

CU403 User Manual

[Note] The Photos of Light Engine and Control Unit in this manual are for reference only. The items may be different in actual package.

[Note] Please contact Lumens dealers for Installation of Technical Manual.

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1. Precautions

Always follow these safety instructions when setting up and using the Control Unit :

1. Do not place Control Unit in tilted position.
2. Do not place the Control Unit on an unstable trolley, stand or table.
3. Do not use the Control Unit near water or source of heat.
4. Use attachments only as recommended.
5. Use the type of power source indicated on the Control Unit. If you are not sure of the type of power available, consult your dealer or local electricity company for advice
6. Place the Control Unit on a place that it can be unplugged easily.
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.
8. Do not overload wall sockets, extensions leads or multi-way plug boards as this may cause fire or electric shock.
9. Do not place the Control Unit where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
10. Do not block the slots and openings in the projector case. They provide ventilation and prevent the Control Unit from overheating. Do not place the Control Unit on a sofa, rug or other soft surface or in a built-in installation unless proper ventilation is provided.
11. Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the Control Unit.
12. 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.
13. Unplug the Control Unit from the wall outlet and refer serving to licensed service personnel when the following situations happen:
 - If the power cable or plug becomes damaged or frayed.
 - If liquid is spilled into it or the Control Unit has been exposed to rain or water.
14. To prevent damage to the machine and electric shock on personnel due to potential difference, please confirm the potential difference with electric meter before installation. **<NOTE> Please confirm that the operation is conducted by a qualified electrician before working on this task. Persons other than qualified electrician must not operate this machine to avoid danger.**
 - 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 7.5).
 - If the measured potential difference is more than 10V, please contact qualified service personnel for troubleshooting.
 - **Using the device at a potential difference of larger than 10V may cause risk of device damage and electric shock.**

<Note> Using an incorrect battery type in the remote control may result in breakdown. Follow your country's instructions on how to dispose of used batteries.

■ Safety Precautions

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

If the Control Unit will not be used for a long period of time unplug it from the power outlet.

		CAUTION RISK OF ELECTRIC			
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 symbol indicates that this equipment may contain dangerous voltage which could cause electric shock.			
				This symbol indicates that there are important operating and maintenance instructions in this User's Manual with this unit.	

■ EN55022 (CE Radiation) Warning

This product is intended for use in a commercial, industrial, or educational environment. It is not intended for residential use.

This is a Class A product. In a domestic 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, meeting room or auditorium.

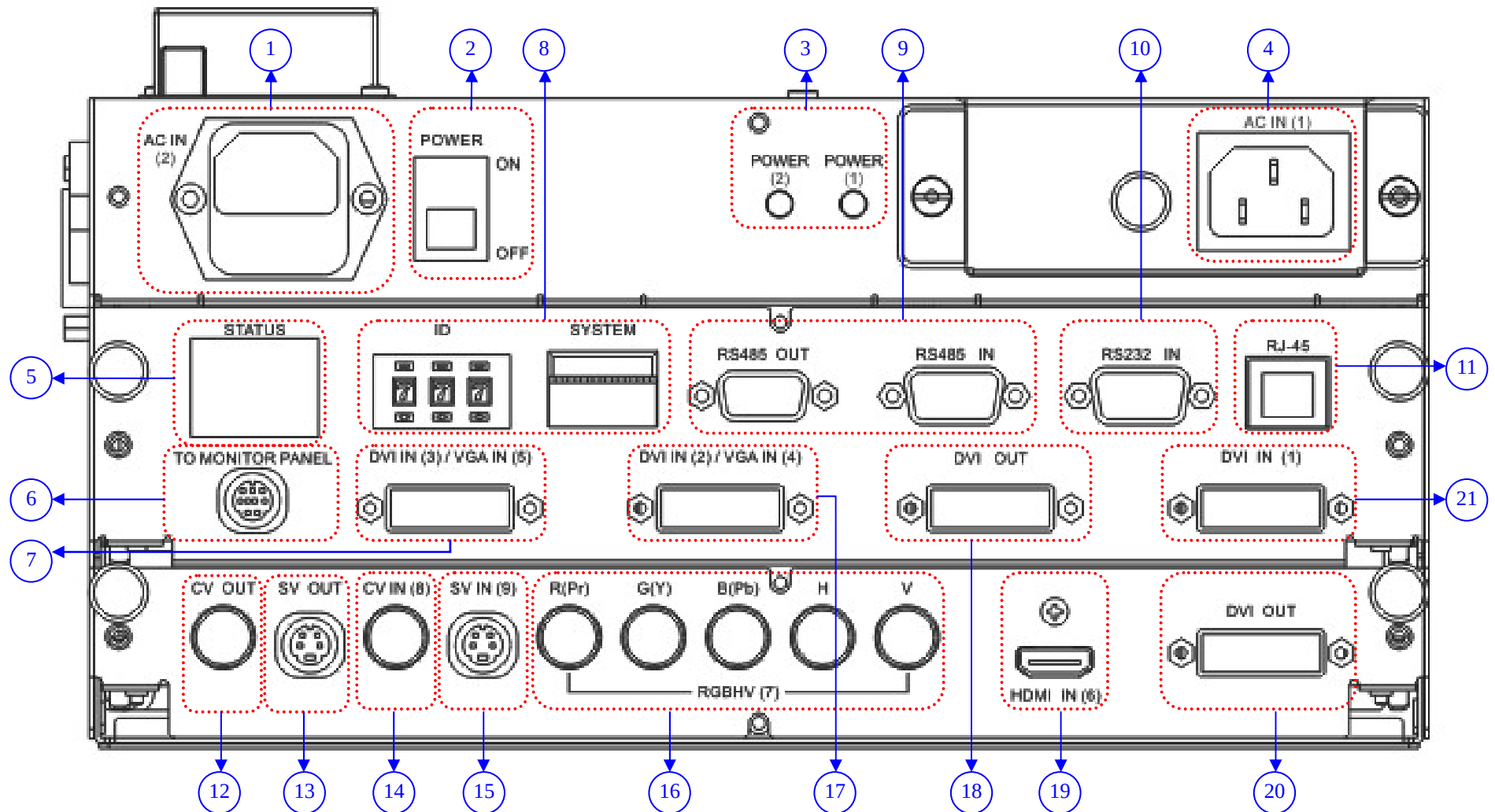
2. Package Content

The package contains the following accessories :

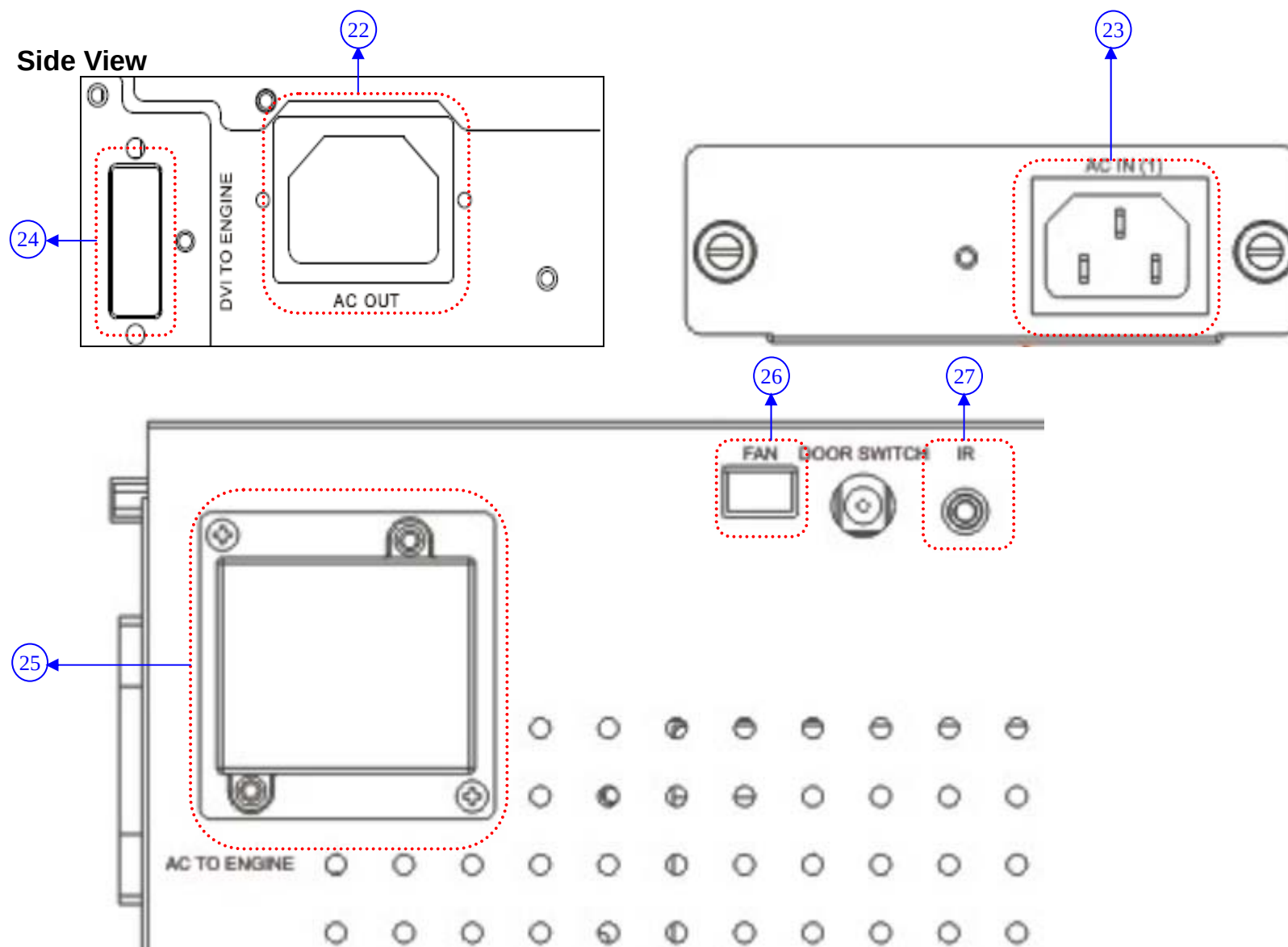
- 2.1. Power Cord
- 2.2. DVI Cable (Long)
- 2.3. DVI Cable (Short)
- 2.4. RS485 Cable
- 2.5. DVI Adaptor
- 2.6. IR Extension Cord
- 2.7. Washers + M4 Hex Screws
- 2.8. Fan Connector
- 2.9. Remote (Optional)
- 2.10. DVI to HDMI Adaptor
- 2.11. Fuse x 1

3. Port Description

3.1. Front View



3.2. Side View



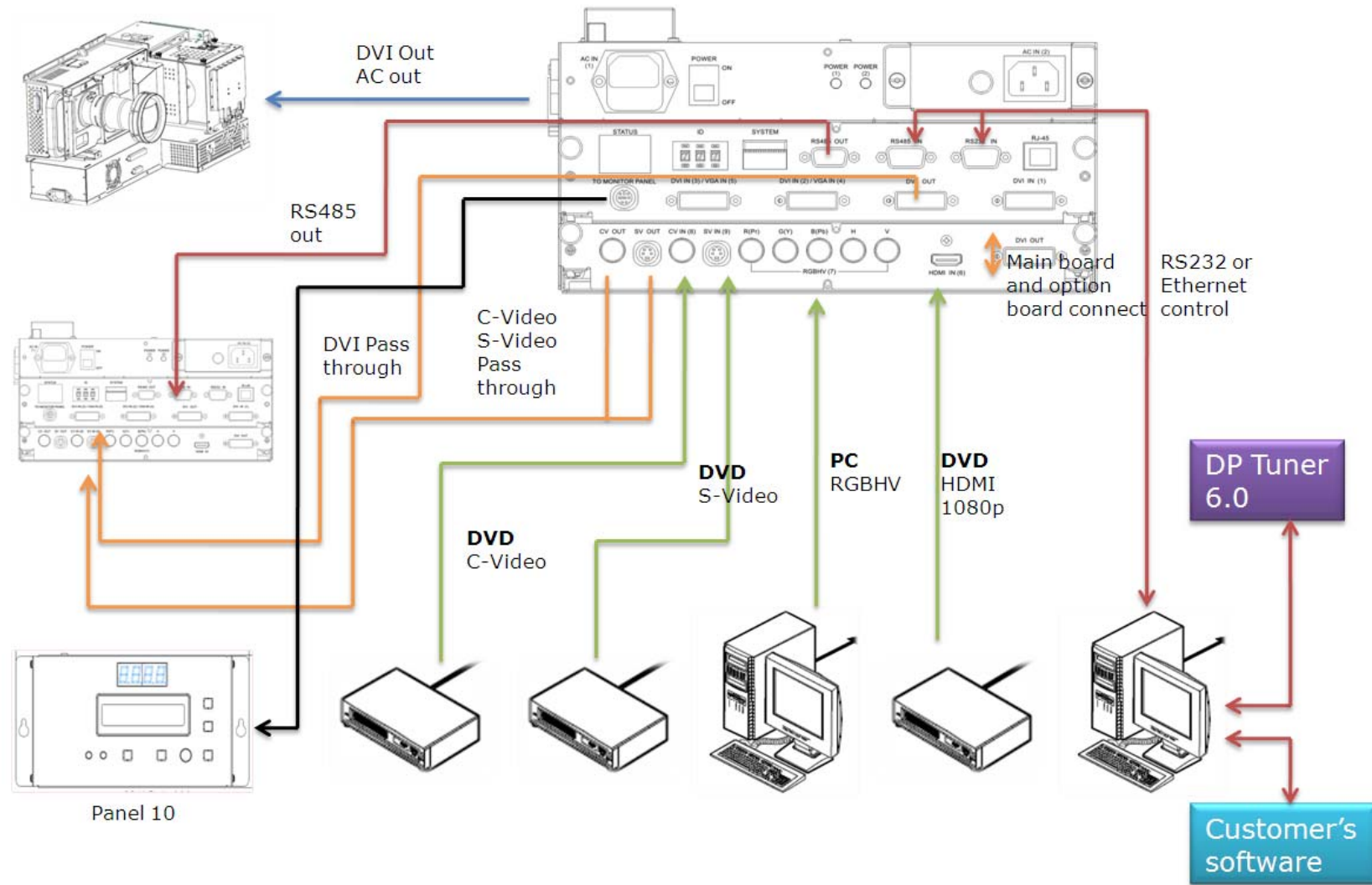
Description of the Front Ports

1. AC IN(2)
2. POWER SWITCH
3. POWER LAMP
4. AC IN(1)
5. LED LAMP
6. Connected to Panel 10
7. DVI(3)/VGA(5) INPUT
8. ID/SYSTEM DIP SWITCH
9. RS485 INPUT / OUTPUT
10. RS232 INPUT
11. RJ-45 PORT
12. C-Video OUTPUT
13. S-Video OUTPUT
14. C-Video INPUT
15. S-Video INPUT
16. RGBHV INPUT
17. DVI (2) /VGA (4) INPUT
18. DVI OUTPUT
19. HDMI (6) INPUT
20. DVI OUTPUT
21. DVI (1) INPUT

Description of the Side Ports

22. AC OUTPUT
23. AC INPUT(1)
24. DVI to Engine
25. AC to Engine
26. 12V FAN OUTPUT
27. IR PORT

4. System Diagram



5. Installation

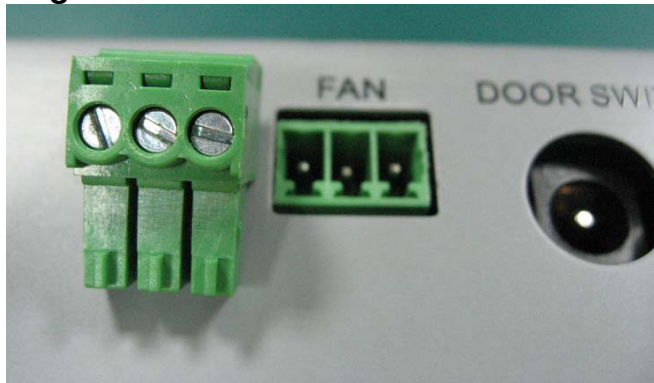
5.1. Installing the power to the control unit



<Note>

Make sure AC (1) and AC (2) are both connected in your installation to make the Control Unit (CU) double backup power function available. If the power is only connected to AC (1), the machine core will not be able to obtain power from AC OUT due to different circuit.

5.2. Installing the fan connector



5.3. Connect DVI IN (1) & DVI OUT

5.3.1. Using the DVI short cable



5.4. Installing the CU washer

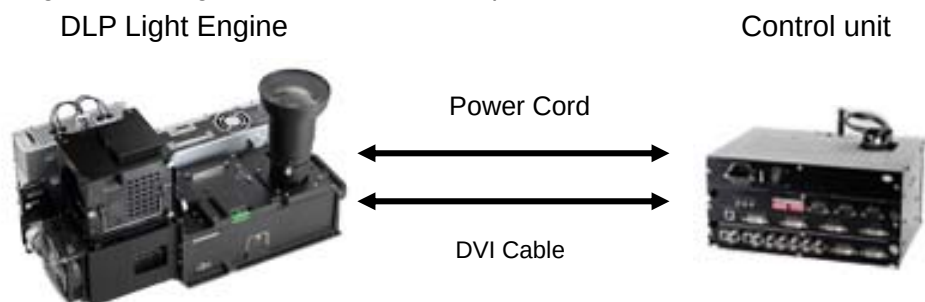
5.4.1. Using washers and M4 hex screws



5.5. Installing CU to the DLP Projection Engine

5.6. Connect LE & CU

5.6.1. Using the DVI long cable, AC male/female power cord

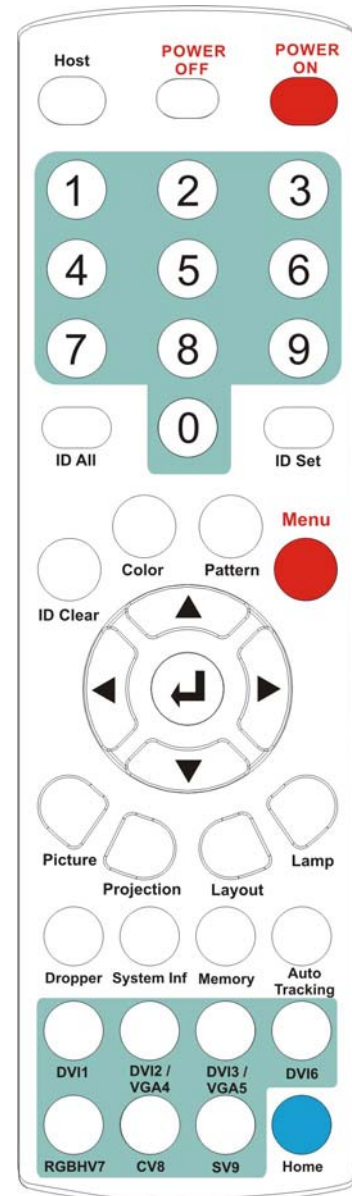


5.7. Wait until all CUs have been installed

6. Introduction to the buttons of the remote

<Note> The below functions are listed alphabetically

Button	Function
# 0~#9	Numbers 0~9
↵	Enter
Up, down, left and right key	Direction key: select the items in the OSD menu
Auto Tracking	Automatic screen adjustment. (Executing the Tracking and Position function simultaneously)
Color	RGBCMY 7 colors adjustment (RGBCMYW)
CV8	Select CV8 signal input
Dropper	Independent Color Control (ICC)
DVI1	Select DVI 1 signal input
DVI2 / VGA4	Select DVI 2 signal input and VGA 4 signal input
DVI3 / VGA5	Select DVI 3 signal input and VGA 5 signal input
DVI6	Select DVI6
Home	Press "Home" key and the OSD cursor will move to the Color Temp, which is available only in the status of ID activities. The status is: 1. If OSD is turned on, no matter at which layer, press "Home" key and the cursor will return to Color Temp 2. If OSD is not turned on, press "Home" key, turn on OSD and the cursor is at Color Temp
Host	Turn on the "Host" of the display wall
ID All	Turn on all display walls and enables them to be controlled by the remote
ID Clear	Clear settings of the DLP Projection Engine
ID Set	Setting the DLP Projection Engine
Lamp	Open the control Lamp menu
Layout	The screen setting is n x m
Memory	Open the Memory menu
Menu	Call out the OSD menu
Pattern	Built-in test screen
Picture	Screen Color, Sharpness, Hue adjustment
Power Off	Turn off the device
Power On	Turn on the device
Projection	Adjustment of screen projection (Gamma, Flip...)
RGBHV7	Select RGBHV7 signal input
SV9	Select SV9 signal input
System Info	System status information



7. Troubleshooting

In case that the same problem persists, contact the dealer.

7.1. Issues: The infrared rays of the control unit are inactive.

■ Recommended solution:

- ◆ Confirm if the remote batteries are installed or reversed.
- ◆ Confirm if the connection cable of the infrared unit on the control unit is actually connected or damaged

7.2. Issues: The DLP Light Engine has no power and the new LED light does not illuminate

■ Recommended solution:

- ◆ Refer to the Chapter “Installing the Machine” and check if all wires are installed properly.

7.3. Issues: Short circuit occurs in cable, making control signal transmission unavailable.

■ Recommended solution:

- ◆ Please manufacture the RS-232 cable according to the applicable standards, otherwise the abnormal cable might cause negative effect on the control of RS-232 cable.

7.4. Issues: External signals are constantly on and off. The screen is only displayed in black and white.

■ Recommended solution:

- ◆ Please detect any signal attenuation due to long cable.
 - VGA cable longer than 25 meters is not recommended.
 - DVI cable longer than 5 meters is not recommended.
 - Video signal cable longer than 10 meters is not recommended.
- ◆ Check the external device for secure connection.

7.5. Issues: Machine core doesn't work when booted.

■ Recommended solution:

- ◆ Check whether the cable is connected and screws are all secured.

7.6. Issues: How do I measure the potential difference

■ Recommended solution:

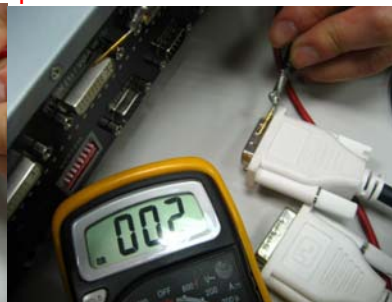
- ◆ Use a multimeter and switch to the AC voltage for measurement



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



Measure the
RS-232 cable



Measure the
DVI cable



Measure the
coaxial cables