



LED 视频处理器

LED Video Processor

使用说明书 User Manual

- △ 使用本 LED 视频处理器之前，请先仔细阅读此使用说明书并将之妥善保存以备日后参考。
Before using this LED Video processor , please read this manual carefully and preserved for reference in the future.

MAGNIMAGE

LED-500B

Statement

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The product specifications and information mentioned in this manual is just for reference, will not give prior notice if there is any updated. Unless there is a special agreement, it is just used as guidelines. All the statements or information in this manual shall not constitute any form of guarantee.

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Briefs

Thanks for your purchasing our LED Video processor. Do hope you can enjoy the experience of the product performance. The design of the LED video processor conforms to international and industry standards. But if with improper operation, there will be a personal injury and property damage. In order to avoid the dangerous, please obey the relevant instructions when you install and operate the product.

Trademark Credit

- VGA and XGA are the trademarks of IBM.
- VESA is a Video Electronics Standards Association's trademark.
- HDMI 、 HDMI mark and High-Definition Multimedia Interface are all from HDMI Licensing LLC.

Even if not specified company or product trademarks, trademark has been fully recognized.

About Software

Do not change, decompile, disassemble, decrypt or reverse engineer the software installed in the product, these acts are illegal.

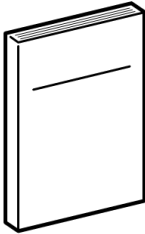
Features

- Single machine for quick switching of signal channel
- The multi-machine prompt restore function of working mould is convenience for you to switch rapidly in a variety of applications.
- Image still effect

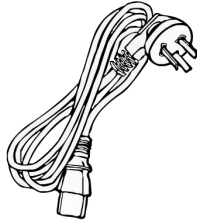
Using Directions

Included Accessories

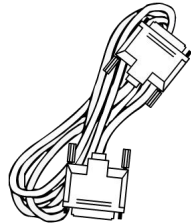
User Manual



Power Line



DVI Cable



Certificate of
Quality



M3 screws × 4

Sending card
stud bolts

4 pin2.54
sending card
power cable

Safety Instructions

- Please use the correct power supply according that the power input voltage for this product range is 100~240V AC, 50/60Hz.
- When you need to connect or pull out any signal or bound guideline, please confirm that all the power supply cords have been pulled out ahead.
- When you need to add hardware device for the LED video processor, make sure all of the signals and power cables have been pulled out.
- Before you operate any hardware, please turn off the LED video processor's power, and to set you on the electrostatic by touching the ground surfaces.
- Please use the processor in a clean, dry and ventilated environment, not in high temperature, humid environment.
- Stay away from the fire, water and of which is inflammable and blast, dangerous.
- This product is with high pressure components, please don't open the case or maintain it by your own.
- As there is exceptional condition with smoke, ill-smelling, please turn off the switch at once and contact with the dealers.

Function Introduction

Brief

LED-500 series products are the video processor developed for the large screen display system, adopted the top image processing chips, internal 12 bits processing, with clearer images and richer colors.

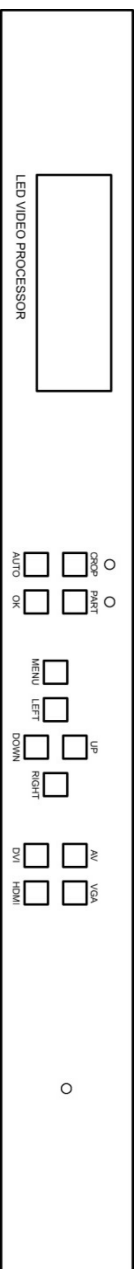
Advanced alternate motion picture processing technology, to remove video motion tail or jagged, for the normal PAL/NTSC video, output image will be clearer, for the HD 1080i signal, output image details will be rich, full color and image quality is in the leading level.

Advanced image scaling technology, support user-defined output resolution, single unit can support horizontal resolution 2560 at maximum, vertical resolution 1536 at maximum, can upgrade the output signal bandwidth utilization greatly; furthermore, also can use the traditional standard output resolution, then scaling the output image by pixel to pixel according to the real size of the LED screen.

Accurate dual picture input image intercepting function, can realize the pixel to pixel display and material fusion.

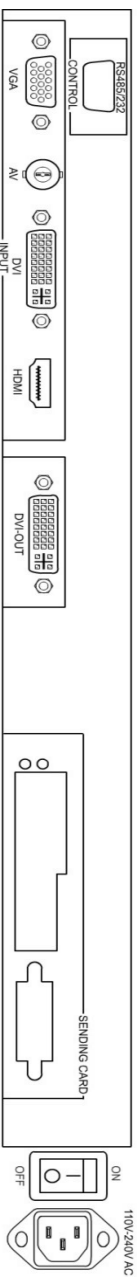
Perfect video image input port, including 1 × VGA , 1 × DVI , 1 × AV (PAL/NTSC) , 1 × HDMI, support full HD signal input, can be connected with various audio and video equipment.

The Front Panel



按键说明	
CROP	Shortcut key for cropping image
PART	Shortcut key for part or full
AUTO	Auto adjust input image position
OK	Confirm
MENU	Main menu, also it is the return operating
LEFT	Left operating
UP	Up operating
	DOWN
	RIGHT
	AV
	VGA
	DVI
	HDMI
	Down operating
	Right operating
	AV input signal
	VGA input signal
	DVI input signal
	HDMI input signal

The Back Panel



The Video Input	
AV	AV input port
VGA	VGA input port
DVI	DVI input port (DVI-D single channel)
HDMI	HDMI input port

The Video Output	
DVI	DVI Output

Technical Specification

Input Indicators		
Port	Amount	Resolution Standard
AV	1	PAL/NTSC
VGA	1	Resolution based on VESA standard such as 1024×768/60Hz, 1280×1024/60Hz
DVI	1	Resolution based on VESA standard such as 1024×768/60Hz, 1280×1024/60Hz
HDMI	1	EIA/CEA-861 and HDMI-1.3

Output Indicators		
Port	Amount	Resolution Standard
DVI	1	1024×768/60Hz/75Hz/85Hz/100Hz/120Hz 1280×1024/60Hz 1440×900/60Hz 1600×1200/60Hz 1600×1200/60Hz– Reduced 1680×1050/60Hz 1920×1080/60Hz/50Hz 2560×816/60Hz 1920×1200/60Hz 2048×1152/60Hz 1024×1280/60Hz 1536×1536/60Hz

General	
Power Supply	110-220V AC~50/60Hz 0.3A
Operating	0-45°C
Size	482×240.5×44.5 mm (L × W × H)
Net Weight	3.0kg

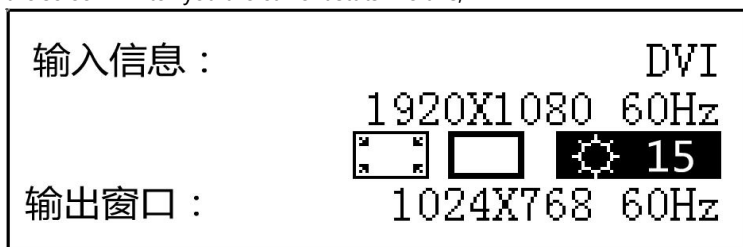
Using Menu

MENU is a convenient access to setting as per your need.

For better using, we adopt a high brightness & contrast LCD screen. If no operation or operation timeout, the screen will be on non-menu status. Press the keys on the front board, the screen will tell you the corresponding information. This will help you achieve better and faster settings.

Non-menu Status

When turn on the machine, you will see the initial operating page on the left screen. After that, the screen will tell you the current stats like this,








Here is the detail of the above image:

Line No.	Details
1	Port name of the input signal
2	Current input signal resolution
3	Current status, explained by several icons From left to right, each icon is: 1. Image cropping state area 2. PART (part or full screen) state area 3. Brightness level state area Check details on the next page.
4	Output window

On non-menu status, the third line area on the screen will show you the current working state with several icons. Check the following table.

Table 1 : Status icon and detail

Icon	Area	Name	Detail (shortcut key in the bracket)
	1	Image cropping off	The image cropping function is off (CROP)
	1	Image cropping on	The image cropping function is on (CROP)
	2	PART function off	PART function is off (PART)
	2	Image cropping on	PART function is on (PART)
	3	Brightness level	Current brightness, "0-15" and "off" (UP、DOWN)

Main Menu Introduction

The main menu shows the symbols listed on the table below, please check its specific meaning.

Icon	Details
>>	Press "RIGHT" or "OK" to enter the operation window, or direct execution
▼	Press "DOWN" on the last program of this page to read the next page
▲	Press "UP" on the first program of this page to read the previous page

"MENU"、"UP"、"DOWN"、"LEFT"、"RIGHT"、"OK" , these six keys on the main menu are designed for choosing and setting. Please check the operation details on the table below.

Work	Key
Open the main menu	Press "MENU" on non-menu status
Program choosing	Press "UP" or "DOWN" , page turning will occur when meets "▼" or "▲"
Parameters changing	Press "LEFT" or "RIGHT" when there is a figure or a option
To the next menu	Press "RIGHT" or "OK" when ">>" on the right
Function execution	Press "RIGHT" or "OK" when ">>" on the right
Back to previous menu	Press "MENU"
Confirm	When reset the operation, press "OK" to confirm to avoid incorrect operation

Main Menu

On non-menu status, press "MENU" to enter the main menu as the below:

Picture	>>
Output Setting	>>
Function	>>
Video Crop	>> ▼
Zoom	>> ▲

On the main menu, there are 7 settings shown on 2 pages. Press "▲" or "▼" for selecting, "OK" or "RIGHT" for entering, "MENU" for backward.

Picture

Picture Mode	Normal	
Brightness	50	
Contrast	50	
Color	50	▼
Sharpness	12	▲
3DNR	Off	
Scheme	Normal	
Bright level	15	▼
DVI Enhance	Off	▲
Black Stretch	Off	
Color Tempture	>>	
Gamma	Off	
VGA Input Phase	>>	



Color Tempture	Normal
Red	50
Green	50
Blue	50

Picture Mode	Four options , "Normal" , "Soft" , "Vivid" and "User" .
Brightness	Range 0~100 .
Contrast	Range 0~100 .
Color	Range 0~100 .
Sharpness	Range 0~24 .
3DNR	Noise reduction, valid only when the input port is not VGA. Available options are "Off" , "Adaptive" , "Low" , "Medium" , "High".
Scheme	Five options, "Normal" , "Vivid" , "Game" , "Theatre" and "Sport".
Brightness Level	Range 0~15
DVI Enhance	Under DVI input, it can greatly improve the output color and clarity.
Black Stretch	Valid only when the Scheme is "Vivid" , "Game" , "Theatre" or "Sport" . It will enlarge the picture' s black section to strengthen the contrast level.
Color Tempture	Four options , "Normal"、"Warm"、"Cool" and "User" . "Red" , "Green" , "Blue" , these three color value can be changed only under "User" option.
	Red Range 0~100 , "User" only.
	Green Range 0~100 , "User" only.
	Blue Range 0~100 , "User" only.
Gamma	For changing Gamma rating by 7 options,"OFF"、" 2.0 "、" 2.2 "、" 2.8 "、" -1.1 "、" -1.2 " and " MIG " . "MIG" is the Gamma curve value of Manimage.
VGA Input Phase	0~63

Output Setting

Output Resolution	>>
H Window	1024
V Window	768
Step	16 ▼
<hr/>	
H Position	0 ▲
V Position	0
Part Or Full	Full



Output To
1024×768 60Hz

← Press LEFT or RIGHT →
to select
Press OK to Confirm

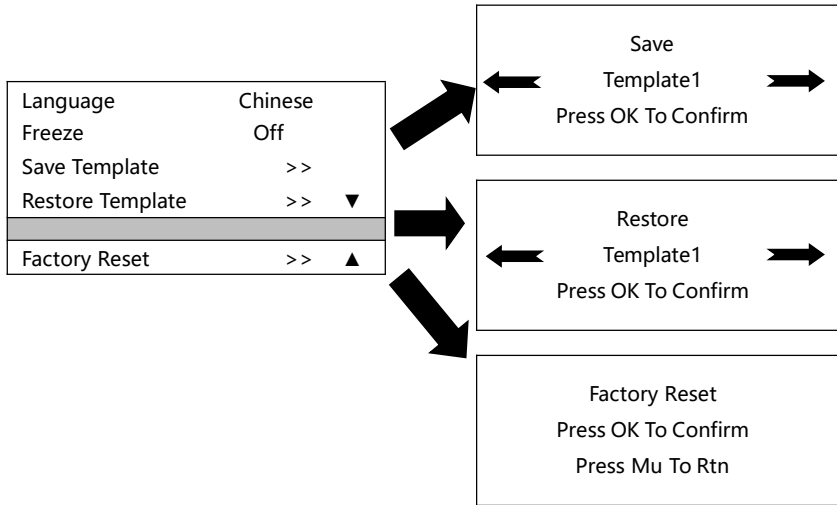
Output	LED-500B supports 19 kinds of regular output resolution, with maximum horizontal width 2560 and maximum vertical height 1536.
Resolution	Find details in "Output Indicators" [9].
H Window	The minimum value is 64 , and the maximum is " the width of the current output resolution " (like 1024 in 1024×768 60Hz) .
V Window	The minimum value is 48 , and the maximum is " the height of the current output resolution " (like 768 in 1024×768 60Hz) .
Step	The fixed value is 16 , can be reset to 128 or 1.
H Position	The minimum value is -16 , and the maximum value can be set to the balance between " the width of the current output resolution " and " H Window " .
V Position	The minimum value is -16 , and the maximum value can be set to the balance between " the height of the current output resolution " and " H Window " .
Part	Full means PART function off.
Or	The complete image will be shown on the LED screen, and the monitor will display shrunken image, " H Window " , " V Window " , " H Position " and " V Position " four parameters take effect automatically.
Full	Part means PART function on. The LED screen will show a part of the image, and the monitor will display full screen image. " H Window " , " V Window " , " H Position " and " V Position " , these four set parameters will be invalid.

Please set the output resolution, H width and V height based on the physical resolution of LED screen. If there is not suitable output resolution, please select the little higher one.

For instance, there is a LED screen with resolution of 1152×960, but we can only find a similar resolution of 1280×1024 60Hz on the list. In this case, please set the output resolution as 1280 ×1024 60Hz. Also, we need to set the H window as 1152, and the V window as 960.

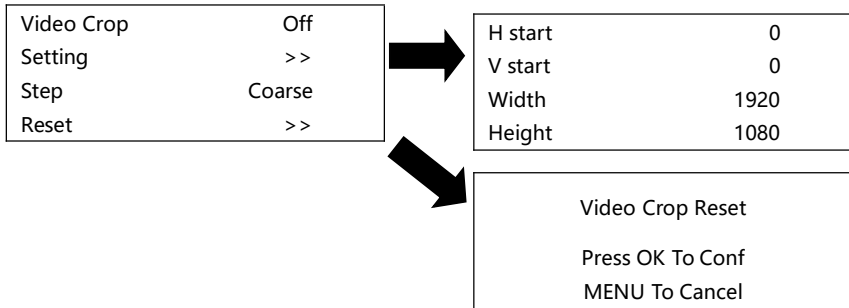
Remarks: the terminal device may not support frequency over 60Hz, ultra high or ultra wide resolution.

Function



Language	Menu language, with “中文” and “English” option
Freeze	Freeze the image of current source. It is invalid when switching input port, missing the signal and setting the image parameters.
Save Template	Save the current setting. 10 settings can be saved at most
Restore Template	Restore the previous setting.
Factory Reset	Restore the factory setting.

Video Crop



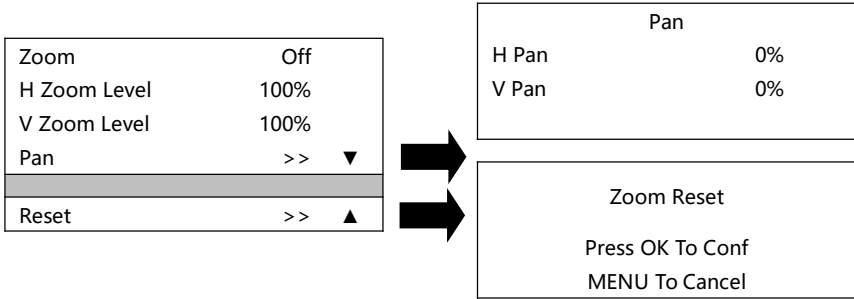
Video Crop	This function is to cut out the image of input signal, including "On" or "Off" option. The default status is "Off" .
Setting	<p>H Start: the minimum value is 0, and the maximum value is the balance between "the width of input signal" and "64" .</p> <p>V Start: the minimum value is 0, and the maximum value is the balance between "the height of input signal" and "32" .</p> <p>Width: the minimum value is 64 , and the maximum value is the balance between "the width of input signal" and "H start" .</p> <p>Height: the minimum value is 32 , and the maximum value is the balance between "the height of input signal" and "V start" .</p>
Step	2 options, "Coarse" and "Fine"
Reset	Restore the parameters of current video cropping. After resetting, full image will be shown.

"Video Crop" could be used only when current input signal is valid and "Zoom" function is off. If it cannot be used, the system will remind the user to check the conflict setting when entering the sub-menu.

"Video Crop" function will cut out the input signal and then output to the LED screen. Therefore, the size and position of cutting window is restricted within the input signal. The parameter settings on the above table are affected each other.

Remarks: the width and height of input signal can be seen on "Non-menu Status" [10]. For example, 1920×1080 60Hz means the input signal is 1920 high, 1080 wide and the frequency is 60 Hz.

Zoom



Zoom	The zoom function includes “On” and “Off” . The default status is “Off” .
H Zoom Level	Enlarge the image horizontally by every 5%. The maximum value is 1000% and minimum 100% .
V Zoom Level	Enlarge the image vertically by every 5%. The maximum value is 1000% and minimum 100% .
Pan	Horizontal move: move the enlarged image by every 1% . The maximum value is 100% . When it goes to 50% , the image will horizontally locate in the middle of the original image. Vertical move: move the enlarged image by every 1% . The maximum value is 100% . When it goes to 50% , the image will vertically locate in the middle of the original image.
Reset	Restore the parameters of current Zoom. After resetting, full image will be shown.

Shortcut Keys

There are shortcut keys on the front, 4 for input, 3 for function and 6 for menu operating. Input shortcut keys include “AV” , “VGA” , “DVI” and “HDMI” . Function shortcut keys include “CROP” , “PART” and “AUTO” . Menu operating shortcut keys include “ OK” , “MENU” , “UP” , “RIGHT” , “DOWN” and “LEFT”

For the key name and its position, please check the “Front panel” [7].

Remarks: all the shortcut keys are valid only on non-menu status unless specially mentioned.



Input Shortcut

On no-menu status, press any input shortcut, the input channel will directly switch to the input signal you select. Soon the menu will show the input signal information. See the “Non-menu Status” [📖 10].

Function Shortcut

CROP Shortcut



CROP can be used only when input signal is valid and “Zoom” is off. Otherwise there will be no response by pressing CROP.

Icon	Detail
	CROP off.
	CROP on.

PART Shortcut

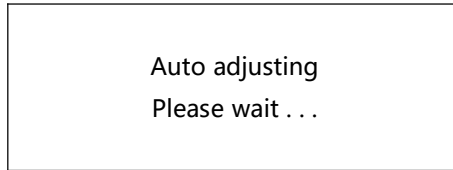
PART means switching part display or full display.

PART function is off on normal status. While using monitor, PART is a convenient approach to watch and set the video.

Icon	Detail
	PART off Full image on LED screen, shrunken image on monitor.
	PART on Shrunken image on LED screen, full image on monitor.

AUTO Shortcut

On "Non-menu Status" [F10], press "AUTO" , the screen will show:



The system will adjust the image display position. When it finished, the system will return to non-menu status.

Remarks: "AUTO" is valid only for VGA input. Make sure the input image is full size with bright rim.

FAQ

LED-500B provides abundant functions. Some functions require professional background.

When you meet small using issues, you can try adjusting as the below table shows. If issues still unsolved, please contact with the local agent, or consult our service department directly.

For your safety, do not attempt to repair this machine by yourself.

Issue	Check list	Page
No output image and no display on the screen' s front panel.	<ul style="list-style-type: none"> ● Check the power cord ● Check the power switch 	
The screen' s front panel is displaying information, but no output image or the image is not stable	<ul style="list-style-type: none"> ● Check the input connecting and make sure it is switched to the corresponding source (if no signal, the LCD screen' s front panel will not display any signal, and the machine will not output image) ● Check display terminals whether it is able to support the output resolution and refresh rate of this machine. ● Check the brightness setting or contrast setting to see whether it is too low. ● Check the user color temperature setting to see whether is too low. ● Check the input status to see whether there is a signal ● Reset by "Factory Reset" in "Function Settings". 	<p>[10]</p> <p>[9]</p> <p>[13]</p> <p>[13]</p> <p>[10]</p> <p>[15]</p>
Image display position deviation	<ul style="list-style-type: none"> ● Enter "Output Settings", adjust the "Horizontal Position" and "Vertical Position", till the image display properly 	[14]
Abnormal display of VGA or DVI source	<ul style="list-style-type: none"> ● Check the input signal resolution, make sure it is VESA standard. 	[9]
The screen does not fully display the VGA signal	<ul style="list-style-type: none"> ● Press "AUTO" button until the image display correctly (please use the proper signal, which is full screen without black rim) 	<p>[7]</p> <p>[19]</p>

Warranty

The Whole Unit Warranty

- One year (since the date of issuing invoice) ;
- If the invoice is lost, the warranty shall start at the date of 60 days after production.

The followings will not be included in the warranty

- The machine is soaked, crashed, besmirched, scratched and other abnormal using causes of damage;
- Demolition or modification which is not approved by our company;
- Using in improper working conditions, resulting in fault or damage (such as high temperature, low voltage or unstable etc.);
- Fault or damage caused by force majeure (such as fire, earthquake, etc.) or natural disasters (like lightning, etc);
- Warranty expires.