

CU-S10 Video Board

User Manual

[Note] The pictures of Optical Engine and control unit used in this manual are for reference only. If there is something different from the actual product, please subject to the actual product.

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1. Safety Instructions

Always follow these safety instructions when setting up and using the CU-CAT Video Board

1 Operation

- 1.1 Please use the product in the recommended operating environment.
- 1.2 Do not place product in tilted position.
- 1.3 Do not place the product on an unstable trolley, stand or table.
- 1.4 Do not use this product near water or source of heat.
- 1.5 Use attachments only as recommended.
- 1.6 Use the type of power source indicated on the CU-CAT Video Board. If you are not sure of the type of power available, consult your distributor or local electricity company for advice.
- 1.7 Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire:
 - Ensure the plug is free of dust before inserting it into a socket.
 - Ensure that the plug is inserted into the socket securely.
- 1.8 Do not overload wall sockets, extension cords or multi-way plug boards to avoid potential risks.
- 1.9 Do not block the slots and openings in the case of CU-CAT Video Board . They provide ventilation and prevent the CU-CAT Video Board from overheating.
- 1.10 Except as specifically instructed in this User Manual, do not attempt to operate this product by yourself. Opening or removing covers may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.11 Unplug the CU-CAT Video Board from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
 - If the power cords are damaged or frayed.
 - If liquid is spilled into the Product or the Product has been exposed to rain or water.

2 Installation

- 2.1 For security considerations, please ask technician personnel approved by agents to install it.
- 2.2 Potential difference should be checked with a meter before installation to avoid equipment damage and personal injury due to electric shock. <Note> Please refer this task to a qualified technician to avoid potential risks.
 - Before you connect and control the video signal, use the meter to verify the connectors or device to be connected for any potential difference.
 - Measure the RS-232, DVI, VGA or video signal connectors of the device to be connected using the meter. (For measurement method, please refer to FAQ).
 - If the measured potential difference is more than 10 V, please contact qualified service personnel for troubleshooting.

- Using the device at a potential difference of larger than 10 V may cause risk of device damage and electric shock.

3 Storage

- 3.1 Do not place the Product where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
- 3.2 Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the Product.
- 3.3 Unplug this product during thunderstorms or if it is not going to be used for an extended period.
- 3.4 Do not place this product or accessories on top of vibrating equipment or heated objects.

4 Cleaning

- 4.1 Unplug all the cables before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.

5 Battery Warnings (RTC Battery)

- 5.1 Using the wrong model of battery may lead to explosion. Please check with the original manufacturer and handle the old battery properly.

6 Remote control (if the accessories are equipped with remote control)

- 6.1 Using an incorrect battery type in the remote control may result in breakdown. Follow local instructions on how to dispose of used batteries.

■ Precautions

Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

	<table border="1"><tr><td>Note</td></tr><tr><td>Risk of Electric Shock Do not remove cover</td></tr></table>	Note	Risk of Electric Shock Do not remove cover	
Note				
Risk of Electric Shock Do not remove cover				
Caution: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.				

This is a Class A product. In a residential environment it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, reception room or hall.

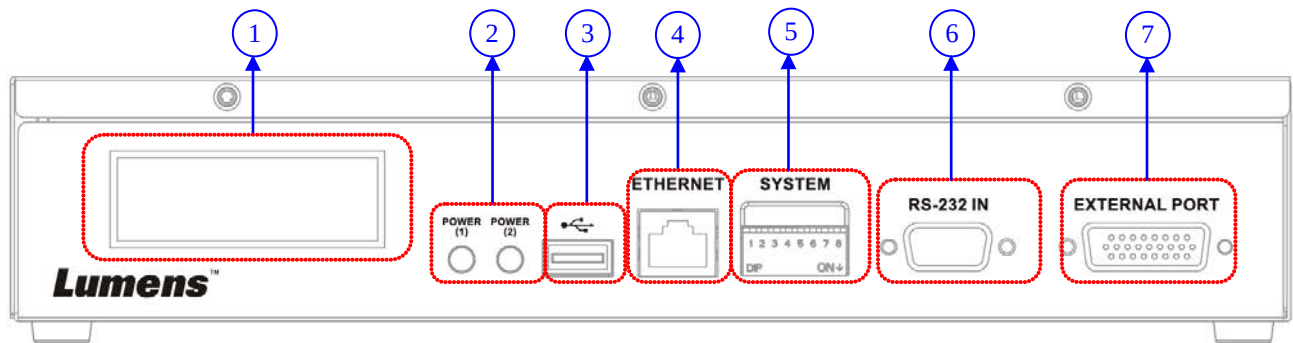
2. Package Contents

The following accessories are included:

- 2.1. Power cord
- 2.2. Power Adapter
- 2.3. IR extension cord
- 2.4. DB26 Cable
- 2.5. Rack Unit metal plates
- 2.6. Two-Way Power Cord

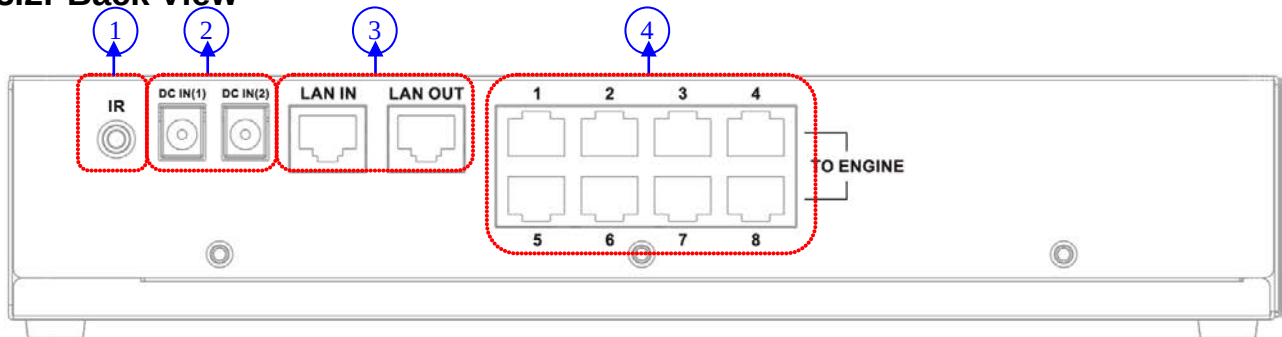
3. Port Description

3.1. Front View



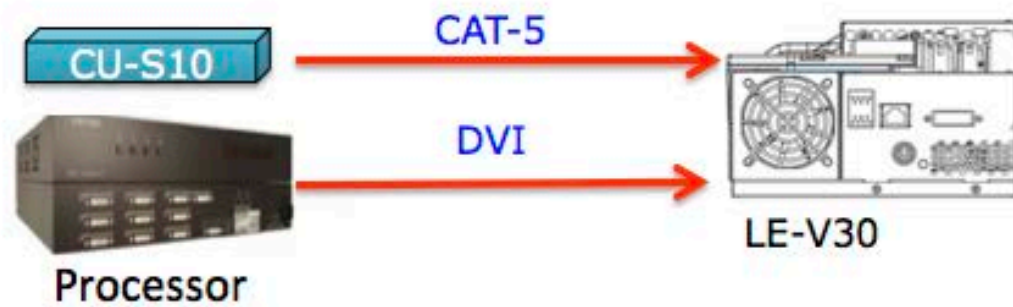
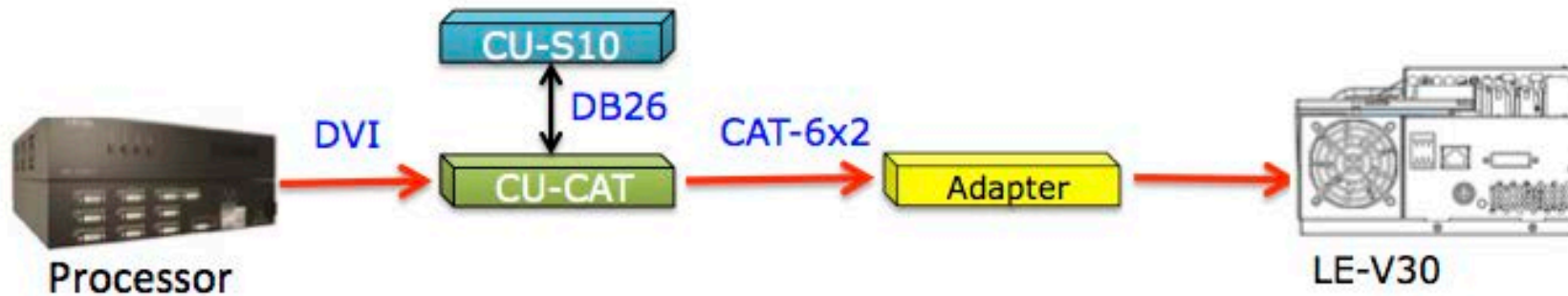
1. LCM
2. Power indicator
3. USB port
4. RJ-45 IN port
5. SYSTEM DIP Switch Setting
6. RS232 IN port
7. DB26 to CU-CAT port

3.2. Back View



1. IR connector
2. Power OUT port
3. RJ-45 I/O port
4. RJ-45 to Engine

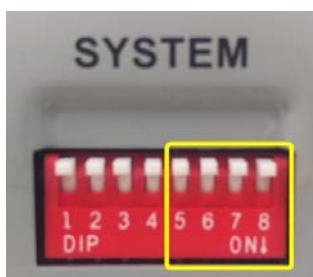
4. Starting Installation



5. DIP SWITCH Setting

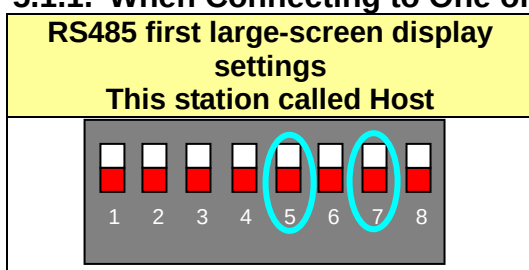
5.1. SYSTEM DIP SWITCH Setting

Set up the first and last CU-S10.



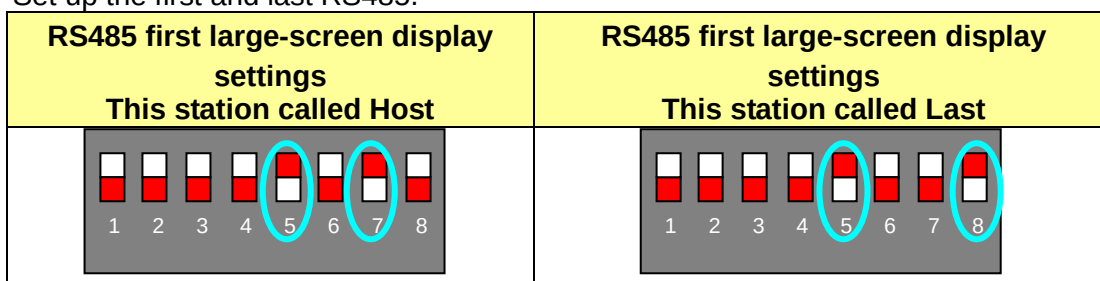
<Remark> Provide system setup. The white colored area is the DIP position

5.1.1. When Connecting to One or Two CU-S10 Only



5.1.2. When Connecting to Three or More CU106

Set up the first and last RS485.



5.2. Setting the Control Box ID SWITCH



<Remark> The control box adopts a binary design, numbered 1, 2, 4, and 8 from left to right

During default, the control box is numbered from 0 to 7.

When No. 1 is activated, the numbering becomes 8 to 15. The calculation method is stated below: $8 \times 1 = 8$ (starting from No. 8)

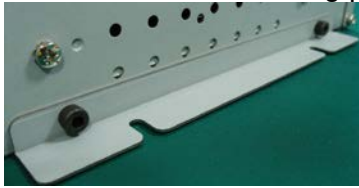
When No. 1 and 2 are activated, the numbering becomes 16 to 23. The calculation method is stated below: $8 \times 3 = 24$ (starting from No. 24)

When No. 3 is activated, the numbering becomes 32 to 39. The calculation method is stated below: $8 \times 4 = 32$ (starting from No. 32)

6. Starting Installation

6.1. Install the CU (Control Units) holding plate

6.1.1. Install with a holding plate and M4 hex socket cap screws

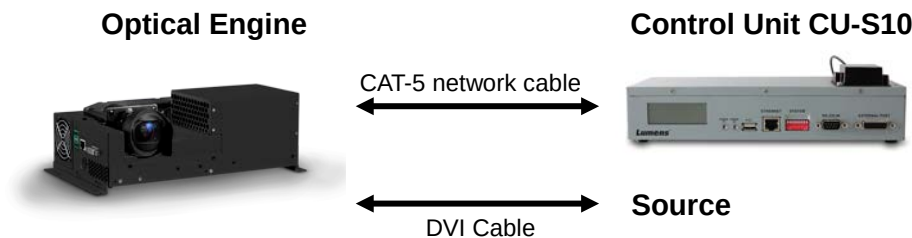


6.2. Attach the CU (Control Unit) to the DLP Projection Engine

6.3. Connect the LE (Optical Engine) and the CU (Control Unit)

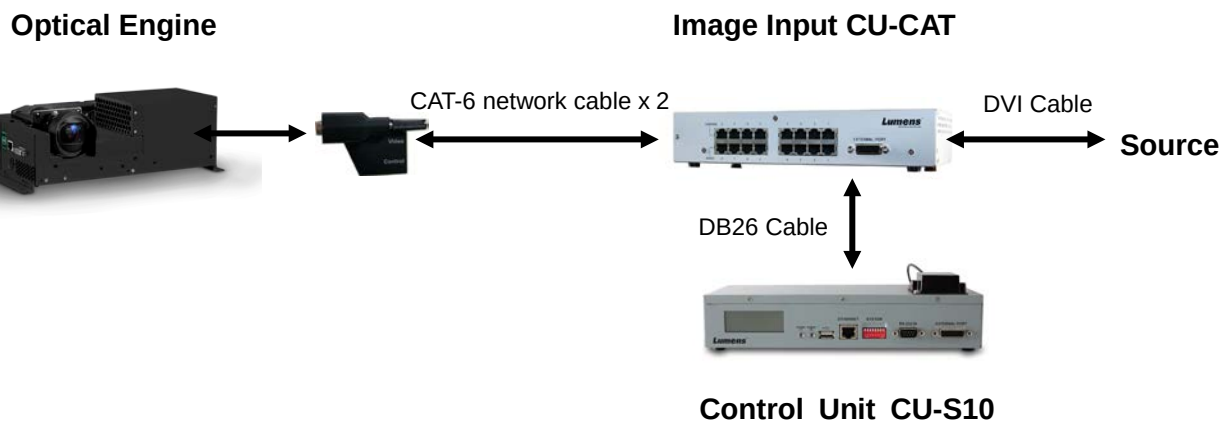
Case 1: Connect CU-S10, using the RJ45 network cable (CAT-5) to connect the engine network port

Use the RJ45 network cable (CAT-5) or DC power cord (light engine accessories)



Case 2: Connect CU-CAT, CU-S10; using the RJ45 network cable (CAT-6) to connect the engine network port

Use the RJ45 network cable (CAT-6) or DC power cord (light engine accessories)

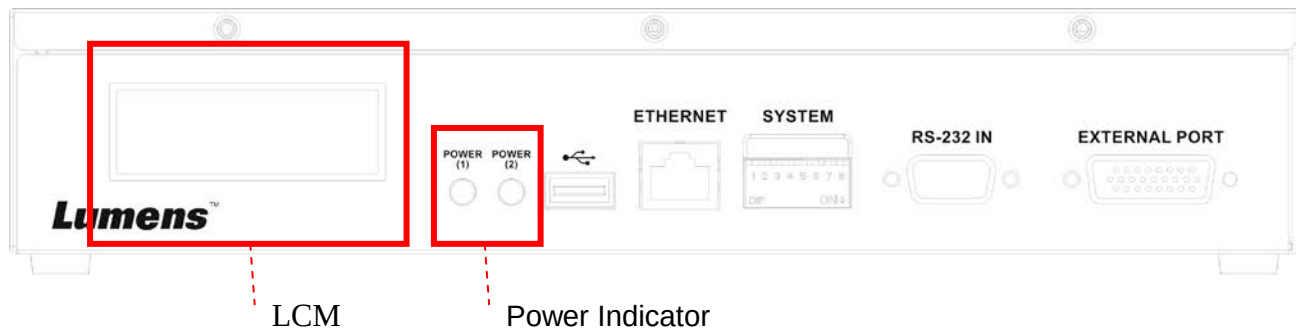


6.4. Wait for all CPU (control unit) the installation is complete

7. Preliminary Test

- 7.1. Turn on your CU (Control Unit)
- 7.2. Turn on your CU with Remote
- 7.3. Confirm correct display
- 7.4. Confirm all the LED indicators light green

8. Indicator Overview



8.1. LCM: Indicate ID and status

Code	Status	Code	Status
A0	CU (Control Unit) in standby mode.	A5	Lighting fails; restarting.
A1	Powered on.	A6	Firmware updating (Master).
A2	Lighting.	A7	CU (Control Unit) not connected to Engine (Light Engine)
A3	Lamp in normal operation (on).	A8	Direct download of Master firmware available
A4	Wait for lamp to cool when the system is powered off.		

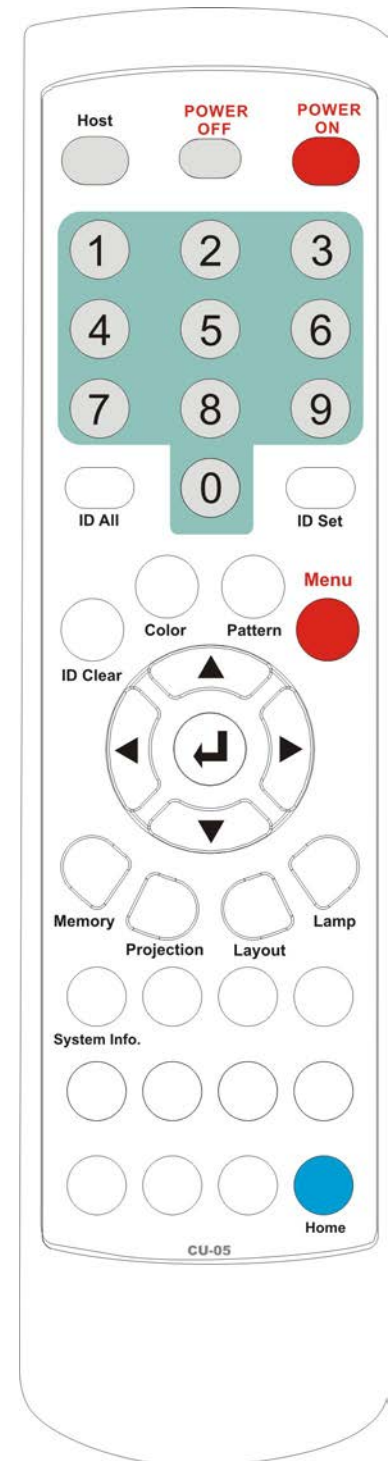
8.2. Power Indicator Overview

- 8.2.1. No Light: Powered off
- 8.2.2. Green: In use

9. Overview of buttons on Remote

<Remark> The below functions are listed alphabetically

Button	Function
# 0~#9	Number 0 ~ 9
	Enter key
Top, bottom, left, and right arrow keys	Arrow key for selecting items in OSD menu
Color	RGBCMY 7-color adjustment (RGBCMYW)
Home	Press this key to point the OSD cursor to Color Temp. This is valid only in status of ID Activities. Available statuses are: 1. If OSD is open, no matter in which level, press this button, and the cursor will return to Color Temp 2. If OSD is not open, press this button, open the OSD, and the cursor position will be in the Color Temp
Host	Turn On Host of the display wall
ID All	Enable all the display walls to be controlled by Remote
ID Clear	Clear projection unit setting
ID Set	Set up projection unit
Lamp	Display the Lamp control menu
Layout	Set the screen to n x m
Memory	Display Memory menu
Menu	Display the OSD menu
Pattern	Built in test screen
Power Off	Power off
Power On	Power on
Projection	Projection method adjustment (Gamma, Flip ...)
System Info.	System status information



10. Troubleshooting

Contact your dealer if problem persists.

10.1. Problems: No response from IR of the control unit

- Recommended solutions:
 - ◆ Ensure there is battery installed and is installed properly in the remote controller
 - ◆ Ensure the connection wire between the IR device and control unit is securely connected and free from any damage.

10.2. Problems: The Optical Engine has no power and the LED replacement light is off

- Recommended solutions:
 - ◆ Please refer to the Machine Installation chapter and make sure all the wires are connected successfully

10.3. Problems: No light is illuminated when the Power button is pressed

- Recommended solutions:
 - ◆ Check the correct connection of DVI cable to the machine core

10.4. Problems: No image is displayed when switching sources

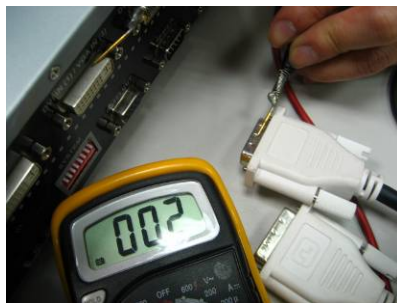
- Recommended solutions:
 - ◆ Ensure the signal and cable to the control unit is connected

10.5. Problems: How do I measure the potential difference

- Recommended solutions:
 - ◆ Use a multimeter and switch to the AC voltage for measurement



- ◆ Take measurements to observe any potential difference between device and cable (**Please specifically confirm the potential difference within the required 10 V**)



Measure the DVI cable