

DLP Projector

Service Manual for

EIP-WSS3100



Date	Revise Version	Description
2013.04.22	V1.0	Initial Issue

Preface

This manual is applied to EIP-WSS3100 projection system. The manual gives you a brief description of basic technical information to help in service and maintain the product.

Your customers will appreciate the quick response time when you immediately identify problems that occur with our products. We expect your customers will appreciate the service that you offer them.

This manual is for technicians and people who have an electronic background. Please send the product back to the distributor for repairing and do not attempt to do anything that is complex or not mentioned in the troubleshooting.

Note: The information found in this manual is subject to change without prior notice. Any subsequent changes made to the data herein will be incorporated in future edition.

EIP-WSS3100 Service Manual

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Manual Version 1.0

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Introduction

1-1 Highlight

No	Item	Description
1	Technology	One panel 0.65" WXGA DMD chip
2	Dimension (W x D x H)	<ul style="list-style-type: none">• 357 (W) x 367 (D) x 135(H) mm (excluding foot)• 357 (W) x 367 (D) x 231(H) mm (including reflection mirror)
3	Weight	<ul style="list-style-type: none">• < 8.0kg
4	Power Supply	<ul style="list-style-type: none">• Universal AC 100 – 240 V ~ 50/60 Hz with PFC input
5	Keystone Correction	<ul style="list-style-type: none">• - Manual keystone- H. Keystone: N/A- V. Keystone -15~ +15 degrees
6	Resolution	1280X 800 (WXGA)
7	Throw ratio	0.35
8	Projection lens	<ul style="list-style-type: none">• Fixed Lens(YM105), F# 2.6
9	Lamp life	<ul style="list-style-type: none">• Normal mode: 3000 hours min, 50% survival rate• Eco mode: 4000 hours min, 50% survival rate
10	Video compatibility	<ul style="list-style-type: none">• NTSC: M (3.58MHz), 4.43 MHz• PAL: B, D, G, H, I, M, N,60• SECAM: B, D, G, K, K1, L• HDTV: 720p, 1080i,1080P• EDTV: 480P,576P• SDTV: 480i,576i
11	System Controller	<ul style="list-style-type: none">• TI DDP4421
12	Color Wheel	<ul style="list-style-type: none">• 44mm diameter, 6 segments, R78 Y44 G81 C34 W55 B68_URD20VA• 7200 rpm@CW 2X
13	Lamp	<ul style="list-style-type: none">• 280W Watt (Osram E20.9n)Lamp
14	Throw Distance	<ul style="list-style-type: none">• 597mm –731mm±20mm, 654mm±20mm @87.2"(TR=0.35)

No	Item	Description
15	LAN Module	With LAN
16	IR Camera Interactive solution	Option, need an external IR Camera module.
17	Temperature	<ul style="list-style-type: none"> • 5 ~ 40°C
18	Altitude	<ul style="list-style-type: none"> • 0 -- 2500 ft, 5 -- 40 °C • 2500 -- 5000 ft, 5 -- 35 °C • 5000 -- 10000 ft, 5 -- 30 °C
19	Input Signal Spec.	<ul style="list-style-type: none"> • Hsync Frequency 30k-100kHz • Vsync Frequency 50 ~ 120 Hz • Graphic Signal (R/G/B/H/V) <ul style="list-style-type: none"> - Analog RGB 0.7Vp-p, 75 ohm, Separate TTL H,V Sync • Video Signal <ul style="list-style-type: none"> - Composite video 1Vp-p, 75 ohm - S-video Luminance 0.714Vp-p, 75 ohm Chrominance 0.286Vp-p, 75 ohm - Component video 1Vp-p, 75 ohm
20	Power Consumption	<ul style="list-style-type: none"> • Normal mode: 350 W+/-10%@110VAC • ECO mode: 290 W+/-10%@110VAC • Standby< 0.5W@ VGA t, RS232 and LAN module disable
21	Long cable supportable	<ul style="list-style-type: none"> • VGA cable, 10M (R/G/B with impedance:75±10%, H/V with impedance:50±10%) • HDMI cable: 10M (with certification)

1-2 Compatible Mode

VGA Analog

(1) PC Signal			
Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x480	60	31.5
	640x480	67	35.0
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	640x480	120	61.9
IBM	720x400	70	31.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
	800x600	120	77.4
Apple,Mac II	832x624	75	49.1
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
	1024x768	120	99.0
Apple,Mac II	1152x870	75	68.7
SXGA	1280x1024	60	64.0
	1280x1024	72	77.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
	1280x960	75	75.2
SXGA+	1400x1050	60	65.3
UXGA	1600x1200	60	75.0
(2) Extended Wide timing			
WXGA	1280x720	60	44.8

(2) Extended Wide timing			
Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
WXGA	1280x720	60	44.8
	1280x800	60	49.6
	1366x768	60	47.7
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3
(3) Component Signal			
480i	720x480(1440x480)	59.94(29.97)	15.7
576i	720x576(1440x576)	50(25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
	1280x720	50	37.5
1080i	1920x1080	60(30)	33.8
	1920x1080	50(25)	28.1
1080p	1920x1080	23.98/24	27.0
	1920x1080	60	67.5
	1920x1080	50	56.3

HDMI Digital

(1) PC Signal			
Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x480	60	31.5
	640x480	67	35.0
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	640x480	120	61.9
IBM	720x400	70	31.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
	800x600	120	77.4
Apple,Mac II	832x624	75	49.1
XGA	1024x768	60	48.4
	1024x768	72	56.5
	1024x768	75	60.0
	1024x768	85	68.7
	1024x768	120	99.0
Apple,Mac II	1152x870	75	68.7
SXGA	1280x1024	60	64.0
	1280x1024	72	77.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
	1280x960	75	75.2
SXGA+	1400x1050	60	65.3
UXGA	1600x1200	60	75.0

(2) Extended Wide timing			
Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
WXGA	1280x720	60	44.8
	1280x800	60	49.6
	1366x768	60	47.7
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3
(3) HDMI-Video Signal			
640x480p	640x480	59.94/60	31.5
480i	720x480(1440x480)	59.94(29.97)	15.7
480p	720x480	59.94	31.5
576i	720x576(1440x576)	50(25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
720p	1280x720	50	37.5
1080i	1920x1080	60(30)	33.8
	1920x1080	50(25)	28.1
1080p	1920x1080	23.98/24	27.0
	1920x1080	60	67.5
	1920x1080	50	56.3
(4) HDMI 1.4a mandatory 3D timing- Video Signal			
Frame Packing	720p	50	
	720p	59.94/60	
	1080p	23.98/24	
Side-by-Side	1080i	50	
	1080i	59.94/60	
Top-and-Bottom	720p	50	
	720p	59.94/60	
	1080p	23.98/24	

Note: If the Computer Compatibility supportive signal is different from User's Manual, please refer to User's Manual.

Disassembly Process

2-1 Equipment Needed & Product Overview

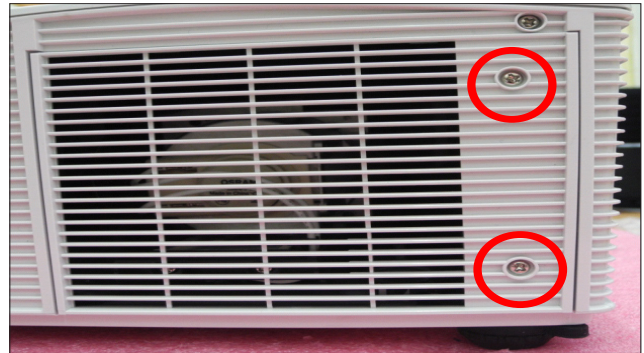
1. Projector
2. Hex Sleeves 7mm
3. Long Nose Nipper
4. Screw Bit (+) :105
5. Screw Bit (+) :107
6. Screw Bit (-) :107
7. Hex Sleeves 5 mm
8. + NO.0 Screwdriver

** Before you start: This process is protective level II. Operators should wear electrostatic chains.
Please place the protective cover or protective plastic on the lens and mirror
for prevent scratched.*



2-2 Disassemble Lamp Module and Mesh Inlet

1. Loosen 2 screws (as red circle) on the Lamp Cover.



2. Separate the Lamp cover and Lamp cover strap(as green square).



LAMP COVER

3. Loosen 2 screws (as yellow circle) on the Lamp Module.

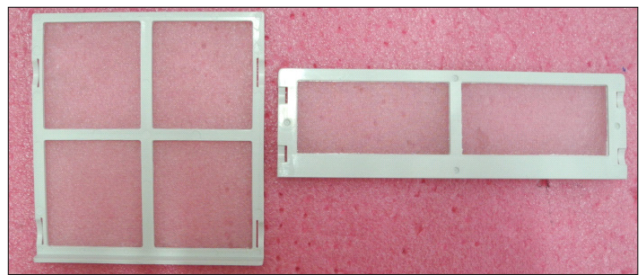


4. Take off the Lamp Module.



LAMP MODULE

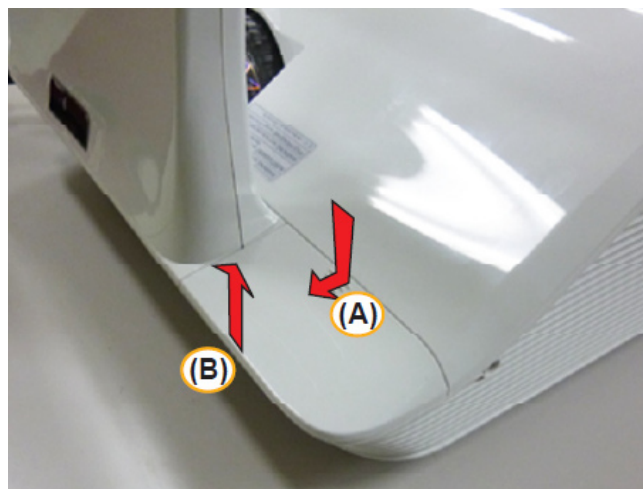
5. Remove the two mesh inlets.



BACK MESH INLET SIDE MESH INLET

2-3 Disassemble Top Cover Module

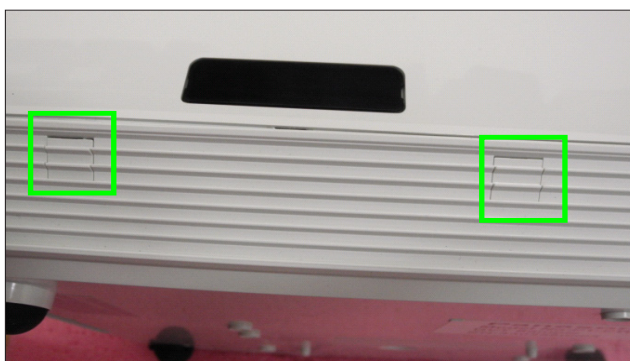
1. Push (A) part and pull the (B) part of the corner cover at the same time to remove it.



2. Unscrew 2 screws(as red circle).



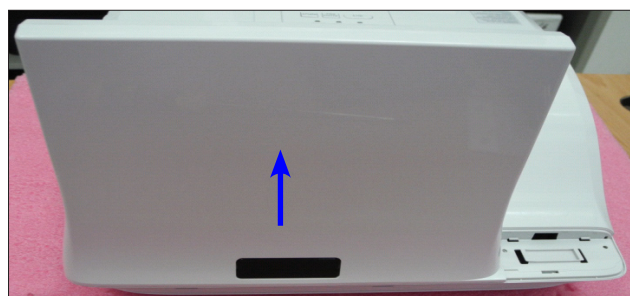
3. Disassemble the Bottom Cap(as green square).



4. Unscrew 2 screws(as yellow circle).



5. Remove the front mirror cover module.



FRONT MIRROR COVER MODULE

6. Remove the rear mirror cover.



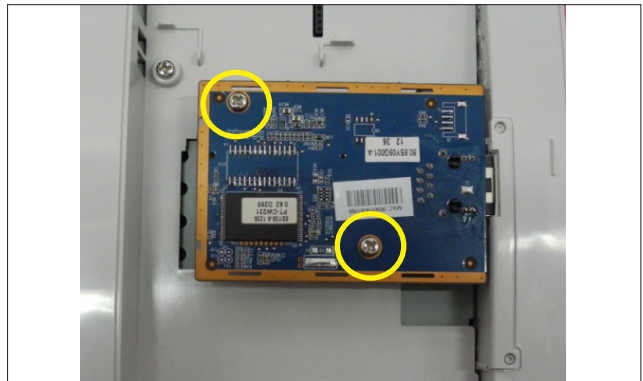
REAR MIRROR COVER

7. Unscrew 2 screws(as green circle)
to remove wireless top cover.



WIRELESS TOP COVER

8. Unscrew 2 screws(as yellow circles)
to disassemble Lan Board.

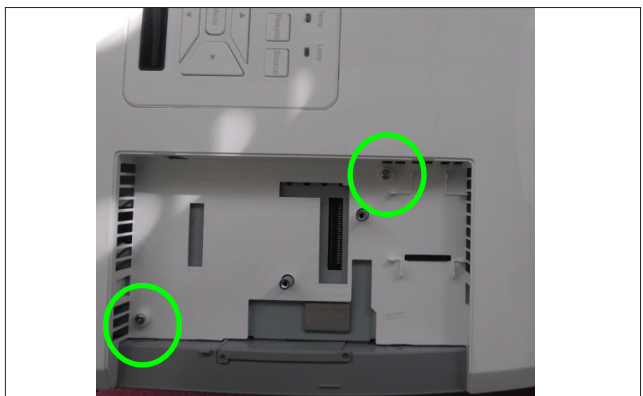


LAN BOARD

9. Unscrew 2 screws (as red circle).



10. Unscrew 2 screws (as green circle).



10. Unscrew 3 screws (as blue circle).



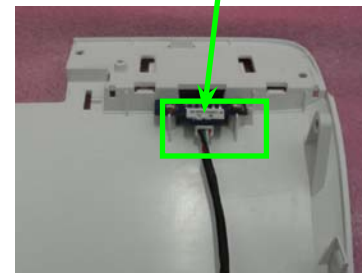
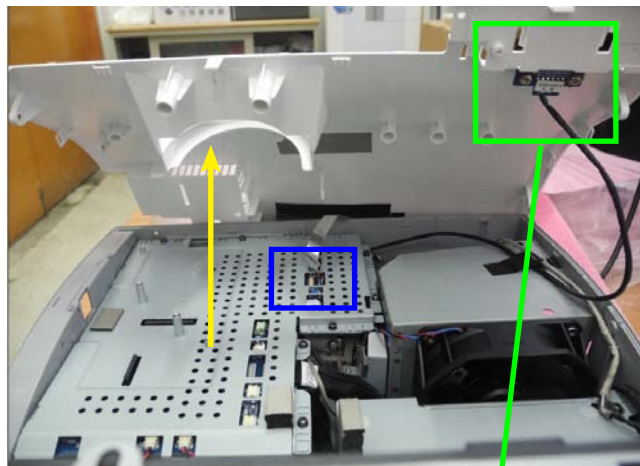
11. Unscrew 3 screws (as yellow circle).



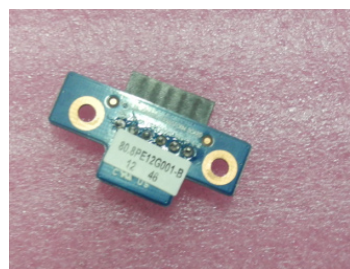
12. Unscrew 2 screws (as red circle).



- 14.- Pull upward the Top Cover Module
- Unplug 1 connector (as blue square)
 - Unplug 1 connector (as green square)
 - Remove the Top Cover Module.

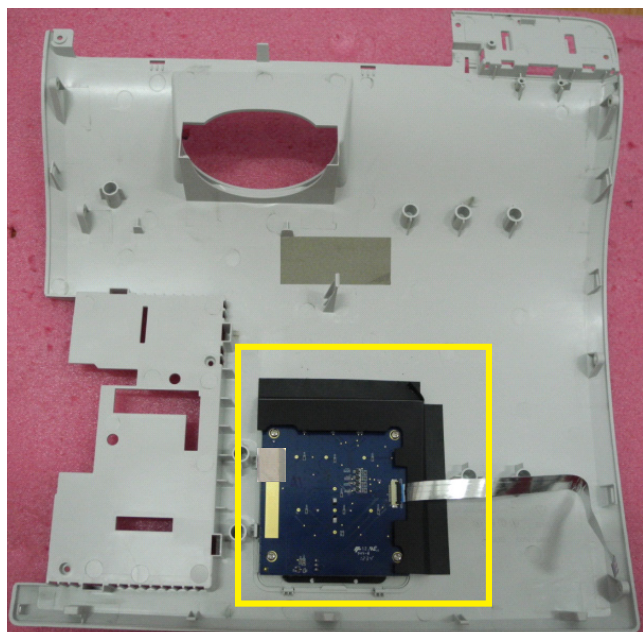


15. Unscrew 2 screws (as red circles) to disassemble IR Camera Transform Board.

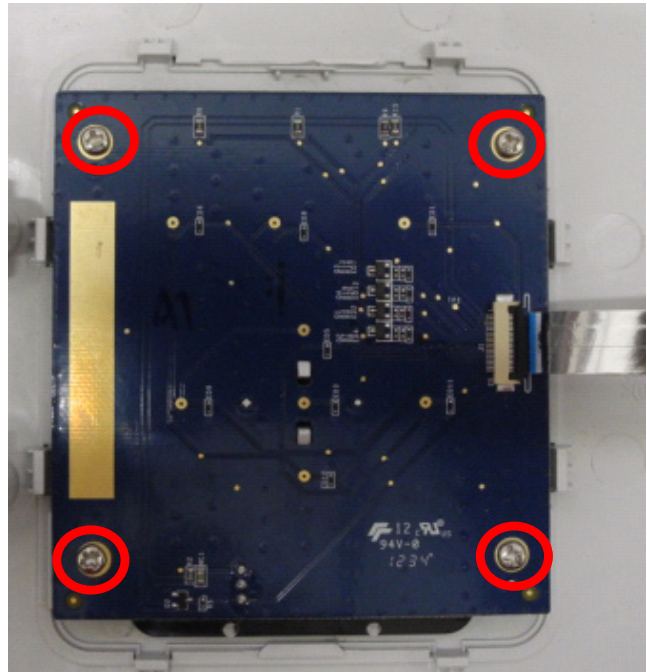


IR Camera Transform Board

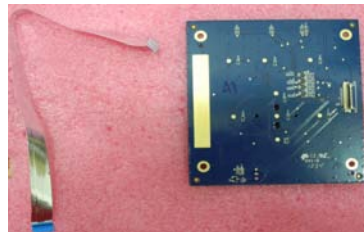
16. Tear off the Keypad mylar and Sponge (as yellow square).



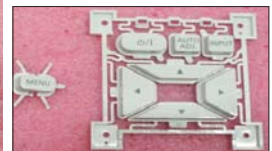
17. Unscrew 4 screws (as red circles) to disassemble keypad board .



18. Separate the keypad button and keypad board and FPC cable.



Keypad Board



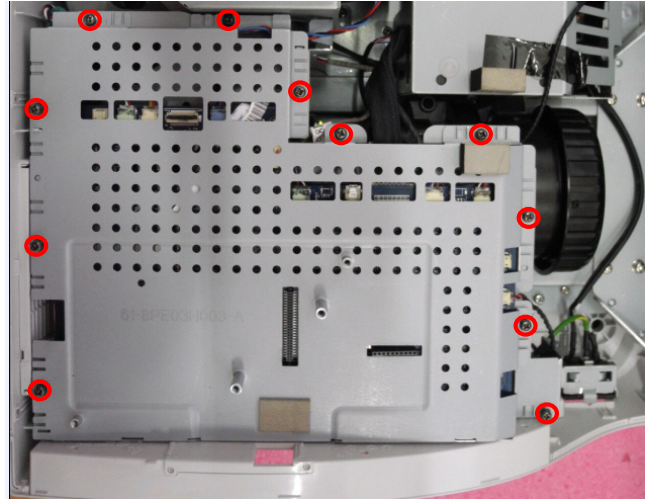
Keypad Button



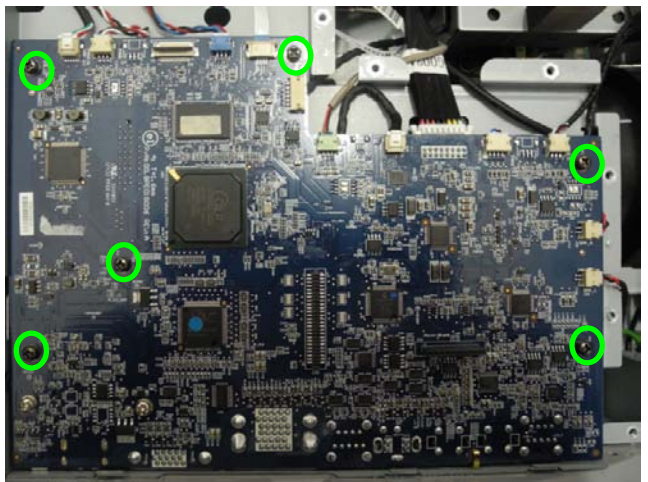
TOP COVER

2-4 Disassemble Main Board

1. Unscrew 11 screws (as red circles) to disassemble the main board shielding .



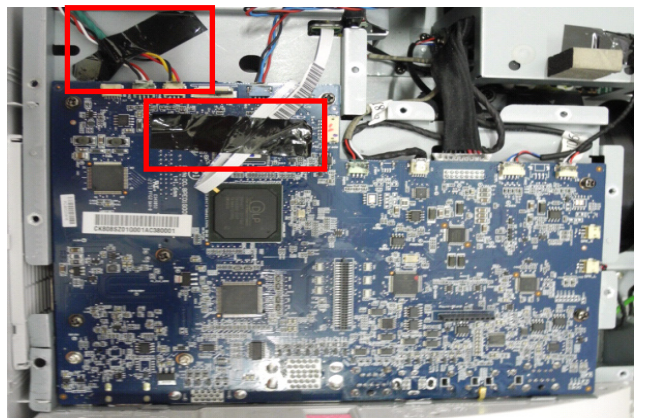
2. Unscrew 6 screws (as green circles) .



3. Unscrew 8 hex screws (as blue circles) and 4 screws (as yellow circles).

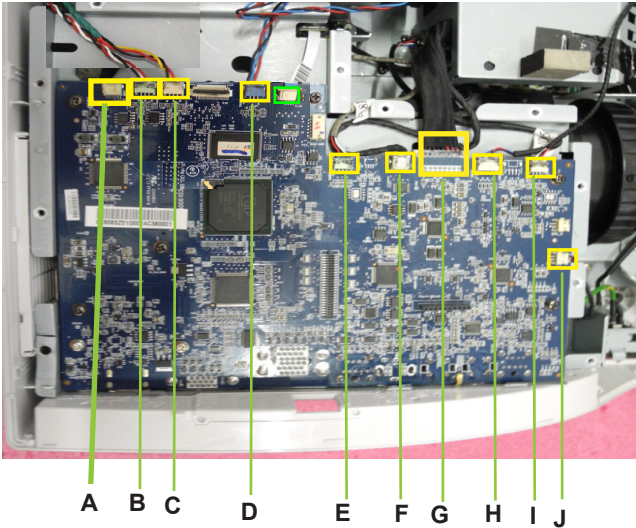


4. Tear off the tape (as red squares).

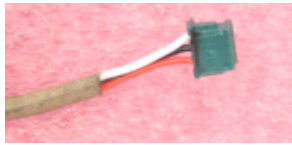


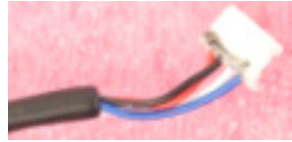




5. Unplug 10 connectors (as yellow square).

6.Unplug 1 connector (as green square)
of Color Wheel.

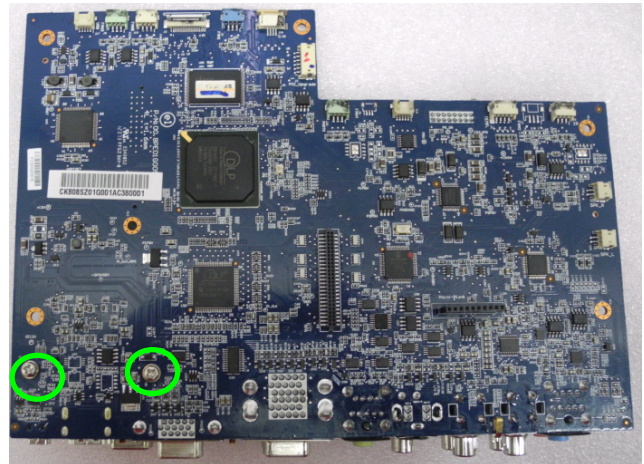


Item	Male Connector on Main Board	The key feature	Figure
A	IR Camera Transform Board	Compose of Red/White/Black/ Green wire (4 pin)	
B	Blower FAN	Compose of Red/Yellow/ Blackwire (3 pin)	
C	DMD FAN	Compose of Red/White/Black- wire (3 pin)	
D	SYS FAN	Compose of Red/Blue/Black Wire(3 pin)	

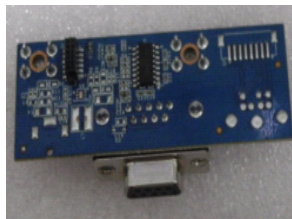
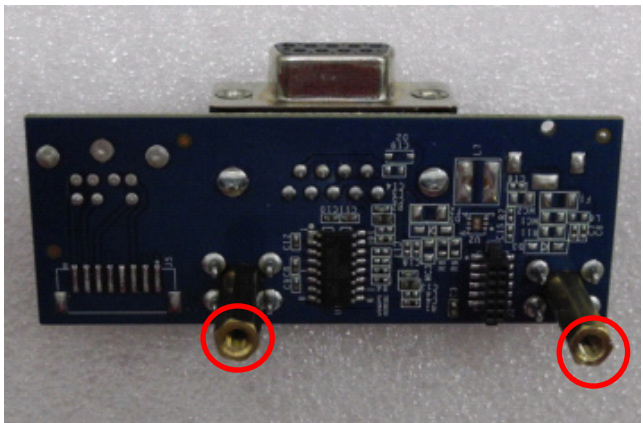
E	Photo Sensor	Compose of Red/Black/White Wire(3 pin)	
F	Lamp Driver	Black wire tube (5 pin)	
G	LVPS to Main Board cable	Black wire tube (16 pin)	
H	Thermal sensor	Compose of Red/Black/White/Blue(4pin)	
I	Front IR	Compose of Red/Black/White Wire(3 pin)	
J	Speaker	Compose of Black/Red wire and Black wire tube (2 pin)	

8.- Disassemble MB Module.

- Unscrew 2 screws to separate the daughter board and main board (as green circles)



9. Unscrew 2 screws(as red circles).



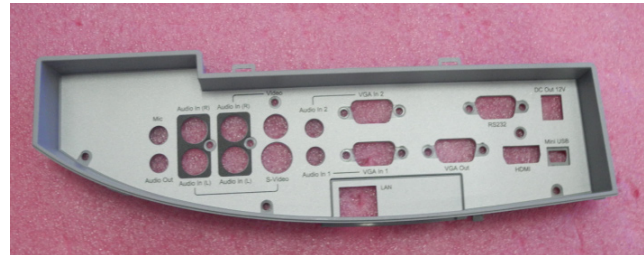
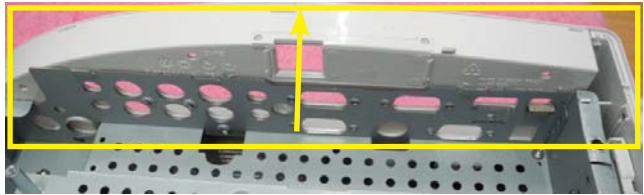
Daughter board



Main board

2-5 Disassemble Shielding and IO Cover Module

1. - Plug the IO cover Module from bottom cover.
 - Separate the lan cover from the IO cover.

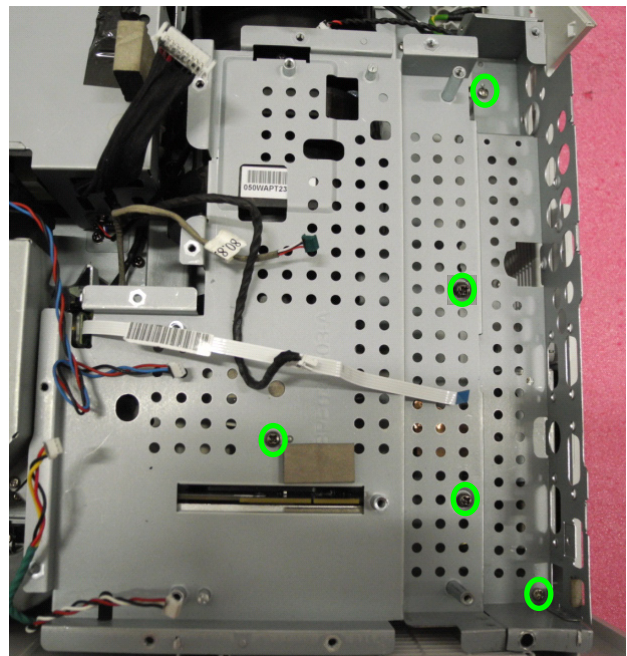


IO Cover



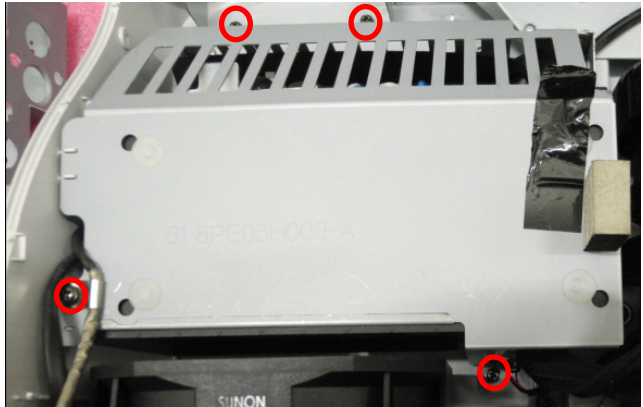
Lan Board Cover

2. Unscrew 5 screws (as green circles) to disassemble the Shielding.



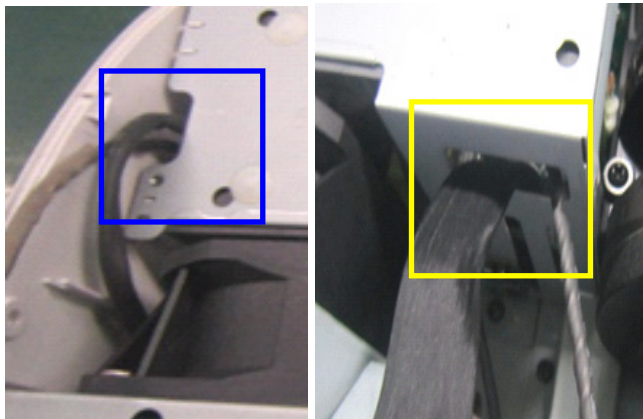
2-6 Disassemble Lamp Driver Module and LVPS

1. Unscrew 4 screws (as red circles) to disassemble the Lamp Driver Module.

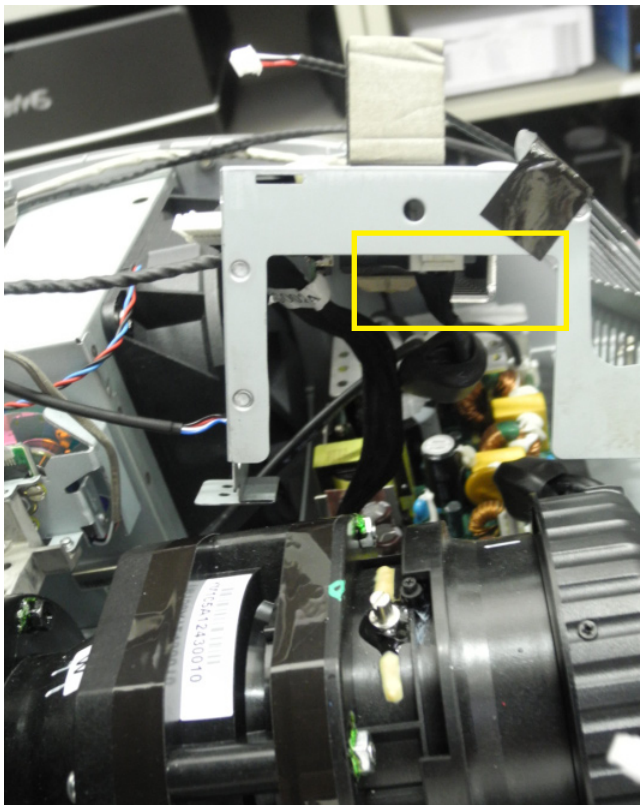


Note:1. When assemble ,please arrange the Interlock switch and lamp cable to the notch (as blue square).

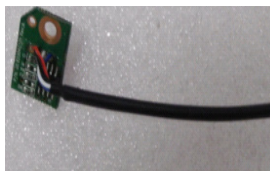
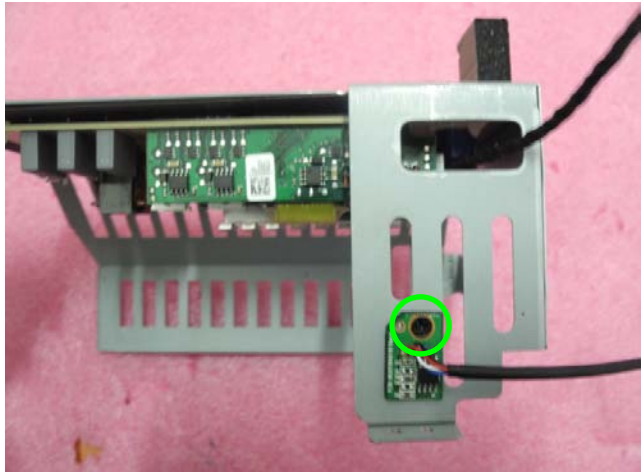
2. When assemble ,please arrange 16Pin cable and 5Pin cable to the Shilded notch(as yellow square).



2. Unplug the connector to disassemble the lamp driver.

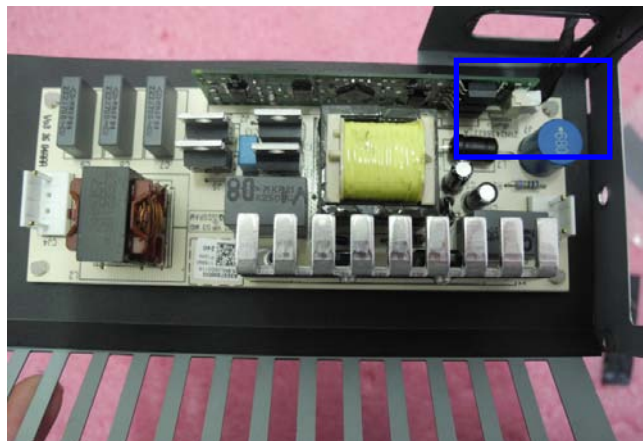


3. Unscrew 1 screw (as green circle) to disassemble the thermal sensor board.

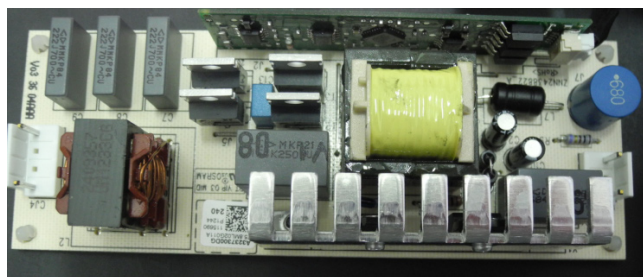


Thermal sensor board

4. Unplug 1 connector (as blue square).



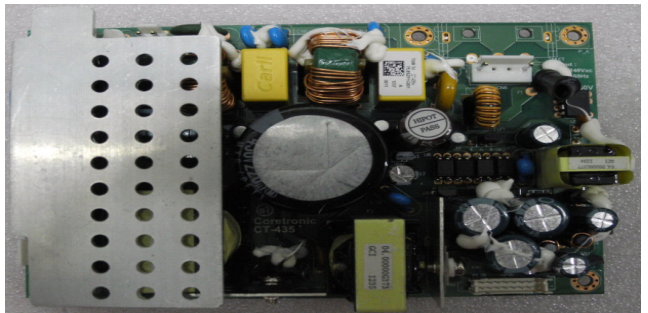
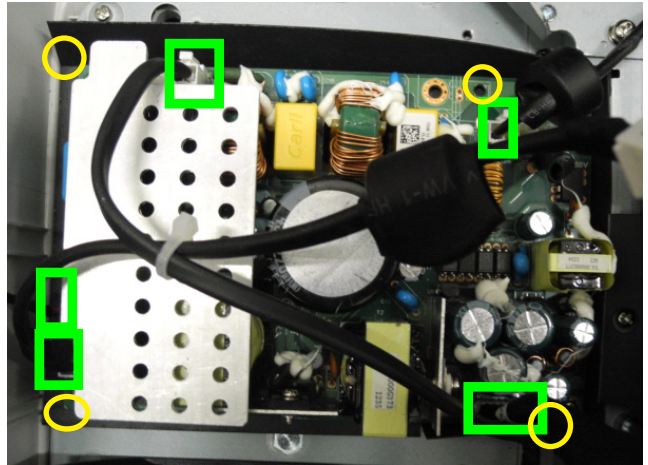
5. Separate Lamp Driver from Lamp Driver Shielding.



Lamp Driver

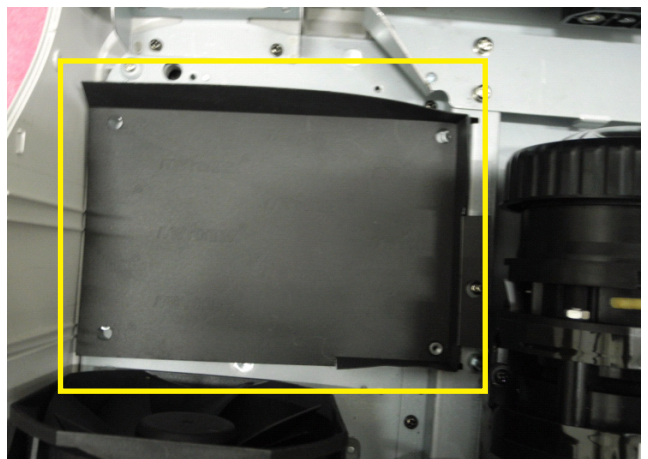
6. Unplug 5 connectors (as green squares).

7. Unscrew 4 screws (as yellow circles) disassemble LVPS.



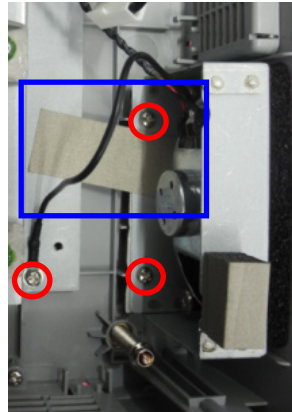
LVPS

8. Take off Mylar(as yellow square).



2-7 Disassemble Speaker and AC Inlet Bracket

1. Tear off the mylar (as blue square) and unscrew 3 screws(as red circles) to remove the right speaker module.
2. Unscrew 4 screws(as yellow circles) to remove the speaker and tear off the sponge(as yellow square).

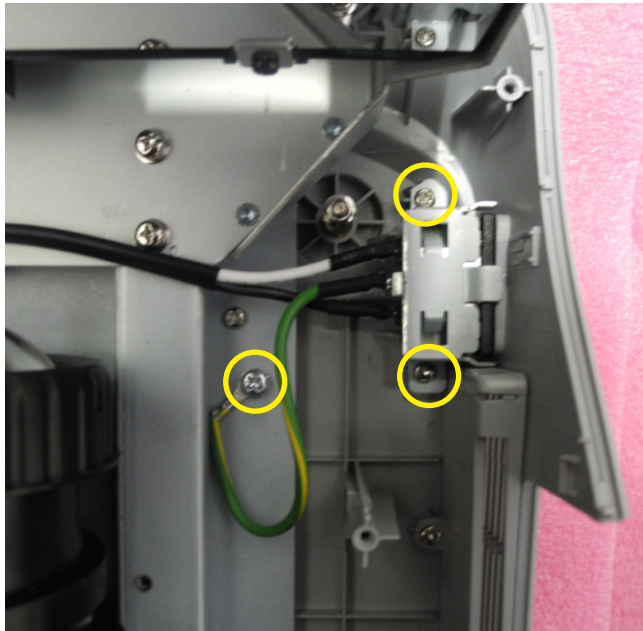


3. Disassemble Speaker.



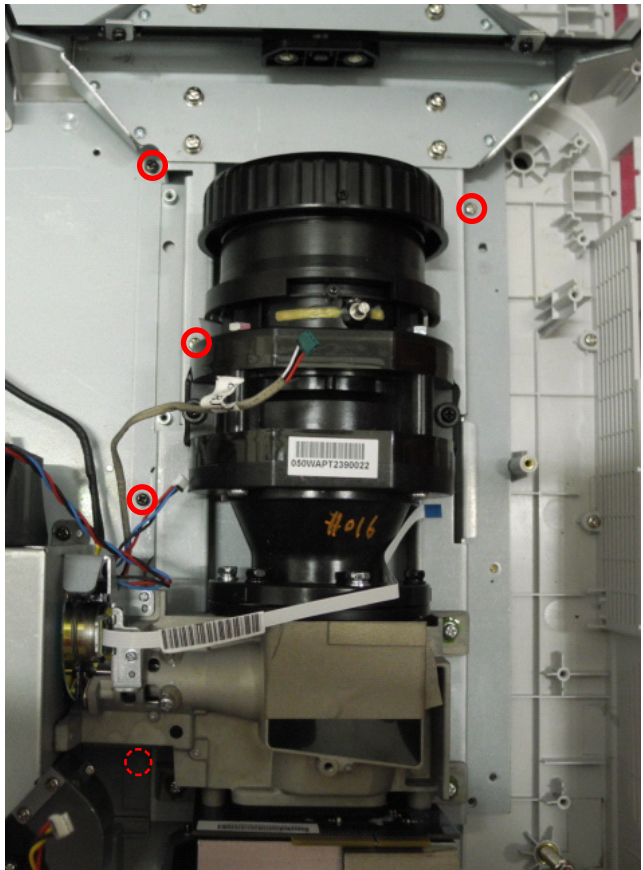
Speaker

4. Unscrew 3 screws(as yellow circles) to disassemble AC Inlet Bracket .

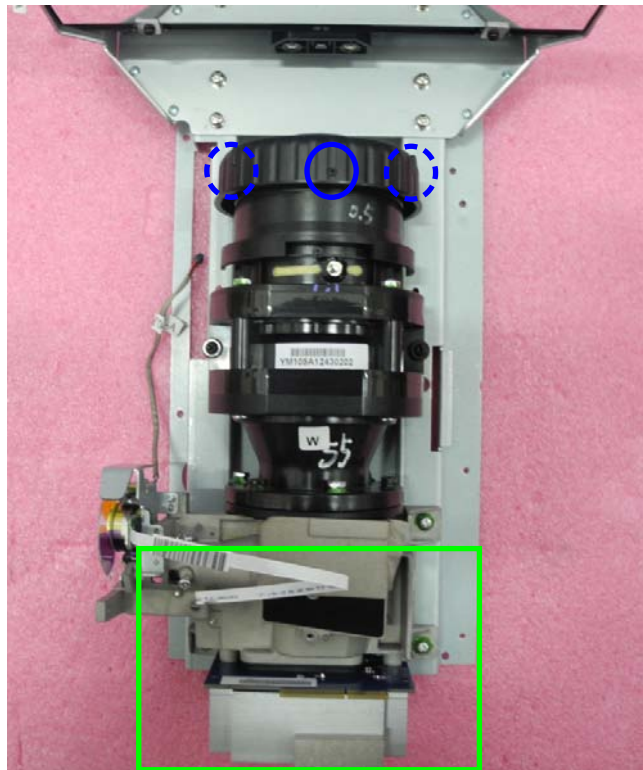


2-8 Disassemble Engine Module

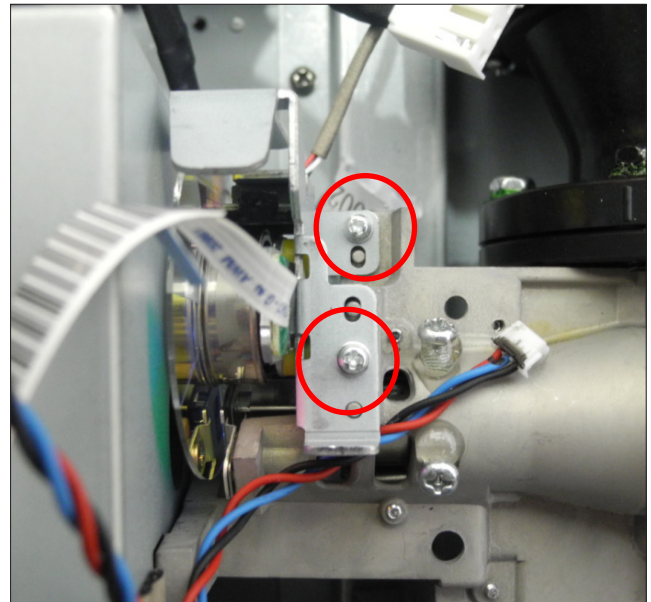
1. Unscrew 5 screws(as red circles) to remove the Engine Module.



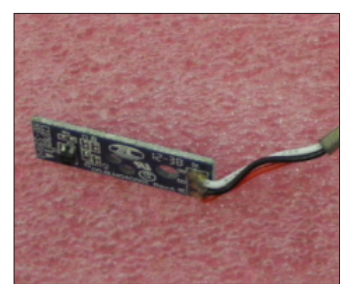
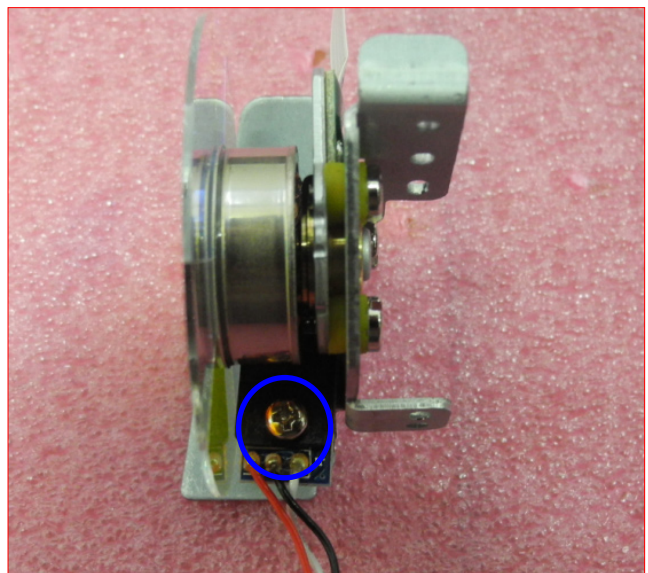
- 2.- Tear off the EMI tape and EMI gasket (as green square) .
 - Unscrew 3 screws(as blue circles) to disassemble the focus ring from the engine module.



3. Unscrew 2 screws(as red circle)
to remove C/W module.



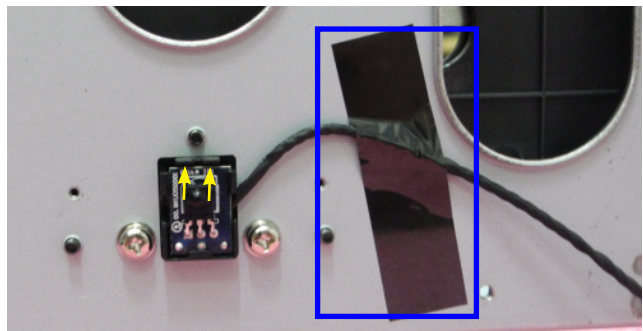
4. Unscrew 1 screw (as blue circle)
to separate C/W module and photo sensor
board.



5. Unscrew 3 screws (as blue circle) to disassemble focus ring.



6. Tear off the tape (as blue square) and disassemble front IR sensor board.

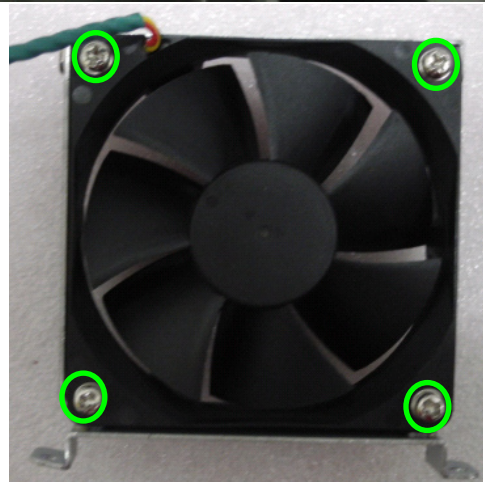
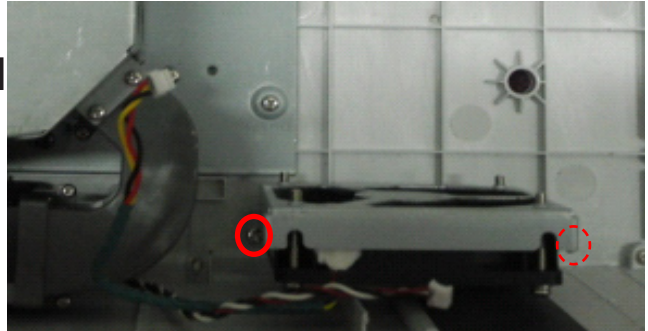


The engine module disassembly process is completed.

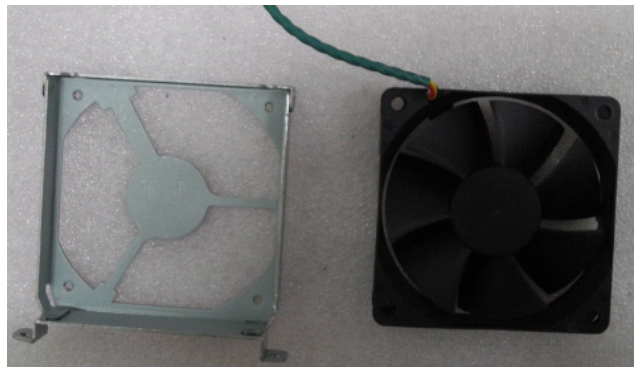
IR sensor board

2-9 Disassemble DMD FAN ,SYS FAN and Blower FAN

1. Unscrew 2 screws(as red circles) and remove the DMD FAN Module.



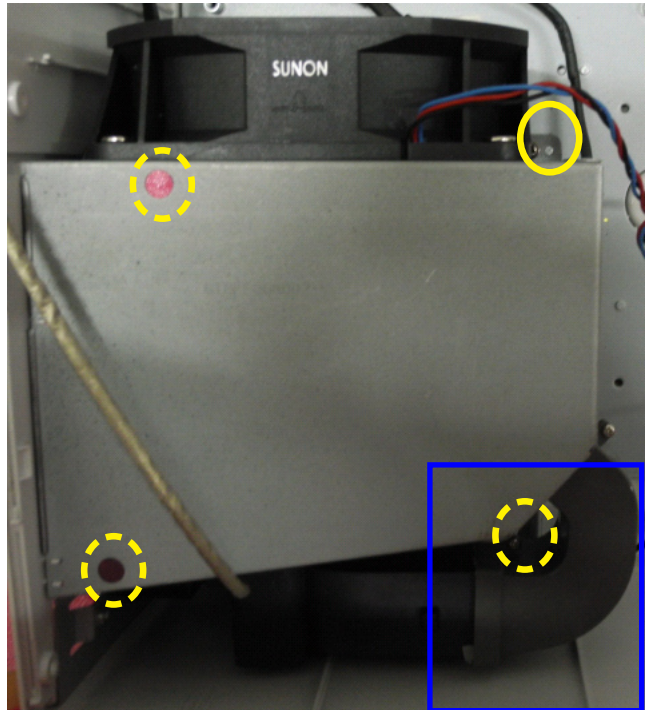
2. Separate the Bracket and FAN.



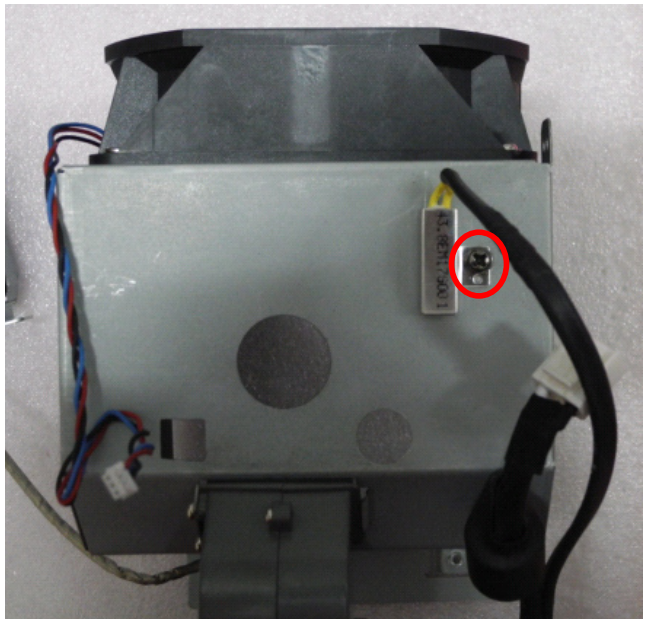
DMD FAN

3. Unscrew 4 screws(as yellow circles) to disassemble SYS FAN.

Note: SYS Fan Rubber card completely into the wind guide tube (as blue square).

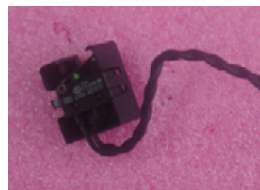
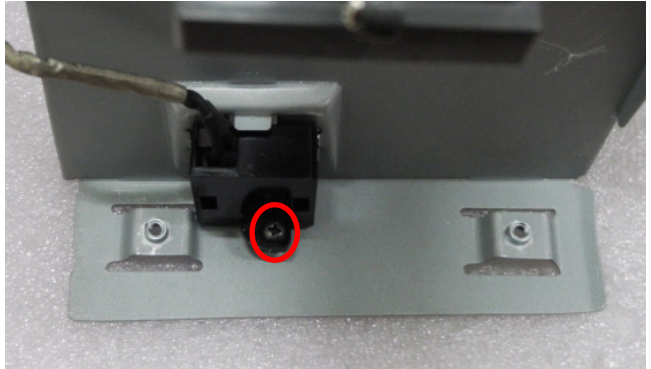


4. Turn over the fan module and unscrew 1 screw(as red circle) to disassemble the thermal switch.



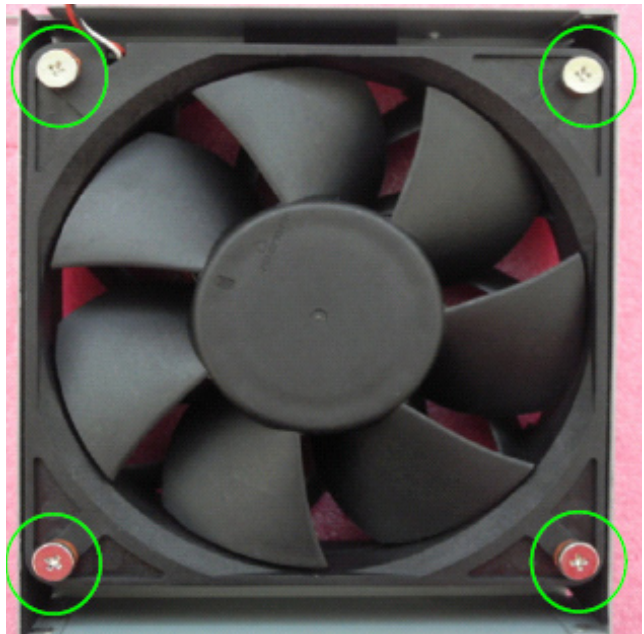
Thermal switch

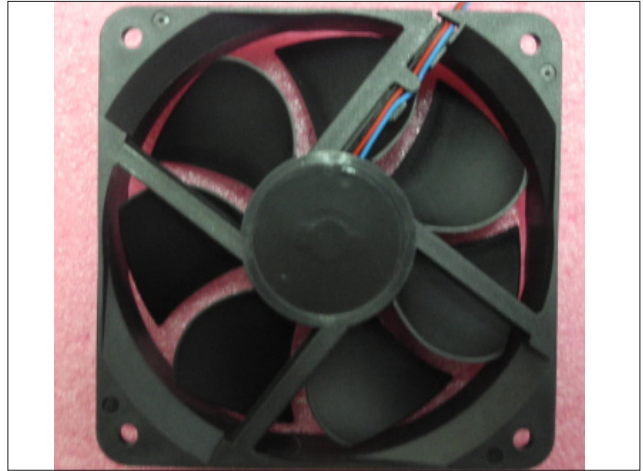
5. Unscrew 1 screw(as red circle) to disassemble the Interlock switch.



Interlock switch

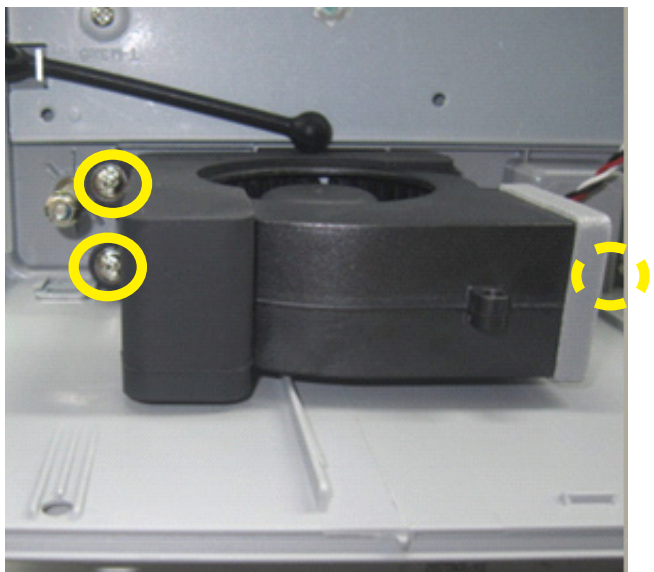
6. Unscrew 4 screws(as green circles) to disassemble the SYS FAN.



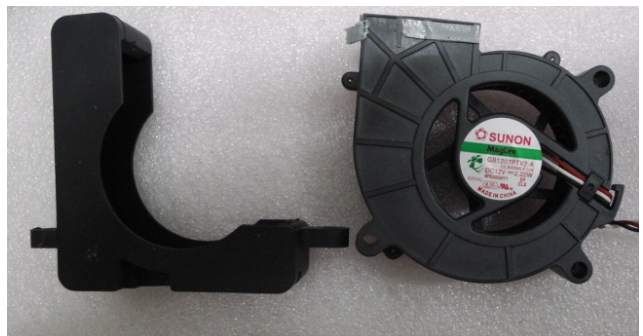


SYS FAN

7. Unscrew 3 screws(as yellow circles)
to disassemble the Blower FAN.

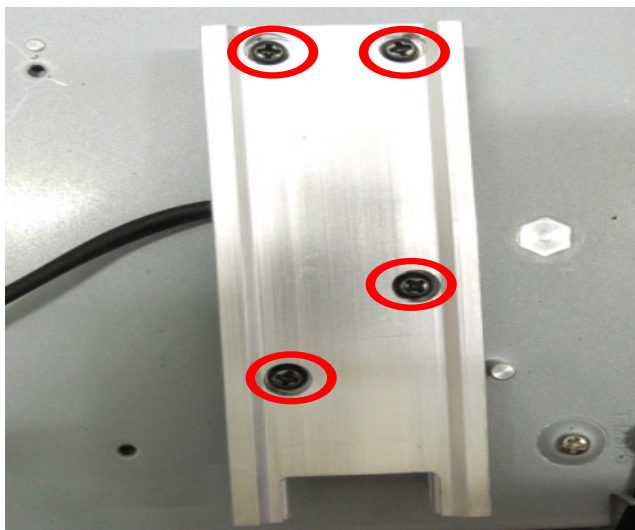


8. Separate the Blower and Blower Rubber.

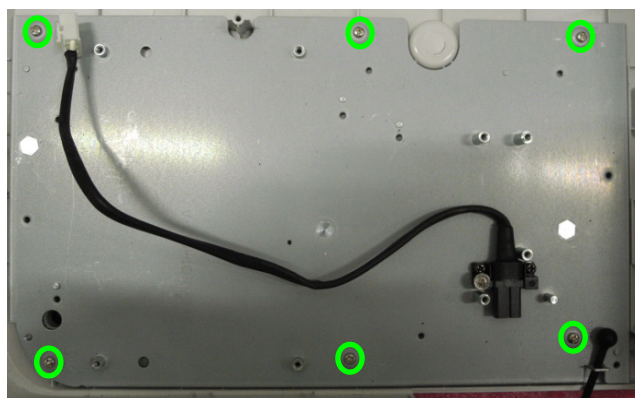


2-10 Disassemble Bottom Module

1. Unscrew 4 screws(as red circles) to remove the Lamp holder rail.



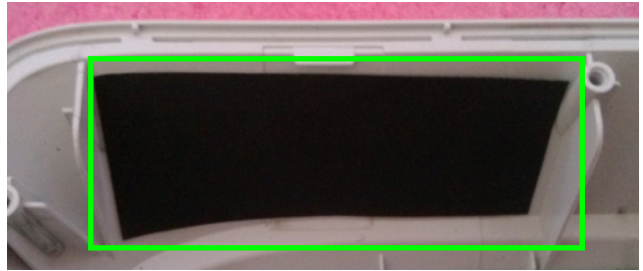
2. Unscrew 6 screws(as green circles) to remove the Bottom Shielding.



3. Unscrew 4 screws(as blue circles) to disassemble the side mesh frame and back mesh frame.



5. Tear off the Speaker Mylar
(as green square).



6. Pull out the Security Bar.



2-11 Re-write Lamp Usage Hour

1. Get into Service Mode

Press "Power", "Left", "Right" and "Menu" buttons sequentially .

2. Select "Lamp Fail" to get into the hidden menu.

3. Re-write Lamp Hour-Full

- Select "Lamp Hour-Full" and use "left" and "right" key to re-write "Full Hours".

4. Re-write Lamp Hour-Eco

- Select "Lamp Hour-Eco" and use "left" and "right" key to re-write "Eco Hours".

5. Re-write Operating Hours

- Select "Operating Hour" and use "left" and "right" key to re-write "Operating Hours".

6. Exit Service Mode

- Use "Up" or "Down" key to select "Exit", press "Enter" to exit the Service Mode.

Note: Left key = decrease Lamp/Projection hour

Right key = increase Lamp/Projection hour

MCU A08 On < 280W-WXGA >	
A14 < Oct 15 2012-15:32 >	
Lamp Hour-Full	0
Lamp Hour-ECO	0
Operating Hour	0
Lamp On/Off Counter	4/2
Lamp Voltage / Max	65 / 65 V
UART Response	0 No problems
Over Temp.	0
Fan Lock	0
Lamp Fail	0
CW Fail	0







































LampIgnition	Hour	Min.	DriverStatus	Burn Cycle	ECO Mode
1.	0	0	N/A	0	0
2.	0	0	N/A	0	0
3.	0	0	N/A	0	0
4.	0	0	N/A	0	0
5.	0	0	N/A	0	0
LampOperation	Hour	Min.	DriverStatus	Burn Cycle	ECO Mode
1.	0	0	N/A	0	0
2.	0	0	N/A	0	0
3.	0	0	N/A	0	0
4.	0	0	N/A	0	0
5.	0	0	N/A	0	0
Exit				✓	
Lamp Hour-Full				0	
Lamp Hour-ECO				0	
Operating Hour				0	

2-12 Repair Action

Repair action	Change parts					Software	Description page
	Main Board	Engine Module	Lamp Driver	F-type Fan	Color Wheel	Firmware	
Firmware Update	v					v	Chapter 5
Color Wheel Index	v				v		Chapter 4-3-1.7
OSD Reset	v					v	Chapter 4-5.2
EDID	v						Chapter 6
Re-write Lamp Hours Usage	v						Chapter 2-11
Fan Calibration	v			v		v	Chapter 4-8
ADC Calibration	v					v	Chapter 4-6
Optical Performance Measure		v					Chapter 4-3-1.8
Waveform Download			v				Chapter4-7

Troubleshooting

3-1 LED Lighting Message

Message	LAMP(Red)	TEMP(Red)	Power LED	
			(Red)	(Green)
Power Plug	Flash ON to OFF 100ms	Flash ON to OFF 100ms	Flash ON to OFF 100ms	
Standby				
Power button ON				
Cooling state			0.5 second(ON) 0.5 second(OFF) flashing	
Power button OFF:Cooling completed;Standby Mode				
Firmware Download				
Thermal Switch error(Lamp OverTemperature),OSD shows"Projector Overheated"				
Thermal sensor error(System Over Temperature),OSD shows"Projector Overheated"				
Fan lock error OSD shows red"Fan Fail,Will automatically turn off soon"		0.5 second(ON) 0.5 second(OFF) flashing		
Lamp error(Lamp,ballast)				
Color Wheel fail Photo sensor fail	0.5 second(OFF)			



Steady light



No light

3-2 Main Procedure

No	Symptom	Procedure
1	No Power	<ul style="list-style-type: none"> - Ensure the Power Cord and AC Power Outlet are securely connected - Check Lamp Cover ,Interlock Switch - Ensure all connectors are securely connected and aren't broken - Check LVPS - Check Main BD
2	Auto Shut Down	<ul style="list-style-type: none"> - Check LED status <ul style="list-style-type: none"> a. Lamp Fail: Power LED (lights blue); Lamp LED (lights red) <ul style="list-style-type: none"> - Check Lamp - Check Lamp Driver - Check Main Board - Check Color Wheel - Check Photo Sensor b. Over Temp.:Power LED (lights blue); Temp LED (lights red) <ul style="list-style-type: none"> - Check Fan - Check Main Board - Check Thermal Switch c. Fan Fail: Power LED (lights blue); Temp LED (Flashes red) <ul style="list-style-type: none"> - Check Fan - Check Main Board - Check whether have executed Factory Fan RPM

No	Symptom	Procedure
3	No Light On	<ul style="list-style-type: none"> - Ensure all connectors are securely connected and aren't broken - Check Lamp Module - Check Lamp Driver - Check LVPS - Check Main Board - Check Color Wheel Module - Check Photo Sensor Board
4	No Image	<ul style="list-style-type: none"> - Ensure the Signal Cable and Source work (If you connect multiple sources at the same time, use the "Source" button switch) - Ensure all connectors are securely connected and aren't broken - Check Main Board - Check Color Wheel Module - Check Engine Module
5	Mechanical Noise	<ul style="list-style-type: none"> - Check Fan Module - Check Color Wheel Module
6	Line Bar/Line Defect	<ul style="list-style-type: none"> - Check whether the Main Board and Engine module are assembled properly - Check Main Board - Check Engine

No	Symptom	Procedure
7	Image Flicker	<ul style="list-style-type: none"> - Do "Reset (All data)" of the OSD Menu - Ensure that the signal cables and source are work as well - Check Lamp Driver and execute waveform download - Check Lamp Module - Check Color Wheel - Check Photo Sensor and clean Photo Sensor - Check Engine module - Check Main Board
8	Color Abnormal	<ul style="list-style-type: none"> - Do "Reset (All data)" of the OSD Menu - Adjust Color Wheel Index - Check Main Board - Check Engine module - Check Color Wheel
9	Poor Uniformity/ Shadow	<ul style="list-style-type: none"> - Ensure the projection screen without dirt - Ensure the projection lens is clean - Ensure the Brightness is within spec. - Check Engine Module
10	Dead Pixel/Dust (Out of spec.)	<ul style="list-style-type: none"> - Ensure the projection screen without dirt - Ensure the projection lens is clean - Check Engine Module

No	Symptom	Procedure
11	Garbage Image	<ul style="list-style-type: none"> - Ensure that the signal cables and source work as well - Check Main Board - Check Engine module
12	Remote Controller/Control Panel Failed	<ul style="list-style-type: none"> - Remote Control <ul style="list-style-type: none"> a. Check Battery b. Check Remote Controller c. Check IR Sensor Board d. Check Main Board - Control Panel <ul style="list-style-type: none"> a. Check FPC b. Check Keypad c. Check Main Board
13	Function Abnormal	<ul style="list-style-type: none"> - Do "Reset (All data)" of the OSD Menu - Check Main Board - Check Engine module

3-3 Pin Assignment

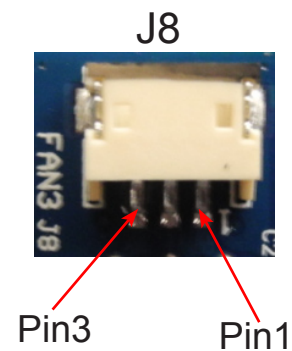
J1: 16 Pin_POWER

PIN	Description	Voltage(V)
1	PS_ON_LVPS	5V±5%
2	GND	0
3	GND	0
4	GND	0
5	+5VSBY_LVPS	5V±5%
6	+12V_LVPS	12V±5%
7	+12V_LVPS	12V±5%
8	+12V_LVPS	12V±5%
9	+12V_LVPS	12V±5%
10	+12V_LVPS	12V±5%
11	+12V_LVPS	12V±5%
12	GND	0
13	GND	0
14	GND	0
15	GND	0
16	GND	0



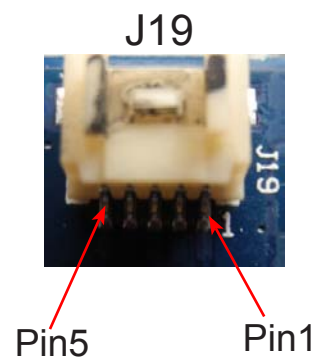
J8: Blower Fan

PIN	Description	Voltage(V)
1	FAN3_1	Pre-cooling mode :8V±5% 25 °C Full power mode :6.5V ±5% 25 °C Eco mode : 5V ±5% 40 °C Full power mode : 8V ±5% 40 °C Eco mode : 6.5V ±5% ED Mode (30% lamp power)3.5V ±5%
2	FAN3_2	High (3.3V)
3	FAN3_3	0



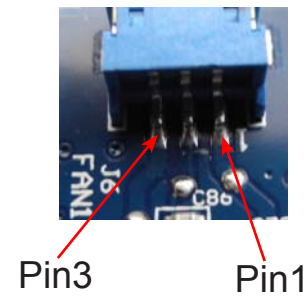
J19: Ballast

PIN	Description	Voltage(V)
1	LAMPLIT_IN	high (5V)
2	GND	0
3	P5V_LAMP_DRV	5V±5%
4	LAMPEN_OUT	high (5V)
5	LAMP_TXD31	high (5V)



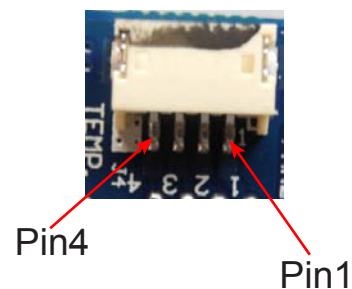
J6: System Fan

PIN	Description	Voltage(V)
1	FAN1_1	Pre-cooling mode : 12V ±5% 25°C Full power mode : 6.5V ±5% 25°C Eco mode : 5.5V ±5% 40°C Full power mode : 12V ±5% 40°C Eco mode : 11V ±5% ED Mode (30% lamp power):5V±5%
2	FAN1_2	Normal Mode:Low Error Mode:High
3	FAN1_3	0



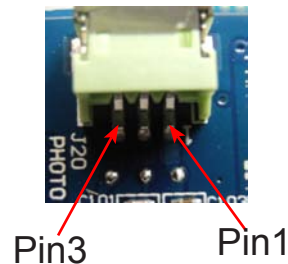
J4: Thermal sensor

PIN	Description	Voltage(V)
1	TS_BD_VCC	3.3V±5%
2	TS_BD_GND	0
3	TS_BD_SDA	high (3.3V)
4	TS_BD_SCL	high (3.3V)



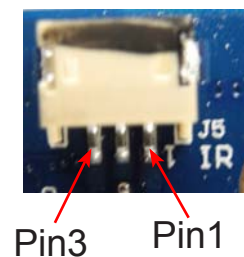
J20: Photo sensor

PIN	Description	Voltage(V)
1	PHOTO_1	5V±5%
2	PHOTO_2	0.9V±5%
3	PHOTO_3_GND	0



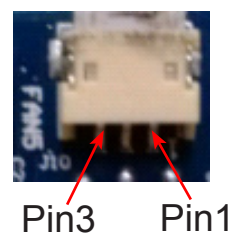
J5: Front IR

PIN	Description	Voltage(V)
1	IR_F_VCC	5V±5%
2	IR_F_GND	0
3	IR_F	high (5V)

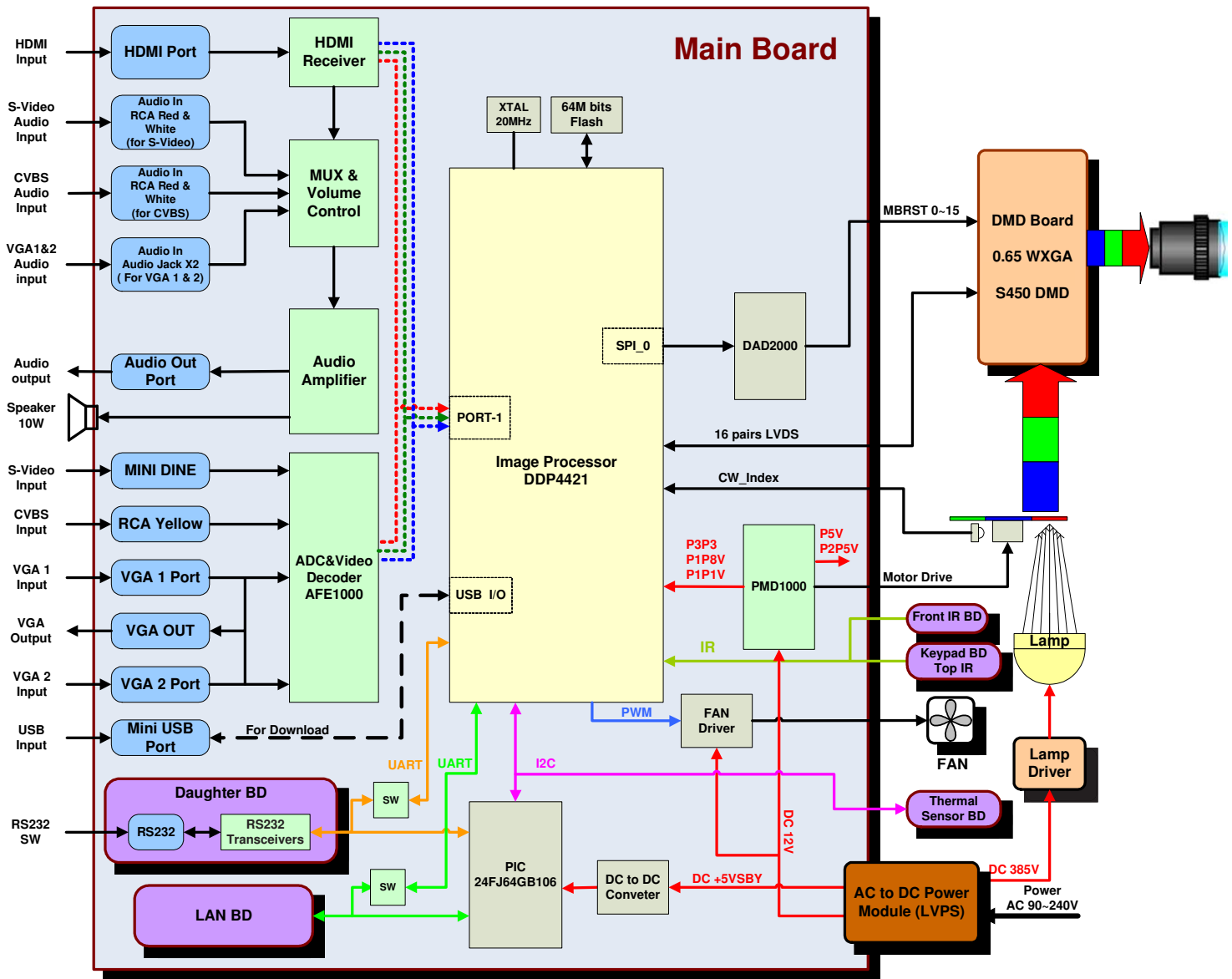


J10: DMD FAN

PIN	Description	Voltage(V)
1	FAN3_1	Pre-cooling mode :12V±5% 25 °C Full power mode :5.5V ±5% 25 °C Eco mode : 5.5V ±5% 40 °C Full power mode : 12V ±5% 40 °C Eco mode : 11V ±5% ED Mode (30% lamp power)5.5V ±5%
2	FAN3_2	Normal Mode:PWM Signal-High (3.3V) Error Mode:High (3.3V)
3	FAN3_3	0



3-4 Block Diagram



Function Test & Alignment Procedure

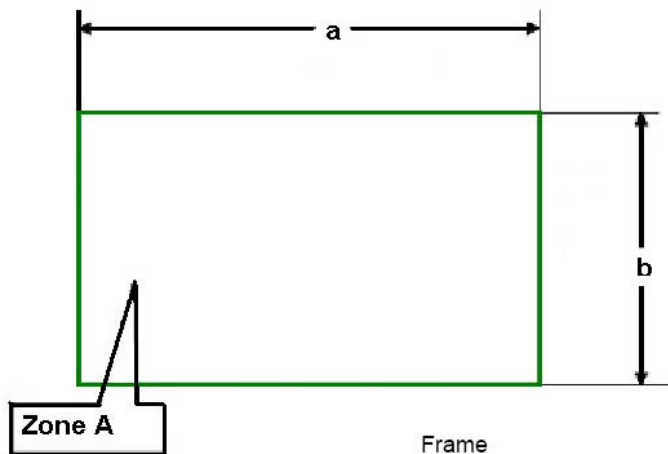
4-1 Test Equipment Needed

- PC with HDTV resolution
- DVD player with Multi-system, equipped "Composite", "S-Video"
- HDTV Source (720P,1080P,1080i)
- CL100
- Quantum Data 802BT or CHROMA2327 (Color Video Signal & Pattern Generator)

4-2 Test Condition

- Circumstance brightness: Dark room less than 2 lux.
- Product must be warmed up for 5 minutes.
- Screen size: 87.2 inches diagonal

Zone Definition



< Figure: Zone A(as green line) Definition >

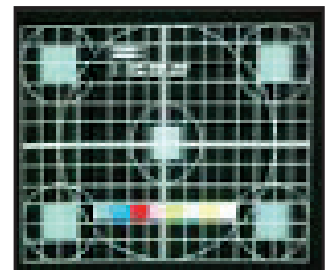
4-3 I/O Port Test

4-3-1 VGA Port Test

Note: Native resolution of test signal is 1280x800 @60HZ,

1. Frequency and tracking boundary

Procedure	<ul style="list-style-type: none">- Test equipment: video generator.- Test signal: analog 1280 x 800@60Hz- Test Pattern: General-1- Check and see if the image sharpness is well performed.- If not, re-adjust by the following steps:<ul style="list-style-type: none">(1) Select "Frequency" function to adjust the total pixel number of pixel clock in one line period.(2) Select "Tracking" function and use right or left arrow key to adjust the value to minimize video flicker.- Adjust Resync or Frequency/Tracking/H. Position/V. Position to the inner screen.
Inspection item	<ul style="list-style-type: none">- Eliminate visual wavy noise by Resync, Frequency or Tracking selection.- Check if there is noise on the screen.- Horizontal and vertical position of the video should be adjustable to the screen frame.
Criteria	<ul style="list-style-type: none">- If there is noise on the screen, the product is considered as failure product.- If there is noise on the screen, use auto or manual "frequency" function or "tracking" function to adjust the screen.- The PC mode functionally sure be workable include support format with frequency and auto detected

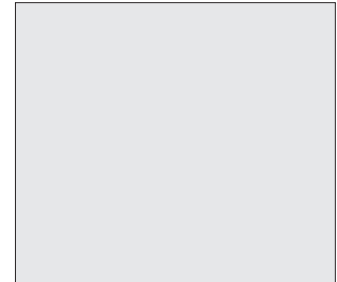


General-1

functional will be workable.

2. Bright Pixel

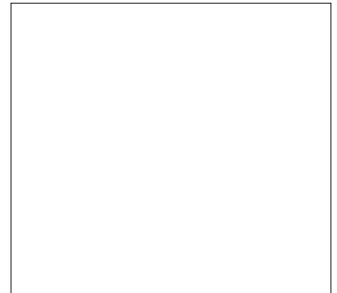
Procedure	<ul style="list-style-type: none">- Test equipment: video generator.- Test signal: analog 1280 x 800@60Hz- Test Pattern: gray 10
Inspection item	<ul style="list-style-type: none">- Bright pixel check.
Criteria	<ul style="list-style-type: none">- Please refer to Pixel specification table.



Gray 10

3. Dark Pixel

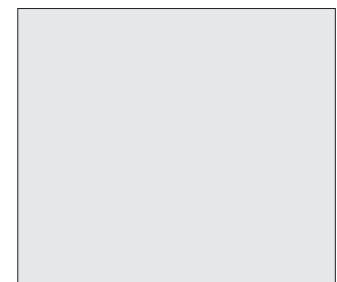
Procedure	<ul style="list-style-type: none">- Test equipment: video generator.- Test signal: analog 1280 x 800@60Hz- Test Pattern: white pattern
Inspection item	<ul style="list-style-type: none">- Dead pixels check.
Criteria	<ul style="list-style-type: none">- Please refer to Pixel specification table.



White Pattern

4. Bright Blemish

Procedure	<ul style="list-style-type: none">- Test equipment: video generator.- Test signal: analog 1280 x 800@60Hz- Test Pattern: gray 10
Inspection item	<ul style="list-style-type: none">- Bright blemish check.
Criteria	<ul style="list-style-type: none">- Please refer to Pixel specification table.



Gray 10

5. Dark Blemish

Procedure	<ul style="list-style-type: none">- Test equipment: video generator.- Test signal: analog 1280 x 800@60Hz- Test Pattern: blue 60
Inspection item	<ul style="list-style-type: none">- Dark blemish check
Criteria	<ul style="list-style-type: none">- Please refer to Pixel specification table.



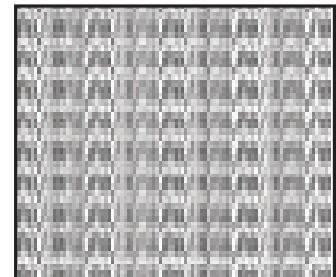
Blue 60

Pixel specification

SEQ #	TEST	SCREEN	ACCEPTANCE CRITERIA
1	Dark Blemish	Blue 60	1. ≤ 4 visible dark blemishes are allowed in the active area 2. The size: ≤ 55.4 mm @87.2
2	Bright Blemish	Gray 10	1. ≤ 4 visible light blemishes are allowed in the active area 2. The size: ≤ 55.4 mm @87.2
3	Reset Boundary Artifact	Gray 30	1. No reset boundary artifacts allowed
4	Eyecatchers Border Artifacts	Black	1. Eyecatcher and border artifacts are allowed
5	Projected Images	1. Any screen 2. Gray 10 3. Any screen 4. Gray 10 5. White 6. Any screen 7. Black or White	1. No adjacent pixels 2. No bright pixels in active area 3. No unstable pixels in active area 4. ≤ 1 bright pixel in the POM 5. ≤ 6 dark pixels in the active area 6. No DMD window aperture shadowing on the active area 7. Blemishes are allowed

6. Focus Test

- Procedure
- Test equipment: video generator.
 - Test signal: analog 1280 x 800@60Hz
 - Test Pattern: full screen
- Inspection item
- Focus check
- Criteria
- From screen 655mm via visual to check focus, look at the entire screen, focus shall be clear, crisp, and sharp over the entire surface of the display pattern. (Blur word on one of the corner after adjustment is acceptable. However, the word should at least be recognizable.)



Full screen

7. Color Performance

- Procedure
- Test equipment: video generator.
 - Test signal: 1024 x 768@60Hz, 1080i
 - Test Pattern: 64 gray RGBW
 - * Please Use 1024 x 768@60Hz signal & 64 gray RGBW pattern to do color performance test.
- Color can not discolor to purple and blue.



64 gray RGBW

- Inspection item
- Check if each color level is well-functioned.
 - Color saturation
- Criteria
- Screen appears normal. It should not have any abnormal condition, such as lines appear on the screen and so on.
 - Color appears normal.
 - It is unacceptable to have few lines flashing.
 - RGBW should all appear normal on the screen and sort from R -G-B-W.
 - Color levels should be sufficient and normal.
(The unidentified color levels on both left and right sides should not over 8 color levels.)
 - Gray level should not have abnormal color or heavy lines.
 - If color appears abnormal, please get into service mode to do color wheel index adjustment.

8. Optical Performance

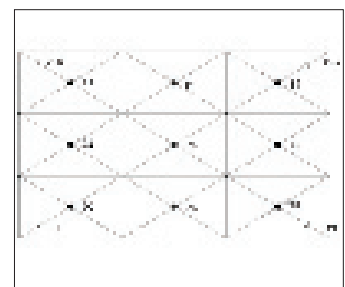
Inspection Condition
<ul style="list-style-type: none">- Environment luminance: 2 Lux- Product must be warmed up for 5 minutes- Distances from the screen: 200mm~250 mm- Screen Size: 87.2 inches diagonal

1). Test equipment

Procedure	<ul style="list-style-type: none">- Connect VGA IN port of Projector with VGA port of Chroma by VGA cable, press “Menu” button, get into OSD mode, the settings are as below:- “Display mode” is “Bright”, “Lamp Mode” is “Standard”, the “Format” is “16:10”,
-----------	---

2). Brightness

Procedure	<ul style="list-style-type: none">- Full white pattern- Use CL100 to measure brightness values of P1~P9.- Follow the brightness formula to calculate brightness values. <p>☀ Brightness Formula</p> <p>Avg. (P1~P9)*2.20m²</p>
Criteria	<ul style="list-style-type: none">• 1370 ANSI lumen



Full white pattern

3). Full On/Full Off Contrast

Procedure

- Full white pattern & Full black pattern
- Use C100 to measure brightness values of full white pattern P5 & full black pattern B5 (see image: full white)
- Follow Contrast formula to calculate contrast values.

☀ Contrast Formula

$P5/B5$

Note: P5 = Lux of center in full white pattern

B5 = Lux of center in full black pattern



Full black pattern

Criteria

- 1600:1

4). Uniformity

Procedure

- Full white pattern
- Use CL100 to measure brightness values of P1~P9 (see image: full white).
- Follow the Uniformity formula to calculate average values.

☀ Uniformity Formula

$$\text{JBMA Uniformity} = \frac{\text{Avg. (P1, P3, P7, P9)}}{P5} \times 100\%$$

Criteria

- 65%

4-3-2 Video Port Test

Procedure	<ul style="list-style-type: none">- Test equipment: DVD Player- Test signal: video
Inspection item	<ul style="list-style-type: none">- Video performance test
Inspection Distance	<ul style="list-style-type: none">- 200mm~250 mm
Criteria	<ul style="list-style-type: none">- Check any abnormal color, line distortion or any noise on the screen.- Check the sound from speaker.

4-3-3 S-Video Port Test

Procedure	<ul style="list-style-type: none">- Test equipment: DVD player- Test signal: S-Video
Inspection item	<ul style="list-style-type: none">- Video performance test
Inspection Distance	<ul style="list-style-type: none">- 200mm~250 mm
Criteria	<ul style="list-style-type: none">- Check any abnormal color, line distortion or any noise on the screen.- Check the sound from speaker.

4-3-4 HDMI Port Test

Procedure	<ul style="list-style-type: none">- Test equipment: DVD Player with HDMI output.- Test signal: 720p, 1080p, 1080i
Inspection item	<ul style="list-style-type: none">- HDMI performance test.
Inspection Distance	<ul style="list-style-type: none">- 200mm~250 mm
Criteria	<ul style="list-style-type: none">- Ensure the image is well performed and the color can not discolor.- Check whether “mute” is normal.

4-3-5 3D Test

Procedure	<ul style="list-style-type: none">- Test equipment: Blue-Ray DVD player & 3D format CD- Test signal: 1080i @60Hz
Inspection item	<ul style="list-style-type: none">- 3D test
Inspection Distance	<ul style="list-style-type: none">- 3~5 M
Criteria	<ul style="list-style-type: none">- The image should not appear noise, flicker, shadow, shocking, abnormal color.

4-3-6 Audio Test

Procedure	<ul style="list-style-type: none">- Test equipment: DVD Player.- Test signal: CVBS
Inspection item	<ul style="list-style-type: none">- Audio performance test
Inspection Distance	<ul style="list-style-type: none">- 200mm~250 mm
Criteria	<ul style="list-style-type: none">- Check the sound from speaker- Plug Audio cable into Audio in port, check whether "Volume" is normal.- Plug Audio cable into Audio Out port, check whether the outboard speaker's "Volume" is normal.- Adjust the volume to "0→ 32" by using the remote controller.- Check the sound from speaker- Check whether the "mute" is normal.



Motion video

4-4 Run In Test

- Temperature: 15°C~35°C
- Circumstance brightness: Normal environment
- Screen size: No concern
- Display mode: ECO mode

After repairing each unit, a Run-in test is necessary (refer to the below table).

Symptom	Run-in Time
Normal repair	2 hours
NFF	4 hours
Auto shutdown	6 hours

- Get into Burn-In Mode

** Cycle setting is based on the defect symptoms. ie: If it is NFF, the run-in time is 4 hours. You have to set the lamp on for 50 min. and lamp off for 10 min for 4 cycles.*

Press power > Left > Right > Menu buttons sequentially to get into service mode	
Choose Burn-In Test > enter	
Lamp On	Press right key to adjust the time (50)
Lamp Off	Press right key to adjust the time (10)
Set burn in cycle	Press right key to adjust the cycle
After setting up the time, choose "Get into Burn-In Mode" and press enter	

4-5 Test Inspection Procedure

1. Check Points

Check item	Check point
Firmware version	All firmware version must be the latest version
TB implementation	Related TB must be implement
Cosmetic	Cosmetic can not be broken
Logo	Missing logo, missing prints and blurry prints are unacceptable
Lamp cover	It should be locked in the correct place.
Zoom in/out	The function should work smoothly
Keypad	All keypad buttons must operate smoothly

2. OSD Reset

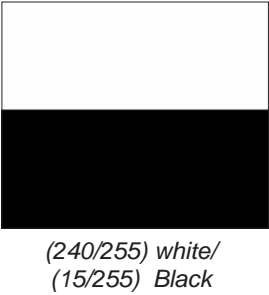
After final QC step, we have to erase all saved change again and restore the OSD default setting. The following actions will allow you to erase all end-users' settings and restore the default setting:

- (1) Please enter OSD menu.
- (2) Choose "Setting" and execute "Reset" function

4-6 ADC Calibration

Note: After replacing main board or upgrading firmware, the ADC calibration should be done.

Procedure	<ul style="list-style-type: none">- Test equipment: video generator(1) Test signal: 1280 x 800@60Hz(2) Test Pattern: White (up) Black (down)- Note:<ul style="list-style-type: none">(1) Calibration pattern should be in full screen mode.(2) Please get into service mode,and choose “ADC Calibration”.
Inspection item	<ul style="list-style-type: none">- Check if there is lines or noise on the screen.- Horizontal and vertical position of the video should be adjustable to the screen frame.
Criteria	<ul style="list-style-type: none">- If there is noise on the screen, the product is considered as failure product.- The screen appears normal, it shouldn't appear any abnormal condition, such as lines and so on.- Check if the projection is same as monitor diplayed.



4-7 Waveform download

After replacing Lamp driver, the “waveform download” is needed .

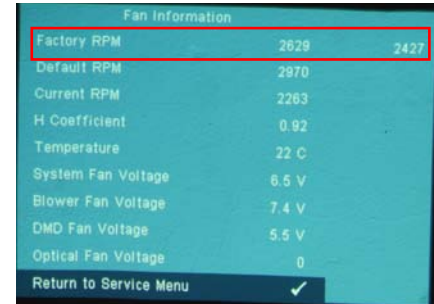
1. Hold on “Power” and “Menu“ button and plug in the power cord.
2. The “Power LED” will flash red about 2s, then release the “Power” and “Menu“ button.
3. Press “Power” button when the “Power LED” flash red and blue alternately.
4. The “Power LED” will light blue about 5s, then it will light red(*Note: If the power LED solid blue or the lamp LED light, please repeat the step 1-3*).
5. The waveform download is finished.
6. Pull out the power cord.



4-8 Fan Calibration

After replacing main board or the F-type Fan and upgrading the firmware, please follow steps as below:

1. Hold on “Menu” button and plug in the power cord.
2. The “Power LED” will flash blue about 2s and release the “Menu” button at the same time.
3. The “Power LED” light blue, and the projector will power on. After the logo disappeared, the message “Fan Information” will be shown on the screen (as picture “A” shown).
4. After 70 seconds, Please check value.



Factory RPM	2629	2427
Default RPM	2970	
Current RPM	2263	
H. Coefficient	0.92	
Temperature	22 C	
System Fan Voltage	6.5 V	
Blower Fan Voltage	7.4 V	
DMD Fan Voltage	5.5 V	
Optical Fan Voltage	0	
Return to Service Menu		✓

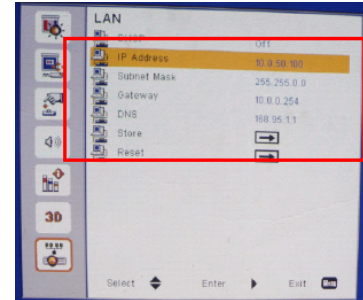
Note:

- If the Factory Fan RPM Value doesn't meet the above range, please repeat the step again.
- Make sure the value of “Factory RPM” is 2080~3860.

4-9 Network Function Test

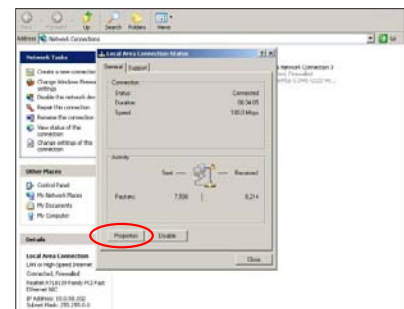
1. Projector Setting

- (1) Power on projector.
- (2) Press "Menu" to get into OSD Mode.
- (3) Select "LAN"
- (4) Record projector IP which you set in last step.
- (5) Connect projector with PC by LAN cable.

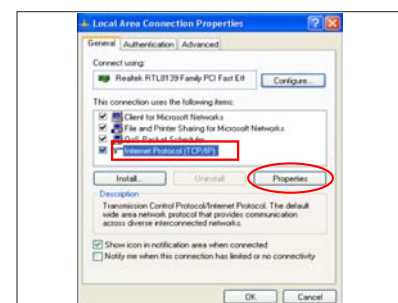


2. PC Setting

- (1). Double click the "Local area connection".
 - Click "Properties".



- (2). Select "Internet protocol (TCP/IP)".
 - Click "Properties".



(3). Modify the IP address to 192.168.10.101

(as red square).

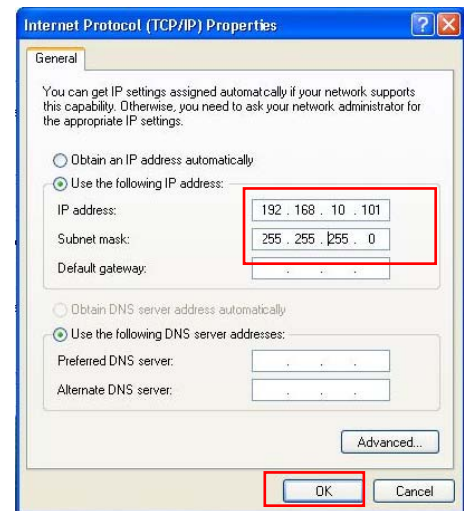
Note: The HOST ID (192.168.10.XXX) of PC ,

IP address must be different from the

projector IP address recorded down

- Click "OK".

(4). Click "Close" to exit the setting screen.



3. Test Procedure

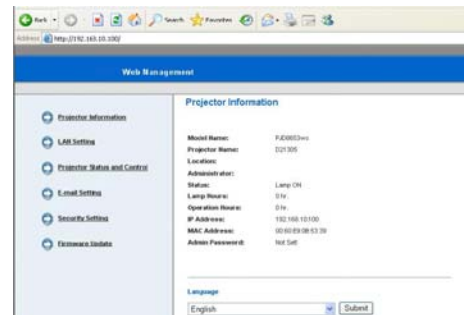
(1). Execute "Internet Explorer".



(2). Visit the IP address: "http://192.168.10.100".

- Projector information will be shown on the screen.

- Please check whether web management, FW version and model name are right.



Firmware Upgrade

Section 1: Scalar Firmware Upgrade

5-1-1 Equipment Needed

Software: (DDP 442X-USB)

- DDP 442X Firmware Downloader.exe
- Firmware (*.img)
- NET Framework 4.0

Hardware:

- Projector
- Power Cord
- Mini USB Cable: (USB Cable mini USB to USB (A))
- PC or Laptop



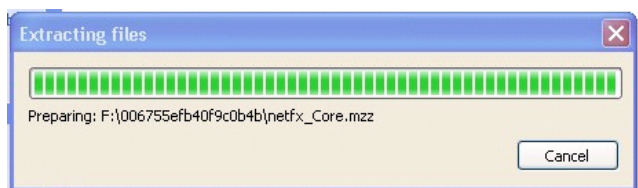
5-1-2 NET Framework 4.0 Setup Procedure

1. Choose "dotNetFX40_Full_X86_X64 Microsoft.NET Framework 4.0 Microsoft Corporation" Program.

2. Click "Run".

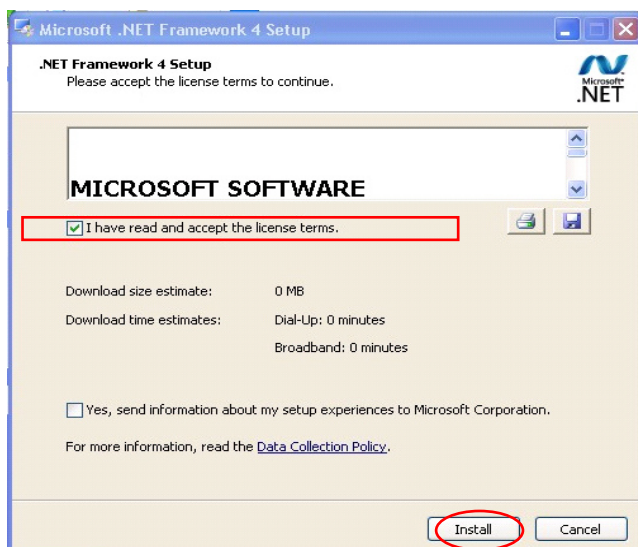


3.Preparing

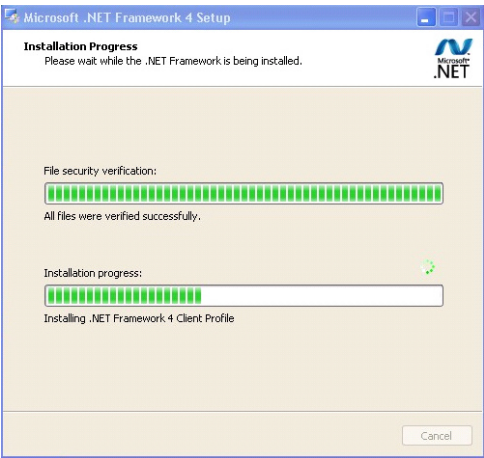


4. Read "License terms".

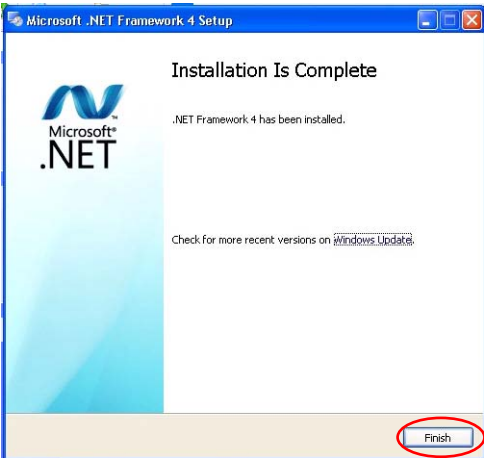
- Choose "I have read and accept the license terms".
- Click "Install".



5.Installing



6. Click "Finish".



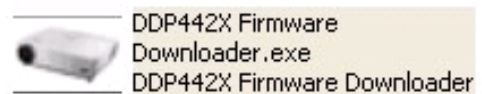
5-1-3 Firmware Upgrade

Procedure

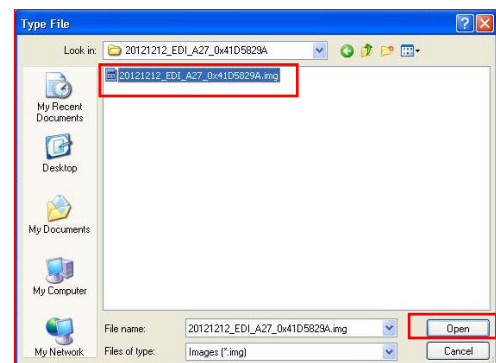
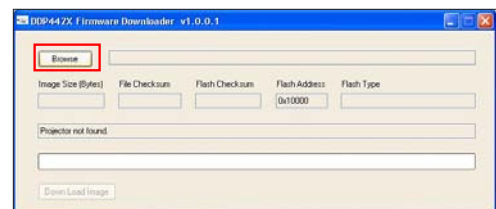
1. Download the firmware from website, unzip the firmware file , then unzip the "DDP442X Firmware Downloader_1_0_0_1.zip" file.



2. Execute "DDP442X Firmware Downloader.exe"



3. Click "Browse" to choose the firmware ,then click "Open".



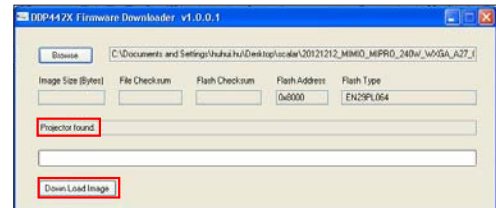
4. Connect projector and computer by USB cable (USB A to mini USB B).



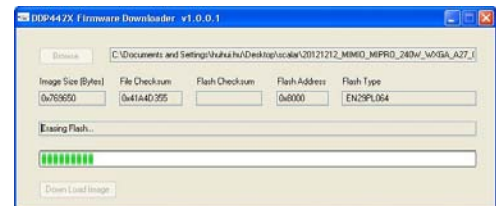
5. Get into firmware download mode.
 - Hold on "MENU" button and plug in the power cord.
 - Release the "MENU" button until all LEDs solid on.



6. The "Projector found" will appear, then click "Down Load Image".



7. The firmware will be upgraded automatically .



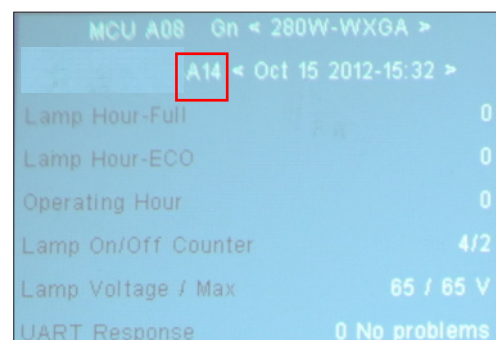
8. Finish.

"Download Complete" will appear, click "OK".



9. Check the Scalar firmware version.

- Unplug the power cord and USB cable, then re-plug the power cord to power on the projector .
- Press "power->left->right->menu" sequentially to get into service mode to check Scalar firmware version.



Section 2: PIC Firmware Upgrade Procedure

5-2-1 Equipment Needed

Software:

- RS232.EXE
- xxx_xxx_xxx.hex

Hardware:

- Projector
- Power Cord
- RS232 Cable : (RS-232 9 Pin Cable (pin to pin, F-F))
- PC or Laptop



5-2-2 MCU Firmware Upgrade Procedure

1. Set up

- Connect projector with RS232 cable to PC.
- Hold on "MENU" button and plug in the power cord.
- Release the "MENU" button until all LEDs solid on.



2. , then
unzip the firmware file, and unzip the
"RS232.zip".



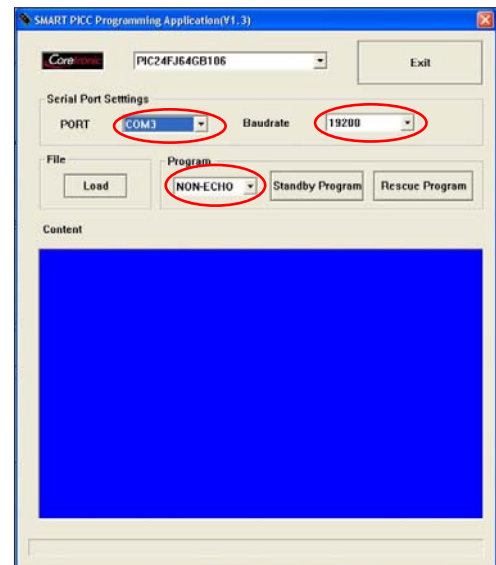
3. Execute "RS232.exe" program.



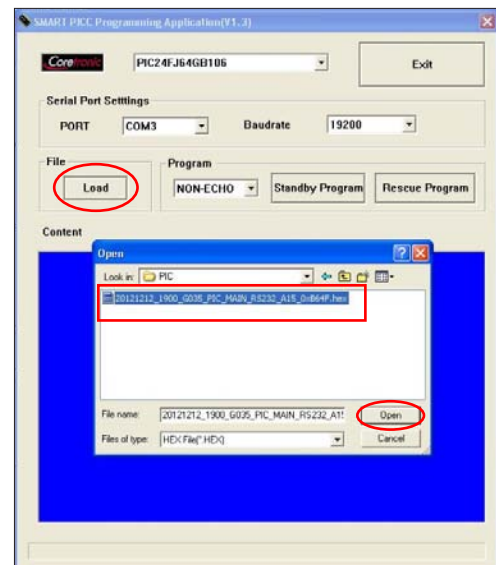
4. Program settings

- Make sure the settings are as below:

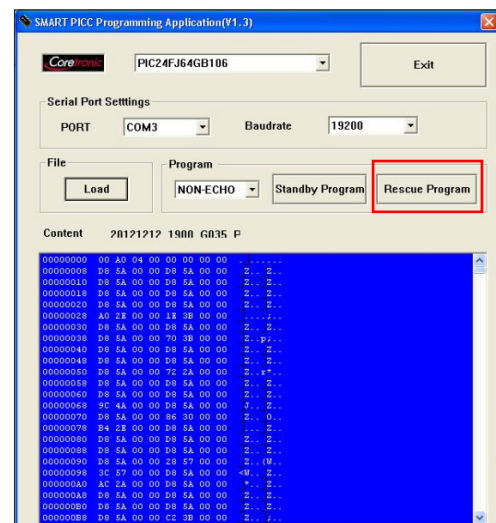
- 1) PORT: Check the COM port is “COM 3”
(Select the COM port which you are using).
- 2) Baudrate : Please set to 19200
- 3) Program : Please set to “NON-ECHO”.



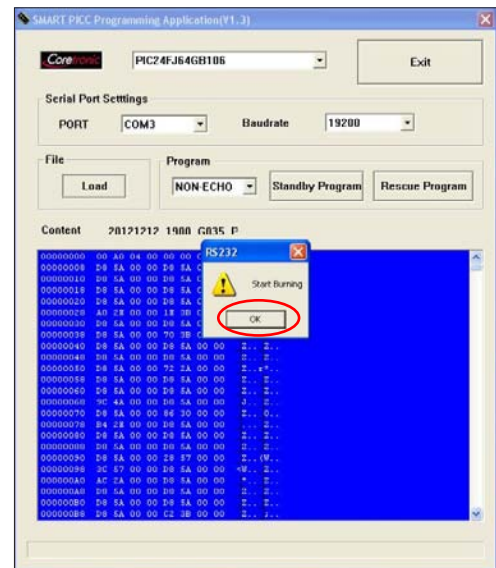
5. Click the “Load” button to choose the firmware file.



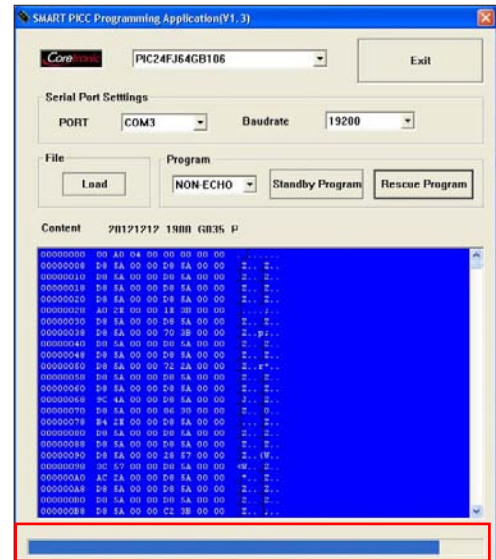
6. Click the “Rescue Program” button.



7. Click the “OK” to start firmware upgrading.

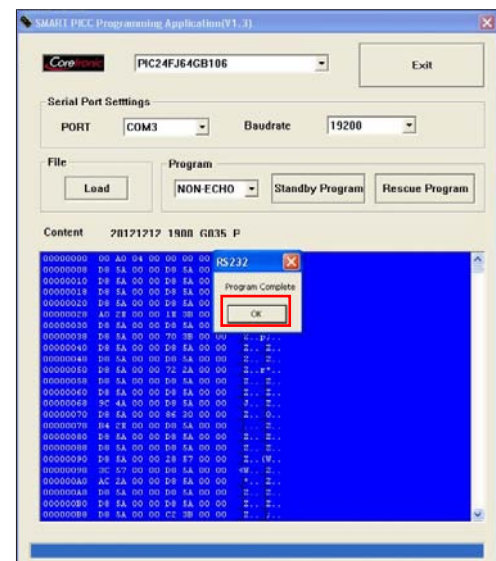


8. The firmware will be upgraded automatically.



9. Finish.

- Click "OK".



10. Check the MCU firmware version.

- Unplug the power cord and USB cable, then re-plug the power cord to power on the projector .
- Press "power->left->right->menu" sequentially to get into service mode to check MCU firmware version.

MCU	A08	On < 280W-WXGA >
	A14	< Oct 15 2012-15:32 >
Lamp Hour-Full		0
Lamp Hour-ECO		0
Operating Hour		0
Lamp On/Off Counter		4/2
Lamp Voltage / Max		65 / 65 V
UART Response		0 No problems

Section 3: Network Firmware Upgrade Procedure

5-3-1 Equipment Needed

Software:

- xxx_xxx_xxx.bin (*.bin)

Hardware:

- Projector
- Power Cord
- LAN Cable
- PC or Laptop

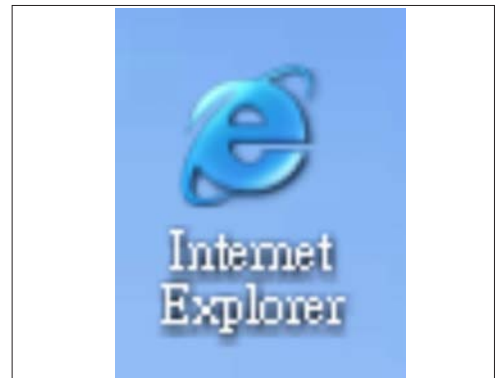


5-3-2 PC Hardware Link

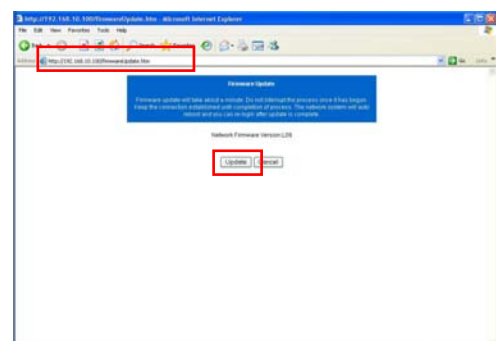
1. Execute Network Settings, please refer to 4-7 details of Chapter 4.
2. Enter into OSD menu.,then select "Setting"-->LAN/Wireless(Standby),choose "Off" to "On",then turn off the projector.



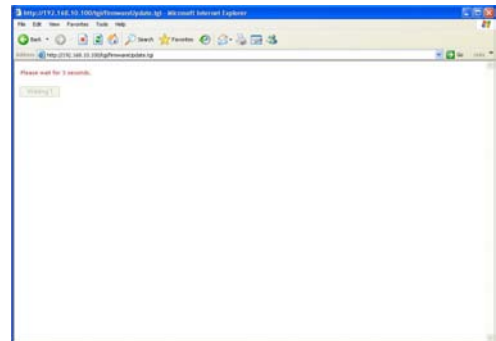
3. Double click "Internet Explorer".



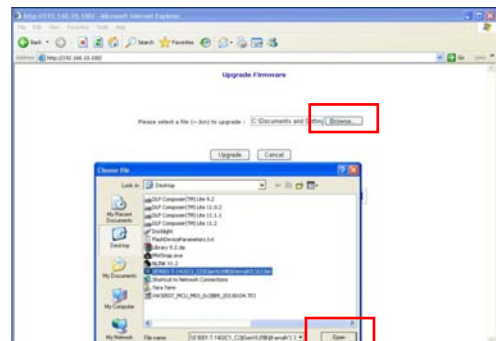
4. - Visit "<http://192.168.10.100/firmwareUpdate.htm>" to get into web to upgrade network firmware.
- Click "Update"



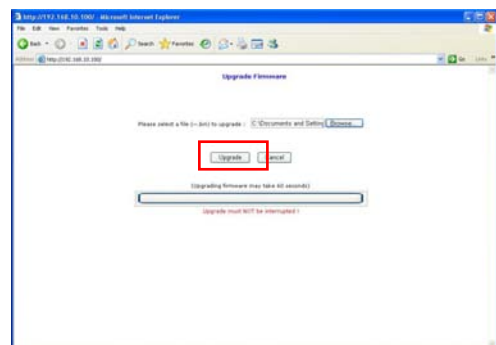
5. Please wait for 3 seconds.



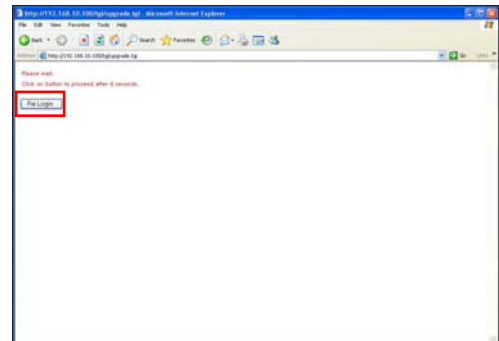
6. - Click “Browse” button to select the Network FW file (*.bin) which you saved.
- Click “Open”.



7. Click the “Update” button.

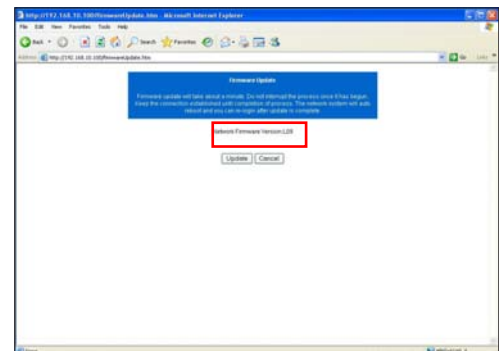


8. Click the “Re login” button.



9. Firmware upgrade procedure complete.

Visit "<http://192.168.10.100/firmwareUpdate.htm>" to check the version.



EDID Upgrade

6-1 EDID Introduction

Extended Display Identification Data is a VESA standard data format that contains basic information about a display device and its capabilities, including vendor information, maximum image size, color characteristics, factory pre-set timings, frequency range limits, and character strings for the monitor name and serial number.

The information is stored in the display and is used to communicate with the system through a Display Data Channel (DDC), which sits between the display device and the PC graphics adapter. The system uses this information for configuration purposes, so the monitor and system can work together.

Note: If a display device has digital input ports, like DVI or HDMI, but without EDID in its main board, the display device will show no image while the input source is digital signal.

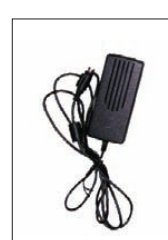
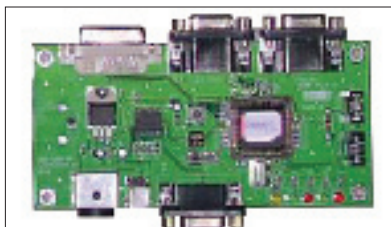
6-2 Equipment Needed

Software

- EDID Program (Generic V0.91)
- EDID File (*.ini)

Hardware

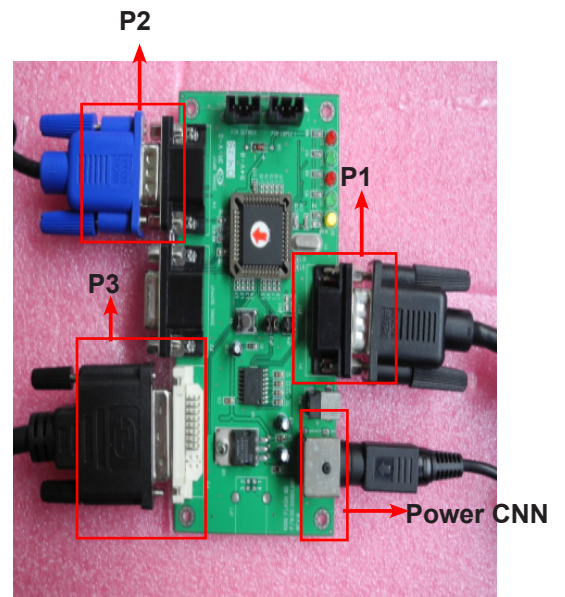
- Projector
- Generic Fixture for EDID Key-in
- Power Cord
- RS-232 9 Pin Cable (pin to pin, F-M)
- Monitor
- PC
- VGA cable
- Power adapter and power cord for fixture
- HDMI to DVI Cable



6-3 Setup Procedure

1. Connect all ports

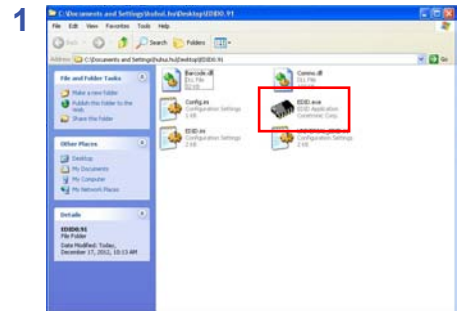
- (1) Connect P1 of Fixture with COM Port of PC/Laptop by RS232 Cable.
- (2) Connect P2 of Fixture with VGA port of Projector by VGA Cable.
- (3) Connect P3 of Fixture with DVI port ,and connect HDMI 1 port of Projector.
- (4) Plug Power Adapter to Power CNN.
- (5) Plug power cord to unit.



6-4 EDID Key-In Procedure

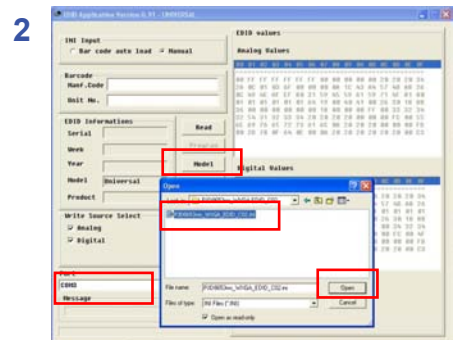
1. Execute EDID Program

- (1) Click on "EDID" to execute EDID program.



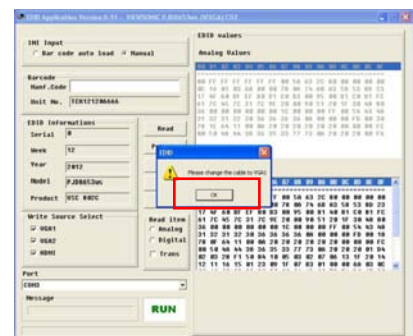
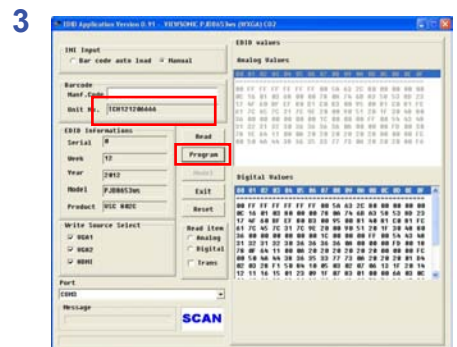
2. Process

- (1) Check the COM port is COM3"
(Select the COM port which you are using).
- (2) Click the Model button.
- (3) Choose the source file "*.ini" and then open it.



3. Process

- (1) Key in the serial number into the barcode blank space.
- (2) Click "Program" button.
- (3) - "Please change the cable to VGA1" will be shown on the screen.
- Please press "OK" button.

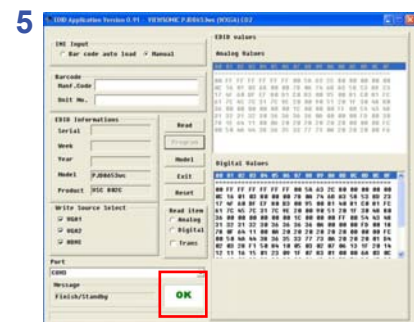


4. - "Please change the cable to VGA 2" will be shown on the screen.
- Change the VGA Cable to VGA 2 port.
- Please press "OK" button.
- "Please change the cable to HDMI " will be shown on the screen.
- Please press "OK" button.



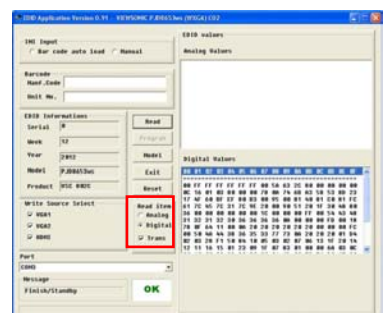
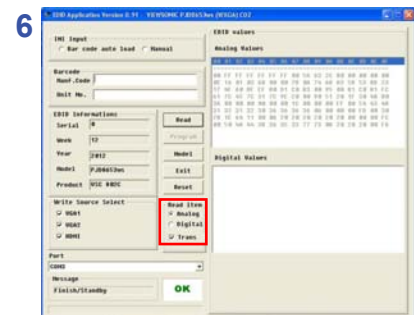
5. Finish

- (1) "OK" will be shown on the screen.



6. Read EDID information

- (1) In the Read item, select "Analog" and "Trans".
- (2) Please press "Read" button.
- (3) In the Read item, select "Digital" and "Trans".
- (4) Please press "Read" button.



7. EDID Informations will show the result.

6-5 Universal password

Note: This unique password is a back door of Administrator Password which will be accepted by projector anytime no matter what the Administrator Password is.

1. The process of get universal password

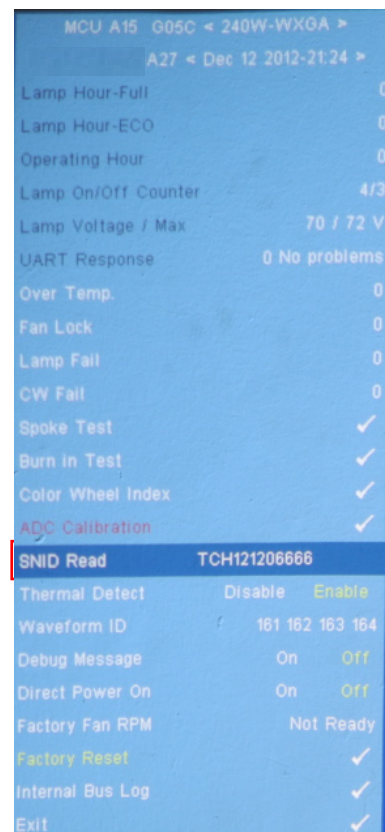
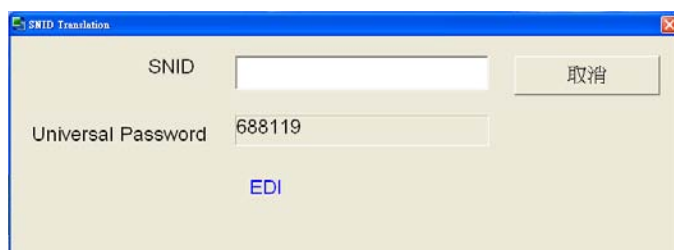
(1) Click the "EDI Password Translation".



(2) Input SNID number. (The SNID number must be the serial number of EDID upgrade or enter into service mode, read the SNID number after upgrade FW.)



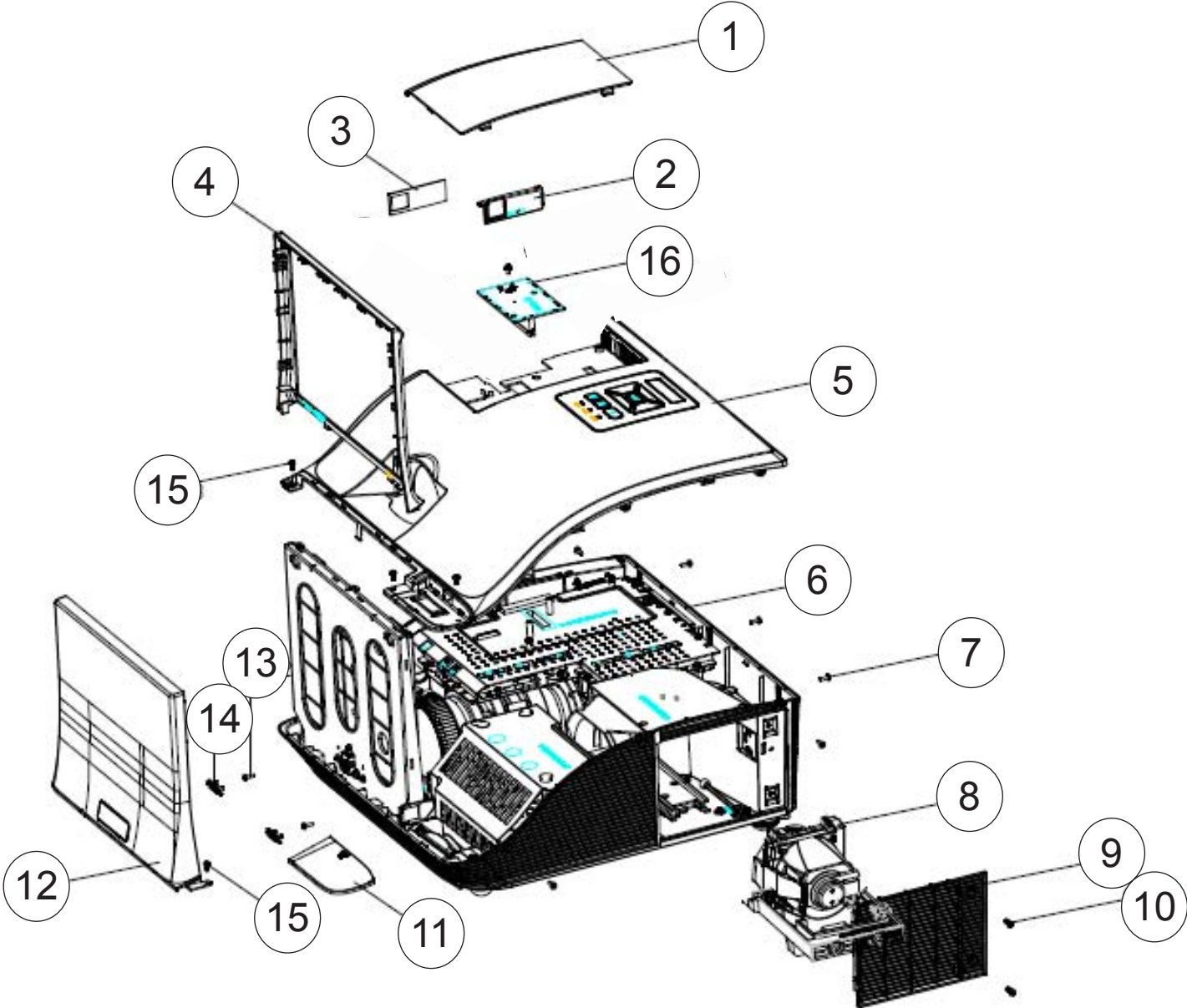
(3) Then the Universal Password will appear.



Appendix A (Exploded Image)

The chapter is only designed to show exploded image of the projector. For updated part numbers, please refer to RSPL report.

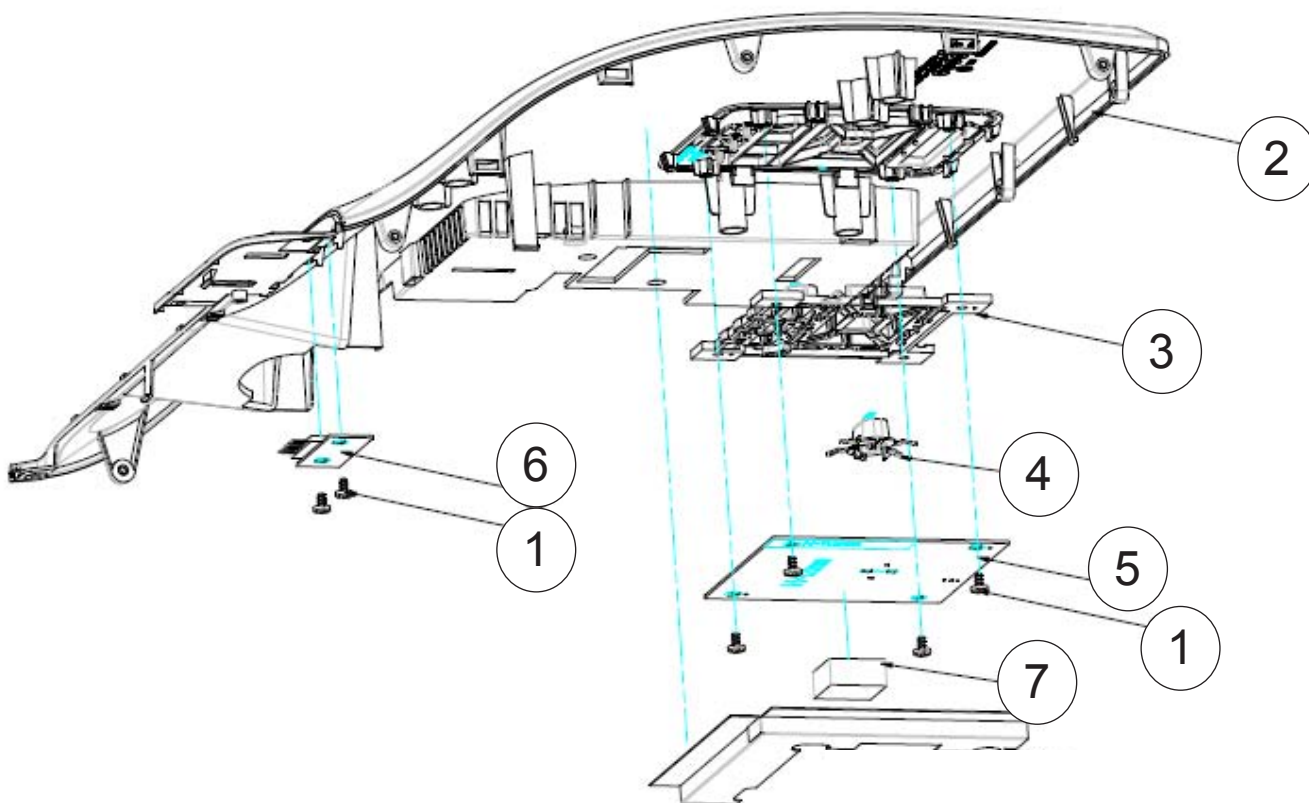
Dummy Casing:



Dummy Casing

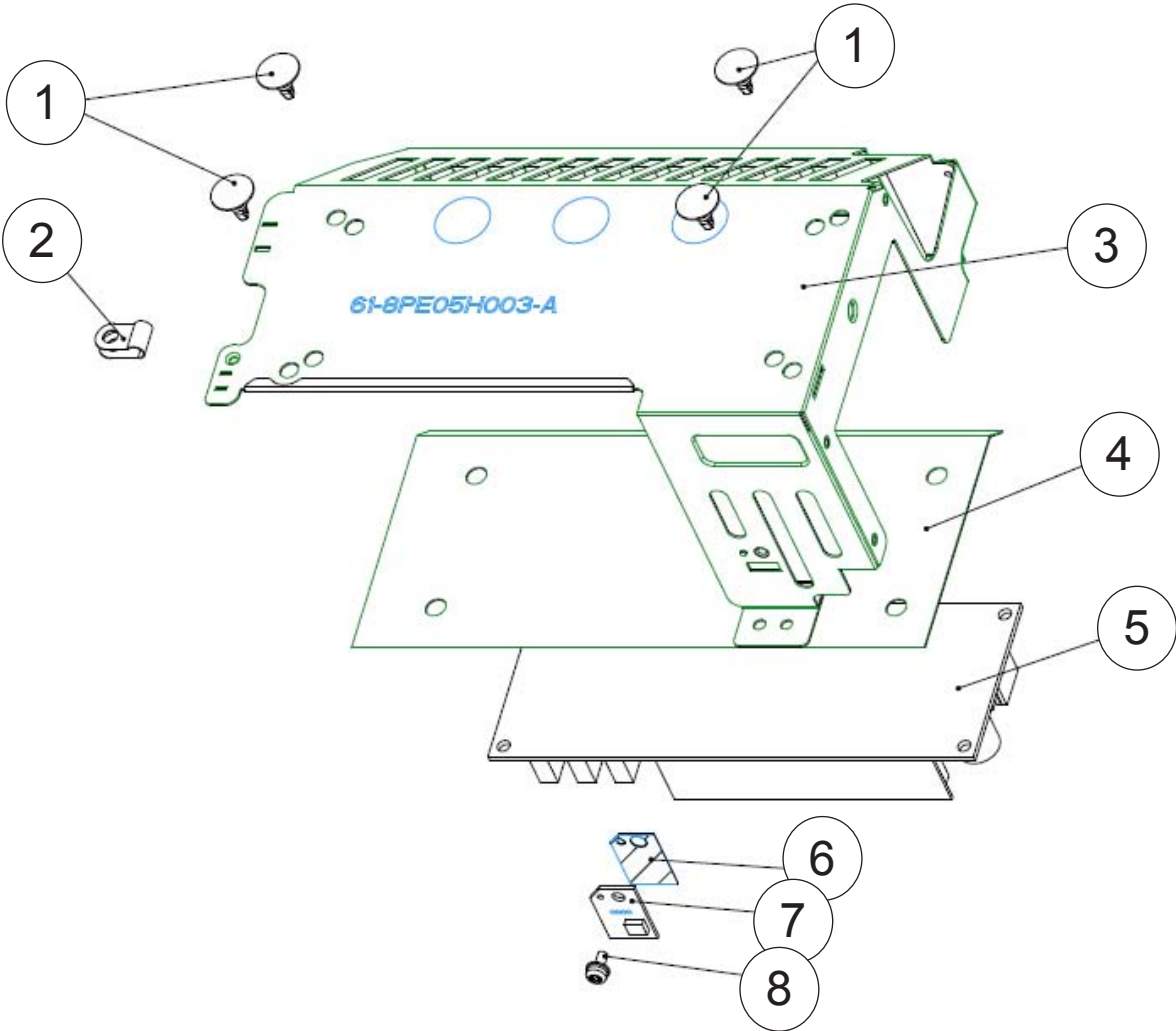
Item	EDI PN	Description	Parts Supply
1	13220657	LAN Module Cover(GP) / 51.8PE05H021,EIKI WSS3100	V
2		CAP WIRELESS IO BLANK MN3600 G3.5	
3		WIRELESS LABEL BLANK PC-835 G3.5	
4		COVER MIRROR REAR MN3600 WHITE G3.5	V
5		COVER COSMETIC MODULE	V
6		ASSY I/O COVER MODULE 8PE (SERVICE)	V
7		SCREW PAN MECH M3*6 NYLOK, GREEN	
8	13080021	Lamp (GP) / SP.8UR01GC01,ORSAM 280W,Holder	V
9		COVER LAMP MN3600 G3.5	V
10		LOCK SCREW PAN MECH M3*8.5-3.5 Ni	
11		CORNER COVER MN3600 G3.5	
12		COVER MIRROR FRONT MODULE CX7720 WH9G129	V
13		SCREW PAN MECH W/SF M3*6 BLACK	
14		BOTTOM CAP MN3600 G3.5	
15		SCREW PAN TAP M3*6 Ni	
16	63730012	PCBA (GP) / 80.8PE08G002,LAN BOARD,f MIPRO	V

ASSY TOP COVER MODULE



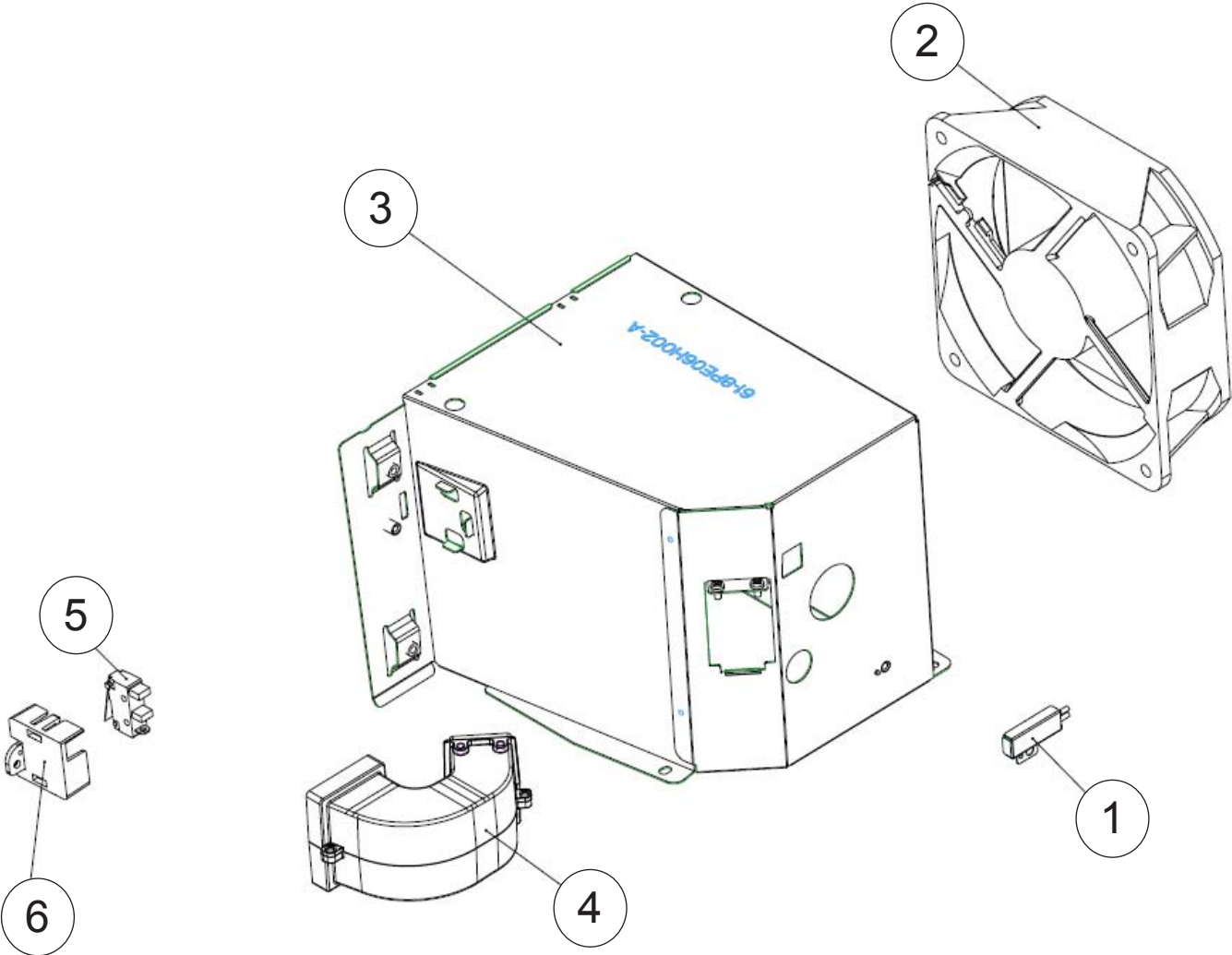
Item	EDI PN	Description	Parts Supply
1		SCREW PAN TAP M3*6 Ni	
2		COVER COSMETIC MODULE	V
3		KEYPAD MN3600 G3.5	
4		KEYPAD MENU MN3600 G3.5	
5	63730009	PCBA (GP) / 80.8PE03G001,KEYPAD FOR G035	V
6		PCBA IR CAMERA TRANSFORM BOARD 8PE FR4 FOR G035 PROJECTOR	
7		GASKET FOR MAIN BOARD EMI	

ASSY LAMP DRIVER MODULE



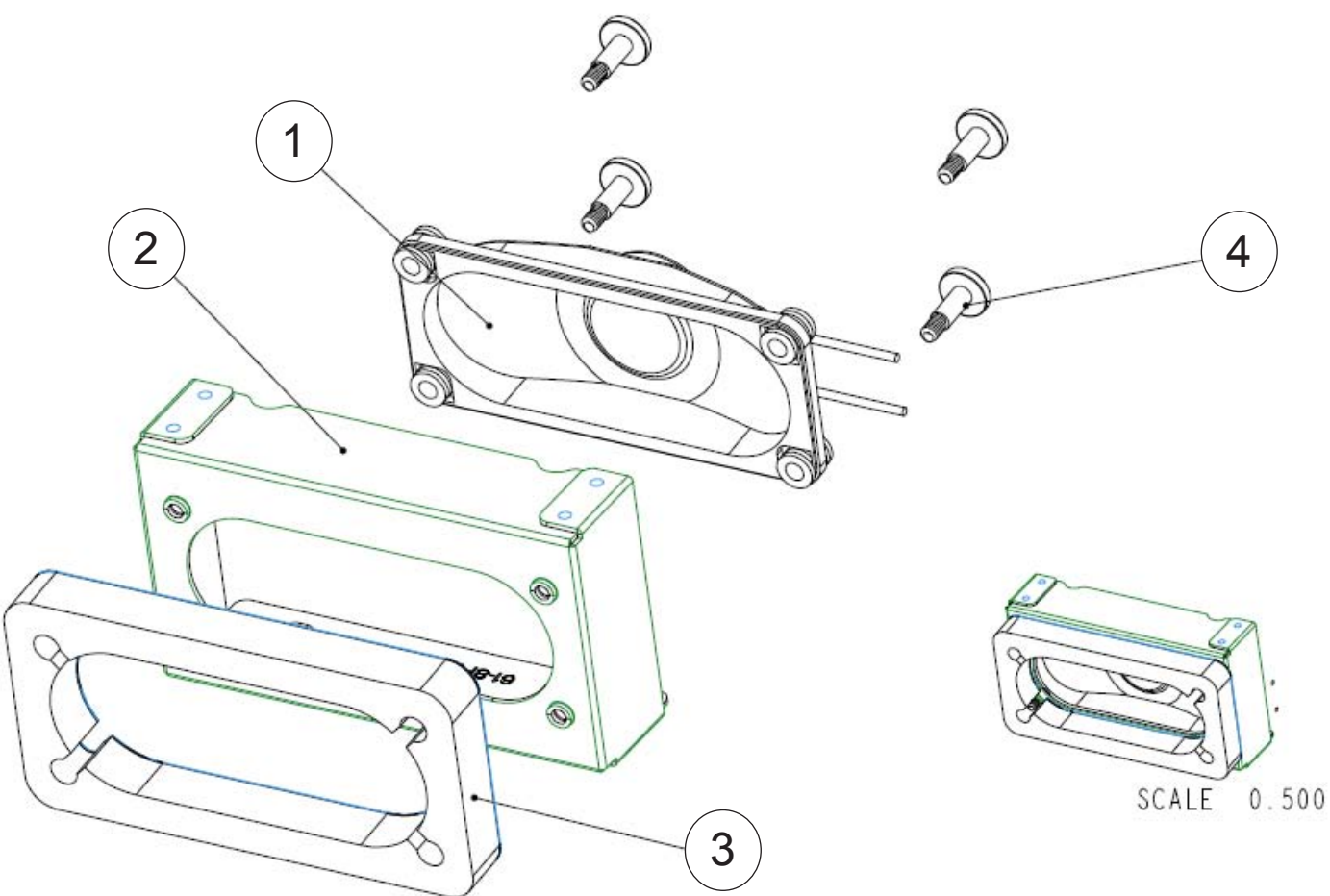
Item	EDI PN	Description	Parts Supply
1		SPACER FOR LAMP DRIVER 240W G3.5	
2		GROUNDING CABLE CLAMP FN-008 "PINGOOD	
3		BRACKET LAMP DRIVER MIPRO	
4		LAMP DRIVER MYLAR FORMEX GK-17 0.43t G3.5	
5	63670007	Ballast (GP) / 75.8SZ01G001,Lamp Driver,EU30	V
6		THERMAL SENSOR MYLAR G3.5	
7	63730010	PCBA (GP) / 80.8PE09G001,THERMAL SENSOR	V
8		SCREW PAN MECH W/SF M3*6 BLACK	

ASSY SYS FAN MODULE



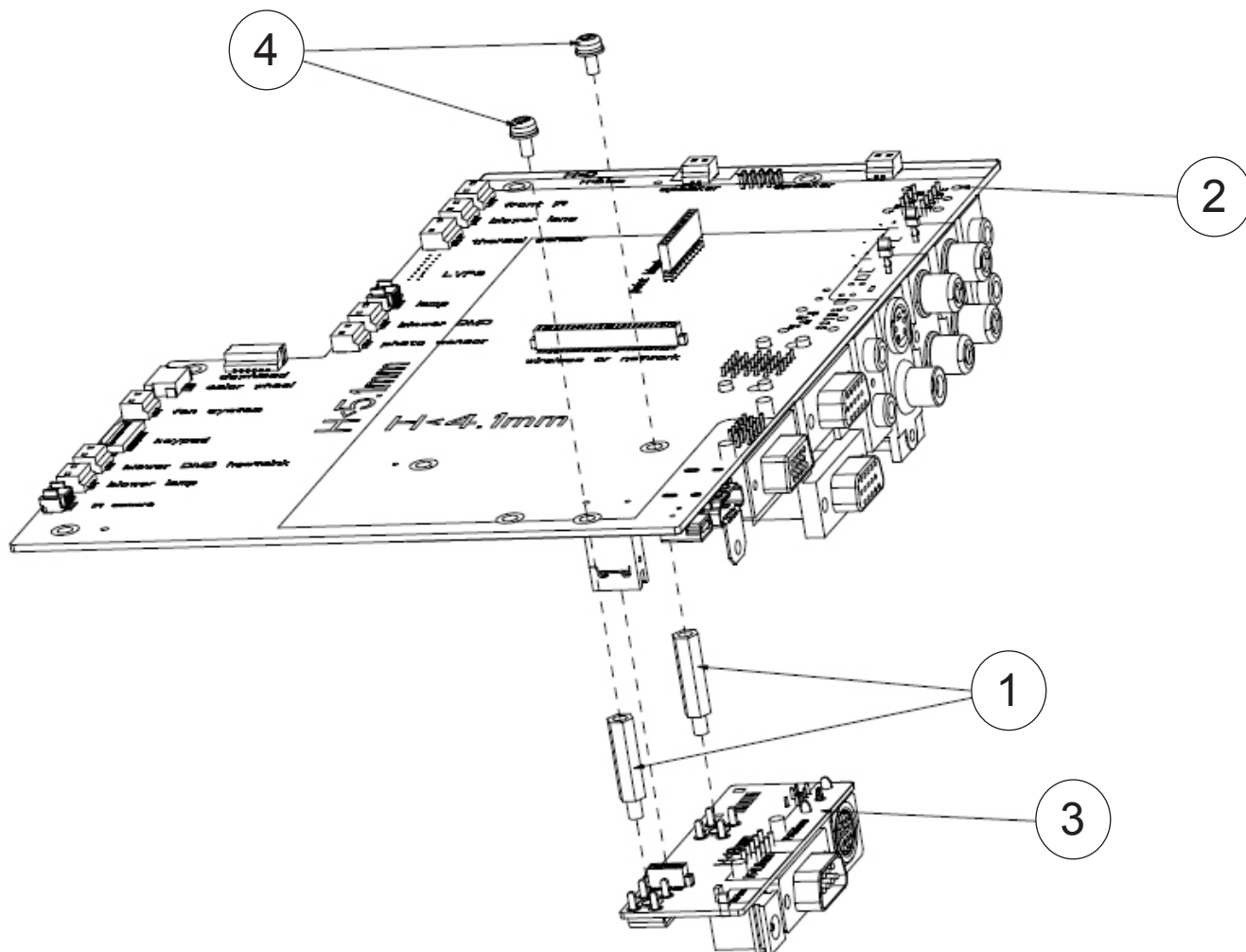
Item	EDI PN	Description	Parts Supply
1	63630003	Thermal Switch (GP) / 43.8EM17G001,W/I bracket	V
2	63260008	FAN(GP) / 49.8PE01G011,SUNON,105*32mm	V
3		FAN SYSTEM BRACKET MIPRO	
4		BLOWER DUCT ASS'Y G3.5	
5		BUY ASSY INTERLOCK SWITCH 2P #26 320mm G3.5	V
6		LIMIT SWITCH HOLDER PC MN3600H BLACK TDP-SP1	

ASSY LEFT SPEAKER MODULE



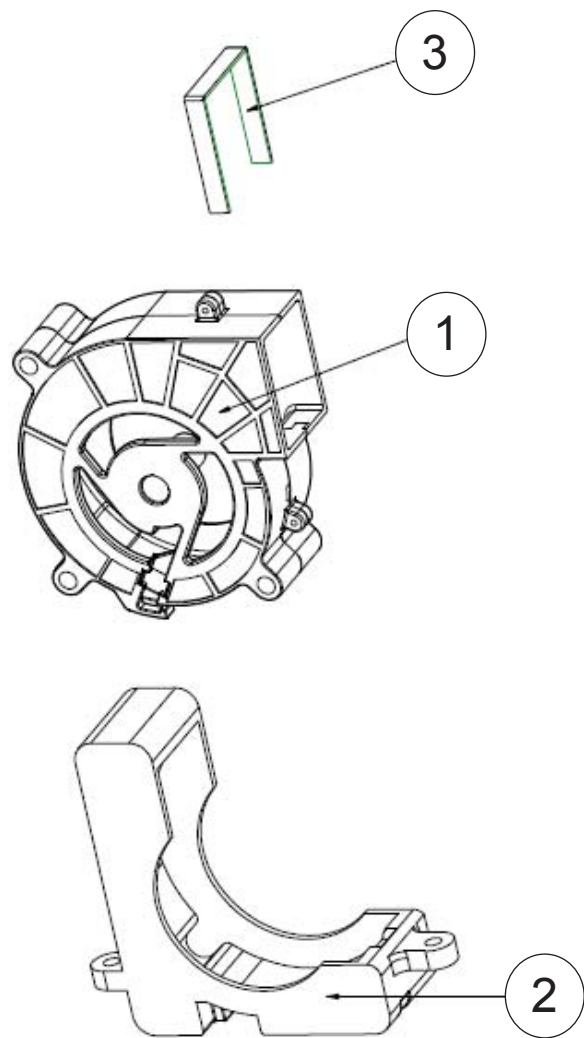
Item	EDI PN	Description	Parts Supply
1	63680002	Speaker(GP) / 49.8PE04G001,10W 6-OHM	V
2		SPEAKER BRKT LEFT SECC 0.8t G3.5	
3		PORON SPEAKER G3.5	
4		SCREW PAN MECH W/SF M3*8 NI GREEN	

ASSY MAIN BOARD MODULE



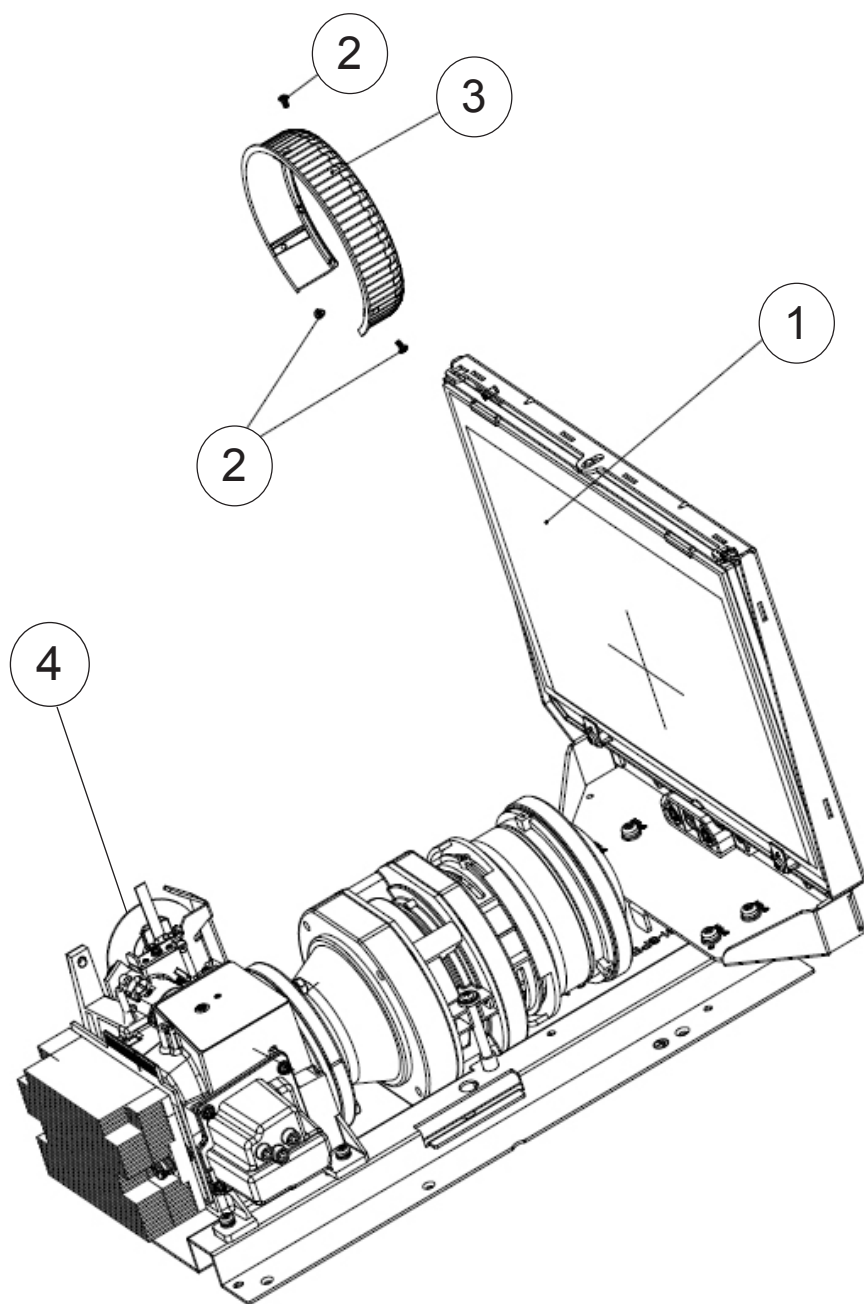
Item	EDI PN	Description	Parts Supply
1		HEXAGON COPPER STICK M3 L18 SCREW L4.5 EzPro 735	
2	63730008	PCBA (GP) / 80.8UR01G001,MB	v
3		PCBA DAUGHTER BD FOR G035 PROJECTOR	v
4		SCREW PAN MECH W/SF M3*6 Ni GREEN	

ASSY LAMP BLOWER MODULE



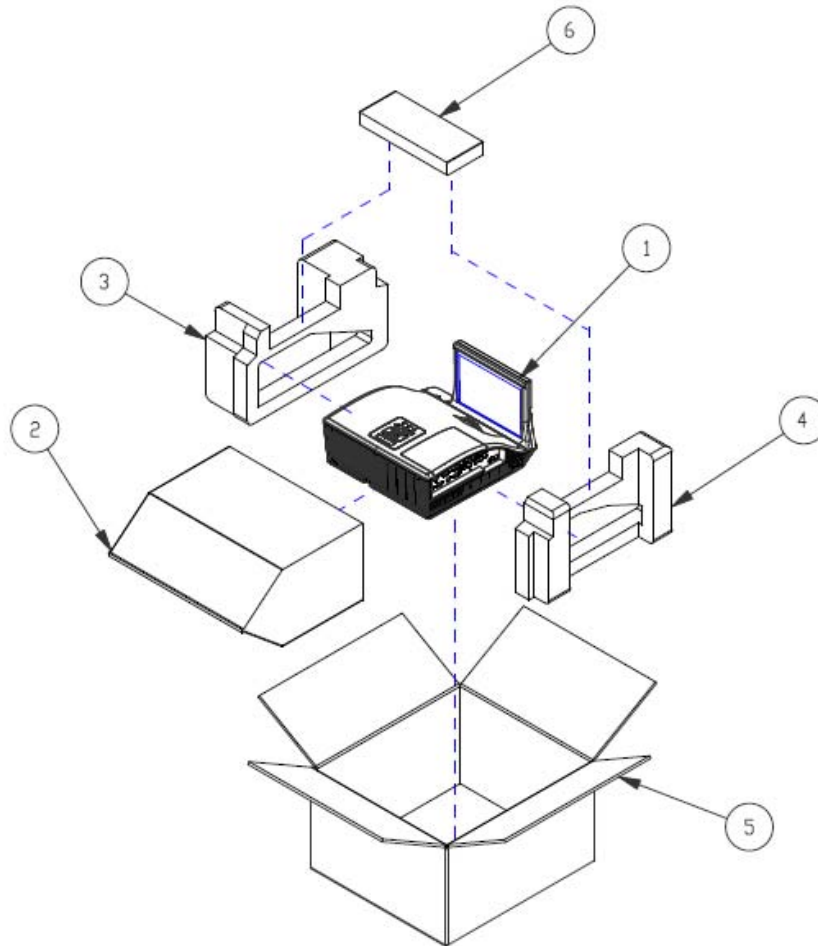
Item	EDI PN	Description	Parts Supply
1	63260006	SUNON 70mm*25mm /LAMP BLOWER/ RoHS2.0/WIRE LENGTH 230mm	V
2		7025 BLOWER RUBBER HD33	
3		7025 BLOWER DUCT AIR TIGHT	

ASSY ENGINE MODULE



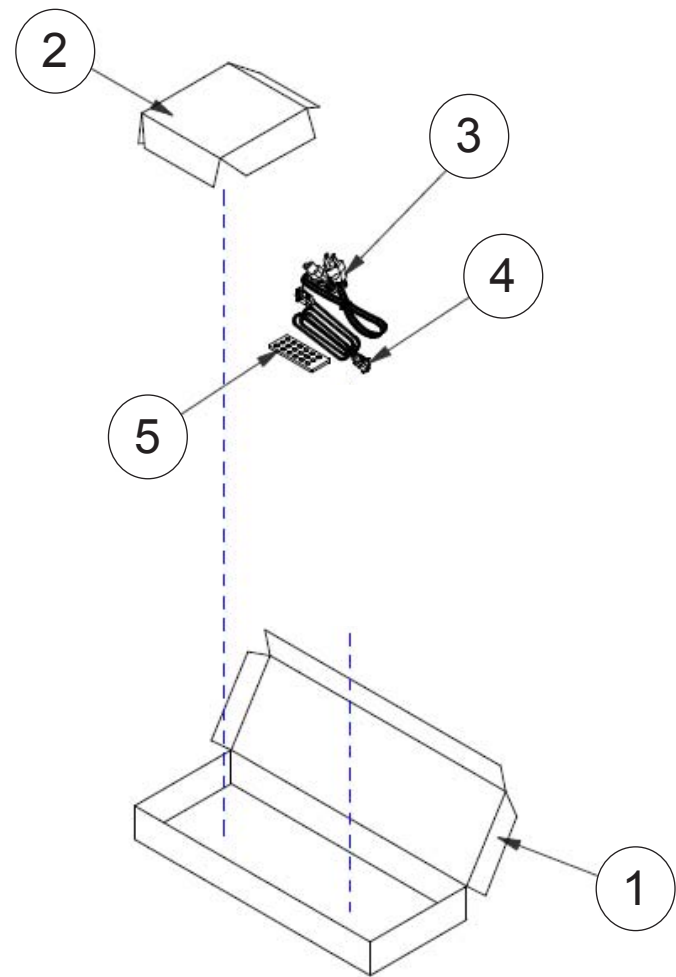
Item	EDI PN	Description	Parts Supply
1	63010004	OE Main (GP) / 75.8PE06G001,G0.35,WXGA	V
		G0.35 OSRAM 280W XGA ENGINE MODULE	V
2		SCREW FLAT HEAD TAP M2*4MM SWRCH18A H BLACK	
3		FOCUS RING MIPRO	
4	63120003	Color Wheel (GP) / 75.8SP06GR01,FOR 8SP	V

Dummy Packing



Item	EDI PN	Description	Parts Supply
1		D.C. G3.5	
2		EPE BAG S500WI	
3		EPE CUSHION LEFT G3.5	
4		EPE CUSHION RIGHT G3.5	
5	63340014	Carton (GP) / 55.8UR01G001	V
6		A.K. G3.5	

Accessories Kit



Item	EDI PN	Description	Parts Supply
1		AK BOX MIPRO	
2		AK PARTITION PAPER W/O IR CAMERA MIPRO	
3		CABLE POWER CORD 1.8M SP30+IS14 US	V
4		CABLE VGA 15P 1.8M BLK EP739	V
5	13910056	Remote Control (GP) / 45.8UR01G001,WI Battery,Blank	V

Appendix B (RSPL Instruction)

The chapter is only designed to show RSPL detailed information. For updated part numbers, please refer to RSPL report.

Item	Core PN	EDI PN	EDI Description	Description
1	42.50115G001			CABLE POWER CORD 1.8M SP30+IS14 US
2	42.00200G005			CABLE VGA 15P 1.8M BLK EP739
3	43.8EM17G001	63630003	Thermal Switch (GP) / 43.8EM17G001,W/I bracket	THERMAL SWITCH WITH BRACKET (KLIXON YS11) 85deg. C
4	45.8UR01G001	13910056	Remote Control (GP) / 45.8UR01G001,WI Battery,Blank	INFRARED REMOTE CONTROLLER PROJECTOR
5	45.8UR01G002	13910053	Remote Control (GP) / 45.8UR01G002,WI Battery,EIKI	INFRARED REMOTE CONTROLLER WITH EDI LOGO PROJECTOR
6	49.8PE02G011	63260006	LAMP BLOWER(GP) / 49.8PE02G011,SUNON 70mm*25mm	SUNON 70mm*25mm /LAMP BLOWER/ RoHS2.0/WIRE LENGTH 230mm
7	49.8ER01G001	63260007	FAN(GP) / 49.8ER01G001,A DDA,70x70x20mm	ADDA, 70mmx70mmx20mm AXIAL FAN
8	49.8PE04G001	63680002	Speaker(GP) / 49.8PE04G001,10W 6-OHM	SPEAKER 10W 6-OHM 280mm G3.5
9	49.8PE01G011	63260008	FAN(GP) / 49.8PE01G011,SUNON,105*32mm	SUNON 105mm*32mm / AXIAL FAN / RoHS2.0
10	51.8PE05H001	13220659	LAN module cover(GP) / 51.8PE05H001,Blank	COVER TOP WIRELESS MN3600 G3.5
11	51.8PE05H021	13220657	LAN Module Cover(GP) / 51.8PE05H021,EIKI WSS3100	COVER TOP WIRELESS MN3600 WITH EIKI LOGO
12	51.8PE07H002			COVER MIRROR REAR MN3600 WHITE G3.5
13	51.8PE42H001			CORNER COVER MN3600 G3.5
14	55.8UR01G001	63340014	Carton (GP) / 55.8UR01G001,EU30WN	CARTON BOX
15	70.8PE15GR01			ASSY I/O COVER MODULE 8PE (SERVICE)
16	75.8PE01G041			COVER COSMETIC MODULE
17	75.8SZ01G001	63670007	Ballast (GP) / 75.8SZ01G001,Lamp Driver,EU30	LAMP DRIVER,OSRAM,O3 TOP 280W,UNIPRO,135*50,D L,DYNAMIC
18	75.8PE07G001			G0.35 OSRAM 280W XGA ENGINE MODULE
19	75.8PE06G001	63010004	OE Main (GP) / 75.8PE06G001,G0.35,WXGA	G0.35 OSRAM 280W WXGA ENGINE MODULE

Item	Core PN	EDI PN	EDI Description	Description
20	75.8PEP2G001	63670006	Power Supply (GP) / 75.8PEP2G001,AD-435W,EU-30W_X	POWER SUPPLY,AD-435W,CONN,150*100,DL,T-SW
21	75.8PE10G001			BUY ASSY INTERLOCK SWITCH 2P #26 320mm G3.5
22	75.8PE20G001			BUY COVER BTM ASS'Y MIPRO
23	75.8PE16G002			LAMP COVER ASSY MIPRO
24	75.8UR04G001			COVER MIRROR FRONT MODULE CX7720 WH9G129
25	75.8SP06GR01	63120003	Color Wheel (GP) / 75.8SP06GR01,FOR 8SP	ASSY COLOR WHEEL MODULE FOR 8SP(SERVICE)
26	80.8PE03G001	63730009	PCBA (GP) / 80.8PE03G001,KEYPAD FOR G035	PCBA KEYPAD BOARD 8PE FR4 FOR G035 PROJECTOR
27	80.8PE09G001	63730010	PCBA (GP) / 80.8PE09G001,THERMAL SENSOR	PCBA THERMAL SENSOR BD FOR PROJECTOR G035
28	80.8PE06G001			PCBA DAUGHTER BD FOR G035 PROJECTOR
29	80.8US01G001			PCBA MAIN BOARD 8US 4L FOR EU30X XGA 280W PROJECTOR
30	80.8UR01G001	63730008	PCBA (GP) / 80.8UR01G001,MB,for EU-30WN	PCBA MAIN BOARD 8UR FOR WXGA 280W PROJECTOR
31	80.8JY04G001	63730011	PCBA (GP) / 80.8JY04G001,PSB FOR H9500BD	PCBA PHOTO SENSOR BOARD FOR H9500BD PROJECTOR
32	80.8PE08G002	63730012	PCBA (GP) / 80.8PE08G002,LAN BOARD,f MIPRO	PCBA LAN BOARD FOR MIPRO PROJECTOR
33	SP.8UR01GC01	13080021	Lamp (GP) / SP.8UR01GC01,ORSAM 280W,Holder	LAMP MODULE FOR PROJECTER
34	23.8PR15G001	13080022	Lamp (GP)	LAMP MODULE OSRAM 280 W E20.9N ARC 0.9