Save setting point to product.
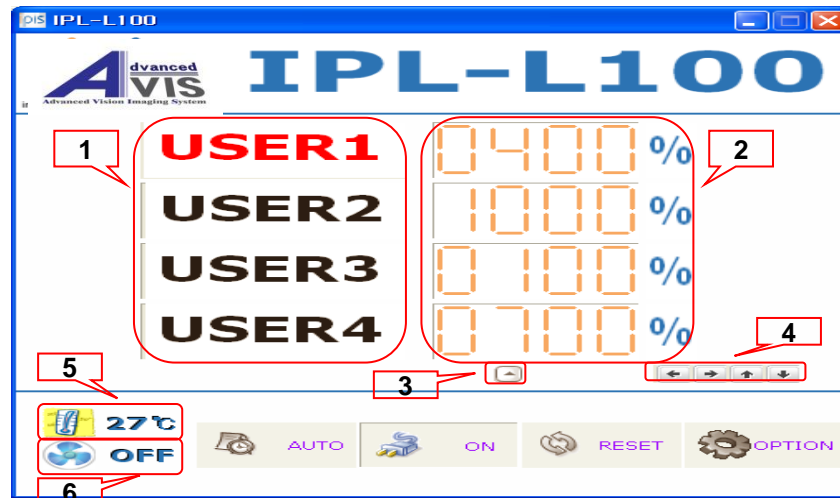
Display setting point of IPL-L100, if start firstly.
Set Lamp of Light Lux, wait time, begin No. and end No.
Button
Read - Read setting point of product.
Write - Save setting point to product.

Product Use Method

## PC Control Program (User Mode)

PC control program is able to control all of IPL-L100.

Function description
[1] Lamp is able to turn ON or OFF when click lamp.
　　　Shot key – No. key 1(LAMP1), 2(LAMP2), 3(LAMP3), 4(LAMP4).
[2] Display Lamp of Light Lux.
　　　Click – Control Lamp of Light Lux
　　　Double Click – Set the point directly.
[3] Cursor
[4] Move cursor, Light Lux UP/DOWN
　　　Shot key –Move left or right.
　　　　　Move up or down (Light Lux UP/DOWN)
[5] Present temperature.
[6] Fan operation condition.

User Mode Set
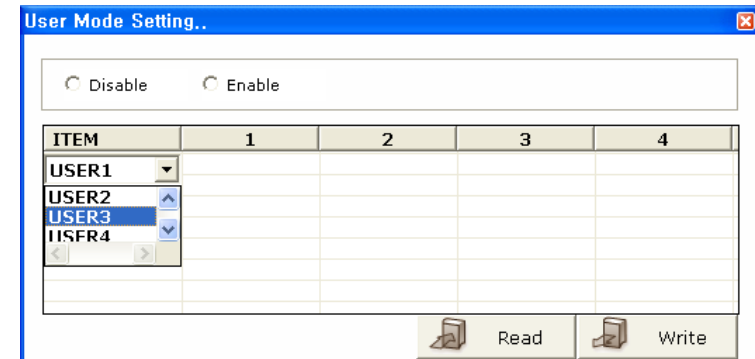
Display setting point, if start firstly.
Click the enable so you can operate user mode.
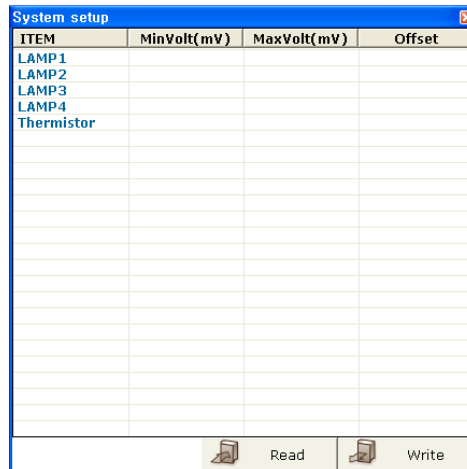Click each cell, set setting point.
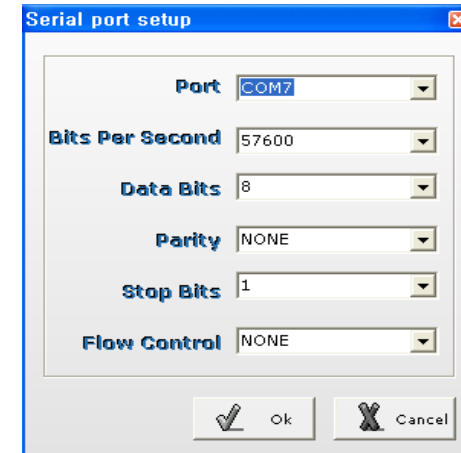Button
Read - Read setting point of product.
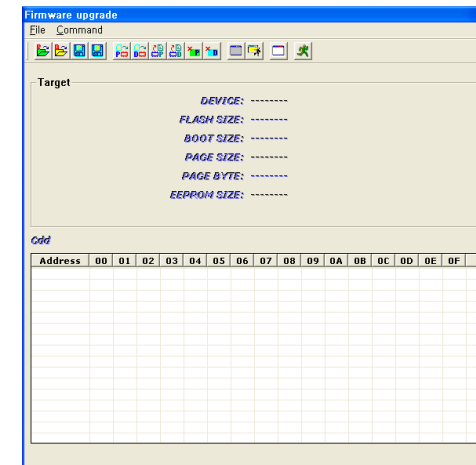Write - Save setting point to product.
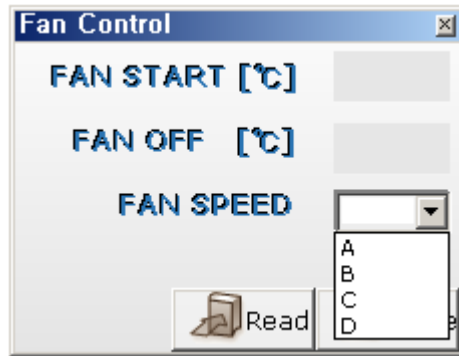
Set the temperature of operation or stop of fan.
Button
Read - Read setting point of product.
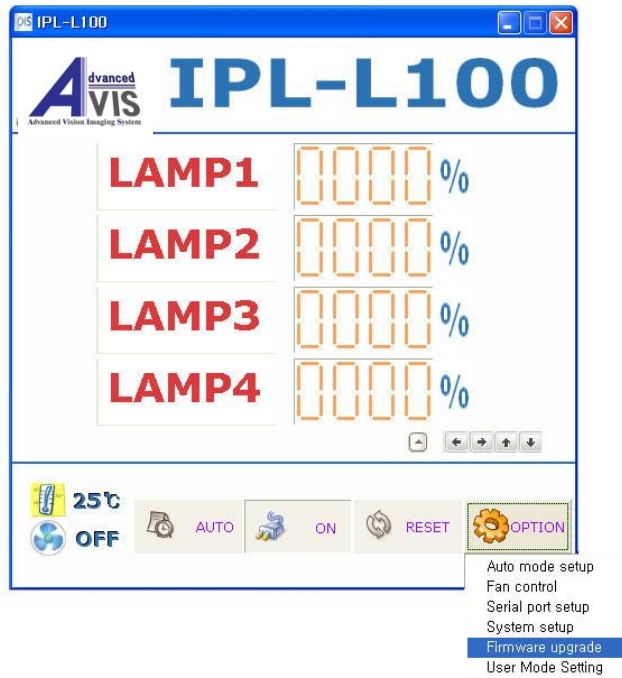Write - Save setting point to product.
Fan speed - A/B/C/D

Set between product and communication port.

Set Max. or Min. brightness of each lamp.

Update new firmware.

Product Use Method
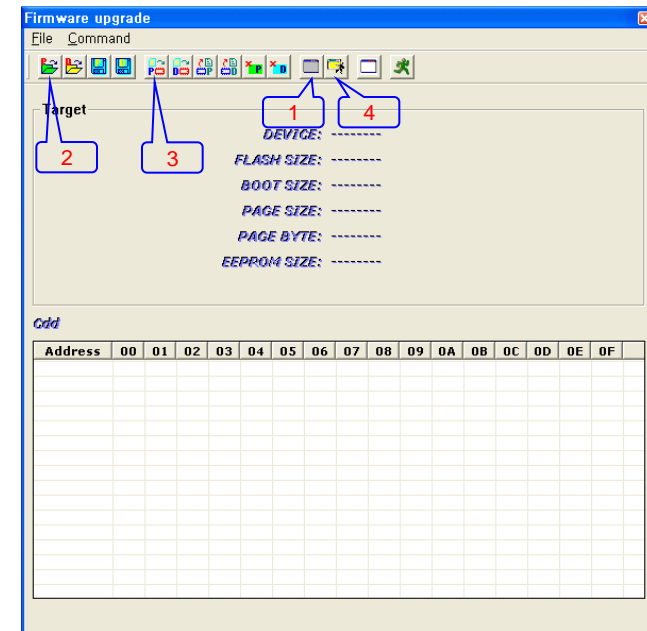
Firmware Upgrade

1.Program operate after RS232 cable connect to PC.
2.Cllick Firmware Upgrade in option mode.

1.After click jump boot program, check the device information
  to Target.
2.Click open program (FLASH) file, and open the Hex file(.A90).
3.Click write program (FLASH), and save the Hex file to product.
4.Click jump application program, and finish firmware upgrade.

SPECIFICATION

MODEL	IPL-L100W	IPL-L100RGB
Lamp	2chip White LED	2chip R/G/B LED
View Area	190*250mm	
Brightness	Over 30,000Lux(Surface)	Over 15,000Lux(Surface)
Color Temperature	under2300k ~ over12000k ($\pm$5%)	R/G/B
Uniformity	Over 85%	
Display	128*64 Dot Graphic LCD	
Fan Control	Automatic or User setting	
PC Interface	RS232C	
Power supply	AC100~250V 50/60Hz Input	
Power consumption(W)	Max. 60W(at Total on)	
Operating Temperature	-10˚C ~ +50˚C	
Dimension	371 * 326 * 126 (WHD, mm)	

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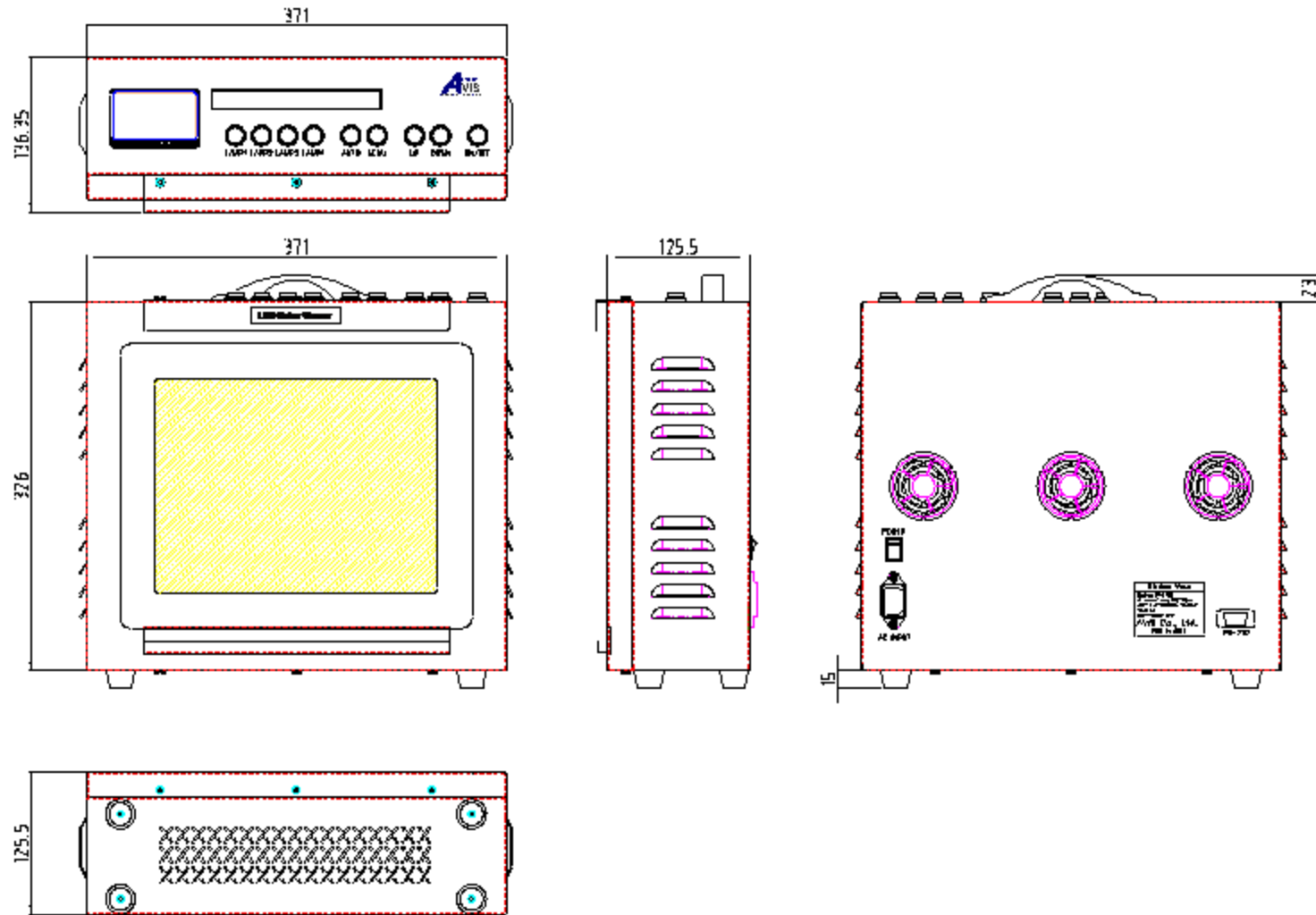
IPL-L100
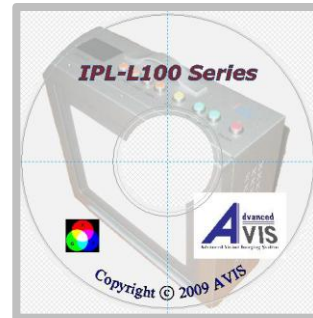
CD

RS-232C Cable

AC Power Cable

Warranty

●AVIS warrants that this product will be free from defects in materials and workmanship for a period of one(1) year from the date of shipment.
●If any such product proves defective during this warranty period, AVIS, at its option, either will repair the defective product without charge for part and labor, or will provide a replacement in exchange for the defective product.
●Parts, modules and replacement products used by AVIS for warranty work may be new or reconditioned to like new performance.
●All replaced parts, modules and products become the property of AVIS.

●In order to obtain service under this warranty, customer must notify AVIS of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service.
●Customer shall be responsible for packaging and shipping the defective product to the head office or agent designated by AVIS, with shipping charges prepaid.
●AVIS shall pay for the return of the product to customer if the shipment is to a location within the country in which the AVIS agent is located.
●Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for product returned to any other locations.

●This warranty shall not apply to any defect, failure or damage caused by improper user or improper or inadequate maintenance and care.
●AVIS shall not be obligated to furnish service under this warranty.
●A) to repair damage resulting from attempts by personnel other than AVIS representatives to install, repair or service the product.
●B) to repair damage resulting from improper use or connection to incompatible equipment.
●C) to repair any damage or malfunction caused by the sue of non-AVIS supplies.
●D) to service a product that has been modified or integrated with other products when effect of such modification or integration increases the time or difficulty of servicing the product.

●THIS WARRANTY IS GIVEN BY AVIS WITH RESPECT TO THE PRODUCT IN LIED OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. AVIS AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AVIS' RESPONSIBILITY TO REPAIR OF REPLACE DEFECTIVE PRODUCTS IS THE SOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR BREACH OF THIS WARRANTY. AVIS AND ITS VENDORS WILL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER AVIS OR THE VENDOR HAS ADVACE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

You can download programs the latest controller software from AVIS webpage.
It can change the specification without any notice for the quality improvement.

Website : http://www.yojet.com.tw
E-mail : kevin@yojet.com.tw

Contact the product purchase consultation and general inquiries to our head office.

Head office : 886-2-2729-2660

MADE IN KOREA