



LED-F802Pro/F804Pro video control server

Instructions for User, V1.1

⚠ Before using the LED video control server, please read the instruction manual carefully and keep it properly for future reference.

MAGNIMAGE

LED-F802Pro/F804Pro

statement

The product specifications and information mentioned in this manual are for reference only and are subject to updates without notice. Unless otherwise agreed, this manual is only used as a guide, and all statements, information and so on in this manual shall not constitute any guarantee of any kind.

update log

[illegible]

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brief introduction

Thank you for purchasing our LED video control server. I hope you can experience the excellent performance of the product. The LED video control server is designed to comply with international, industry standards, but it can still cause personal injury and property damage. To avoid the potential hazards and benefit from your equipment whenever possible, follow the relevant instructions in this manual when installing and operating the product.

brand royalty

- VESA is a trademark of the Video Electronic Standards Association.
- The HDMI, HDMI logo and High-Definition Multimedia Interface (High-definition Multimedia Digital Interface) are all trademarks or registered trademarks of HDMI Licensing LLC.
- Even if the company or the product trademark is not specifically specified, the trademark has been fully recognized.

About software

It is not allowed to change, decompile, reverse compile, decrypt or reverse engineer the software installed on the product. The above acts are all illegal.

product features

- Support the input interface type: HDMI 1.4 X 3, USB X 1
- Support 2 / 4 gigabit network port output, and support custom output resolution
- One layer is supported
- Supports the output window adjustment
- Support single network port 0.98 million pixel
- The maximum single-load limit is 3840 pixels and up to 3820 pixels
- Support quick light-up screen, no need computer software connection
- Support the image interception function
- Support for connecting the MAGNIMAGE C-Link series receiving cards
- Support free cable connecting
- Support for single-machine network port backup
- Support receiving card serial number calibration, switch on the intelligent serial number to visually check the position of the cabinet
- Support for the RS232 control
- Support U disk playback
- Support key lock
- Supports the audio separation output
- support EDID
- Support output black screen
- Support output freezing

safety instruction

The input voltage range of the power supply of this product is 100~240V, and 50 / 60Hz. Please use the correct power supply.

When you want to connect or remove any signal or control lines, confirm that all power cords have been removed previously.

When you want to add the hardware device to this product or when you want to remove the hardware device from this product, please confirm that all the signal lines and power cables have been removed previously.

Before any hardware operation, turn off the LED video control server and release the static electricity from your body by touching the ground surface.

Please use it in a clean, dry and ventilated environment, do not put this product in high temperature, wet and other environment.

This product is electronic products, please stay away from the fire source, water source and flammable, explosive dangerous goods.

There are high pressure parts in this product, please do not open the chassis or repair the equipment by yourself.

If you is smoke, odor and other abnormal conditions, please turn off the power switch immediately and contact the dealer.

Function Introduction

summary

LED-F802Pro / F804Pro is a video controller with video processor and transmission card as one launched by MAGNIMAGE. Video image input interface includes 3 x HDMI 1.4; 1 x USB, supporting full HD signal input;

LED-F802Pro with 1.96 million pixels with 2 gigabit port output; LED-F804Pro single-unit with 3.92 million pixels with 4 gigabit port output; up to 3840 pixels horizontally and up to 3820 pixels vertically.

LED-F802Pro / F804Pro supports quick light-up screen, no need computer software connection, greatly simplifies the field debugging steps.

LED-F802 / F04 Front panel:



1-Power supply switch

2-LCD screen, display the menu content

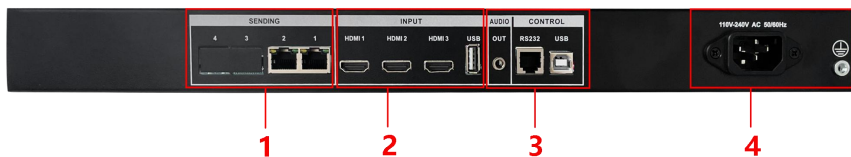
3-knob button and return button

4-HDMI 1, HDMI 2, HDMI 3, USB input keys and LOCK keys

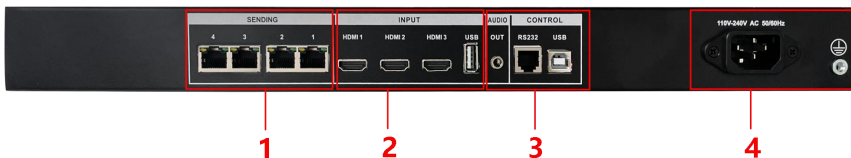
5-Company LOGO

LED-F802Pro / F804Pro rear panel:

LED-F802Pro:



LED-F804Pro:



1-2 / 4 road gigabit network port output

2-HDMI 1, HDMI 2, HDMI 3, and USB input interface

3-AUDIO OUT audio output, square port USB, RS232 interface

4-Power supply interface and ground wire interface

technical specifications

Enter the index		
port	Number of	Resolution specifications
HDMI1.4	3	Maximum resolution: 3840X1080 / 60Hz, downward compatibility support EDID Custom resolution, MAX width 3840 pixels,MAX height 2160 pixels
USB	1	Maximum support is 1080P / 30Hz video files U disk support format: FAT 16, FAT 32, NTFS Video format: MPEG 1 / 2, MPEG 4, SorensonH.263, H.263, H.264 (AVC 1) H.265 (HEVC), RV30 / 40, Divx, and Xvid Picture format: JPG, BMP, PNG, JPEG Audio format: MPEG 1 / 2 LayerI, MPEG 1 / 2 LayerII, MPEG 1 / 2 LayerIII, AACLC, Vorbis, PCM, and FLAC

Output indicators		
port	Number of ports	Resolution specifications
Gigabit network port	2/4	The widest output of the whole machine is 3840 pixels, and the highest output is 3820 pixels Single network port load 0.98 million pixels LED-F802Pro whole unit load 1.96 million pixels LED-F804Pro whole unit load 3.92 million pixels Refresh rate: 23-60Hz
AUDIO OUT	1	Support HDMI, U disk audio separation output

control interface	
Square port USB communication port	Used to connect the computer computer software control
The RS232 port	Used for central control

Complete machine specification	
Enter the power supply	100-240V AC~50/60Hz 0.6 A
working temperature	0-45°C
outline dimension	482.6×217.5×43 mm (L×W×H)
net weight	2.9 KG
Complete machine power	30W

Use the menu

The menu system using the product can be convenient and intuitive to set the local machine to meet the user's requirements.

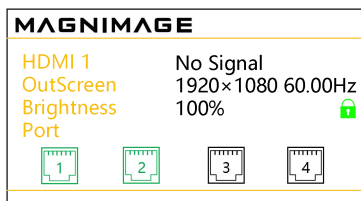
The LED video control server uses a full-color LCD display to display the entire user menu. When the user has no operation or the operation timeout. If the keys in the front panel of the machine are used to set the machine, the LCD screen will display the corresponding menu according to the user's operation to prompt the user to conduct better, faster and more intuitive operation.

The following features of the LCD screen and the LCD screen menu system.

Default status introduction


After turning on the power supply of the LED video control server, the LCD screen on the front panel. After startup, the default state of the current machine will be displayed on the screen, as shown in the figure below:

LED-F804Pro:



The information in the figure above is described below:

function	explain
HDMI 1	The current device selects the input source and the input signal status
Out screen	Current device output resolution
brightness	LED display brightness percentage

Port number	Serial number of the network port 1-4, when the network port is connected to the network cable, the interface network port icon is displayed in green
	Press the lock icon, and press the LOCK button to unlock it

Main menu introduction

The various symbols listed in the following table will appear in the main menu, as shown in the following table:

symbol	explain
	Press the Menu / Conkey to enter the Detailed Settings page or proceed directly
▼	This page is followed by the next page, in the last item on this page to the next page
▲	This page is also before a previous page, in the first item on this page of the upper knob upward spin back to the previous page

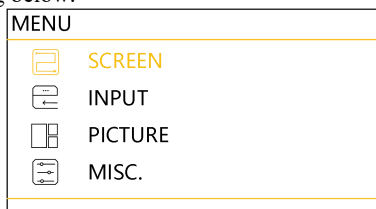
In the main menu, the user uses "menu / confirm", "return" and "knob" to select and adjust each item. The operation is in a fixed mode, please see the following table:

operate	key
Open the main menu	Press the Menu / confirm " key in the non-menu state
Select each project	The knob rotates left and right to turn the page with the "▼" or "▲" symbol
Adjust the parameters	When the right end of the item is a digital parameter or an option parameter, press the "Menu / confirm" key to select, and rotate the knob left and right to change the parameters
Go to the next level of the menu	When the right end ► of the item is marked, press the Menu / Con key
Perform a specific function	When the right end ► of the item is marked, press the Menu / Con key
Return to the previous level menu	Press the "Return" key

primary menu

In the non-menu state, press the "Menu / confirm" button, the menu system will enter the main menu state, the LCD screen

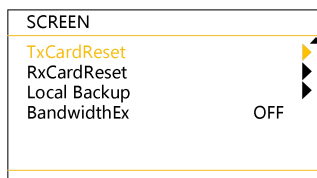
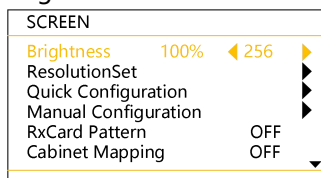
As shown in the following below:



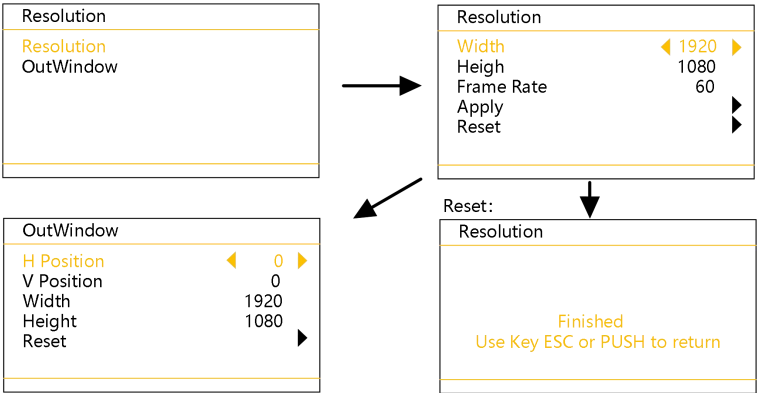
There are 4 sub-menu items in the main menu. Rotate the knob left and right to select the 4 sub-menu titles listed above. After selected, press "menu / confirm" key to enter the selected item and press "Return" key to return.

Large screen configuration

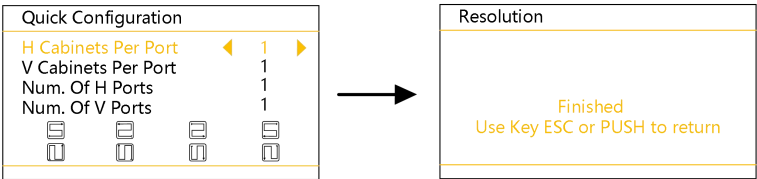
brightness:



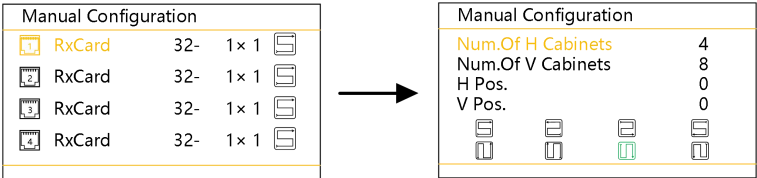
Output Settings:



Quick screen:



Manual screen:

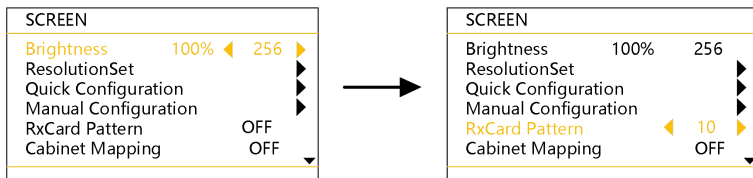


brightness		Adjust the brightness of LED display, 0~256 (0%~100%)	
Output Settings		Custom output resolution, limit width of 3840 pixels and limit height of 3820 pixels	
Output Settings	Output resolution	horizontal resolution	Minimum value of 128, screen horizontal width pixels
		vertical resolution	The minimum value is 128, and the screen is a vertical height pixel
		refresh rate	Range ranged from 23 to 60 Hz

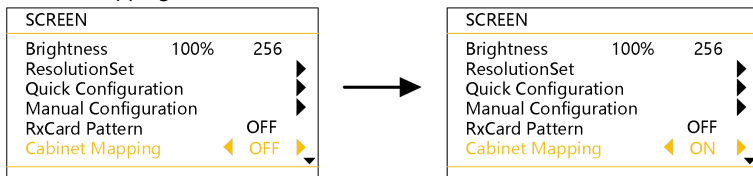
output window	apply	Apply the currently set parameters for the output
	reset	Restore the default 1920X1080 60Hz output resolution
	horizontal position	The window displays the horizontal position parameters
	upright position	The window displays the vertical position parameters
	Horizontal width	The window displays the horizontal width parameter
	vertical height	The window shows the vertical height parameter
	reset	Return the user parameters to the same output resolution size
Quick configuration	The display should be regular, non-alien, and the box size and resolution When the width and height of the box, the cable routing mode is the same, and the serial number of the network port is connected in turn, the screen can be quickly completed through the quick configuration function	
Manual configuration	The display should be regular, non-alien, and the box size and resolution Set the parameters of width and height of box body and horizontal / vertical position of network cable offset for each network port	

Note: The internal fast screen and manual screen function does not support free routing and automatic empty function

Rx card Pattern:

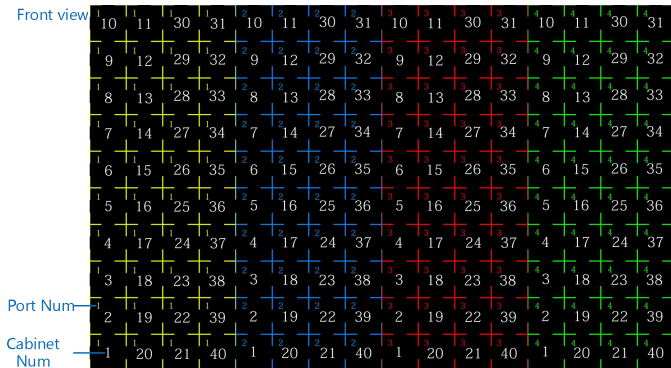


Cabinet Mapping:



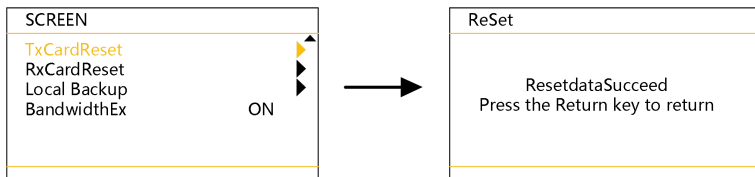
Rx card Pattern	The default is off state, test screen 1-10 options
Cabinet Mapping	When the box mark is opened, the large screen will display the network port number and receiving card number of each box, so as to make the connection diagram intuitively

Cabinet mapping (MAPPING) diagram:

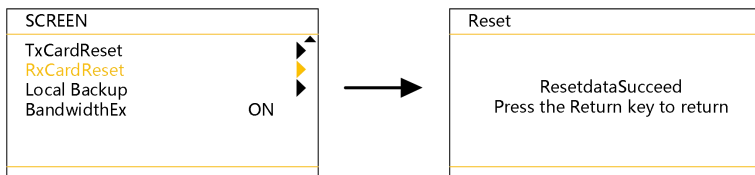


Description: The number in the upper left corner is the network port number, and the middle number is the box number

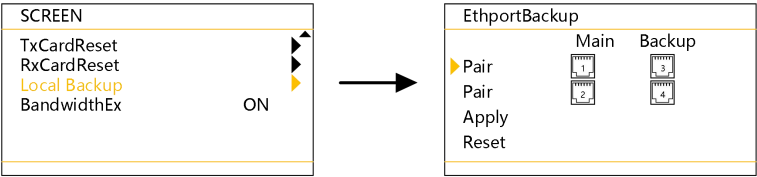
Tx card reset:



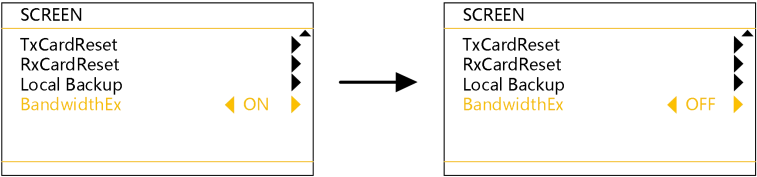
Rx card reset:



Local backup:



Bandwidth extension:



TxCard reset	Reset the sending card connecting screen parameters
Rxcard reset	Reset the reception card brightness, color temperature, and Gamma parameters
Local backup	Specify the network port backup within a single machine
Bandwidth expansion	The default is on. This function requires the receiving card to support bandwidth expansion. After the bandwidth expansion, the single network port band load can reach 0.98 million pixels

Input settings

RGB range:

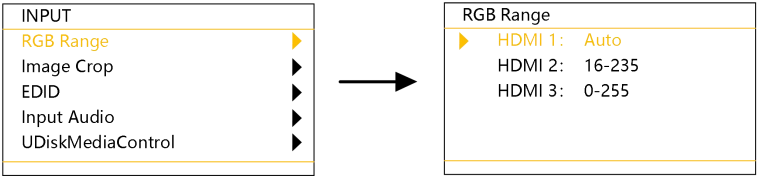
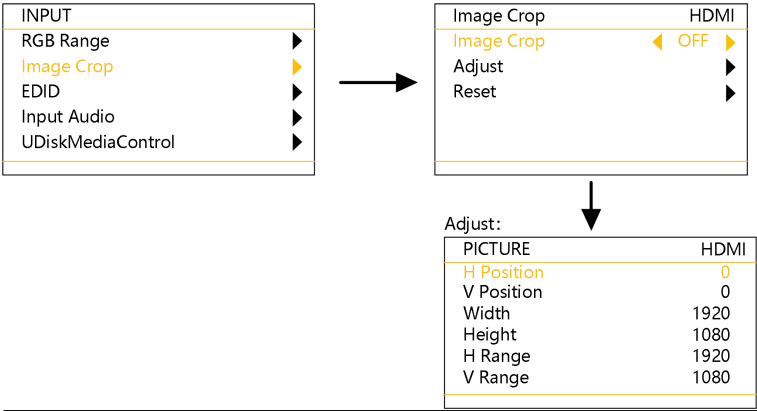
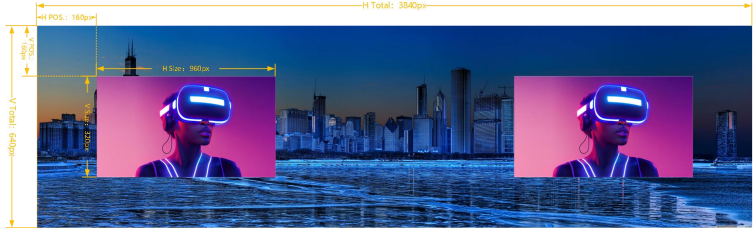


Image crop:



RGB color range	Adjust the input RGB range, the default automatic state, can be set to "16-235" and "0-255" state	
Image crop	horizontal position	The minimum value is 0 and the maximum value is the difference between Horizontal Width minus Horizontal Width
	vertical position	The minimum value is 0 and the maximum value is the difference between Vertical Reference height minus Vertical height
	width	The maximum value is the width of the horizontal reference level
	height	The maximum value is the height of the vertical reference base
	horizontal range	Configure the width of the input resolution
	Vertical range	Configure the height of the input resolution

Picture representation of the image capture:



Note: The horizontal / vertical reference parameters can be simulated as the resolution points of the front-end input signal. If the left portrait picture is captured in the figure above figure, the parameters are set as shown in the table:

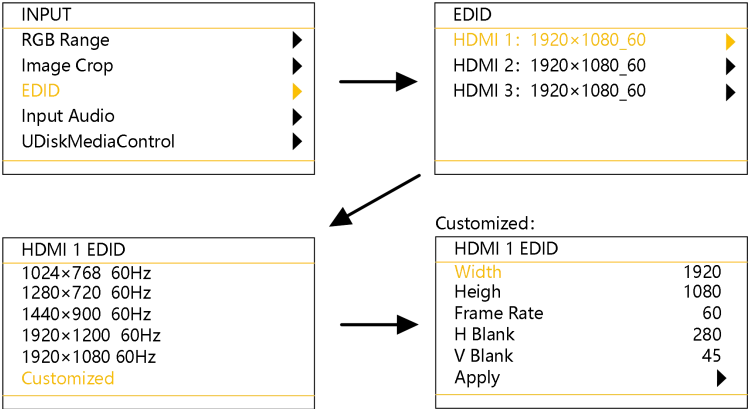
horizontal position	160	upright position	160
Horizontal width	960	vertical height	320
horizontal reference	3840	Vertical benchmark	640



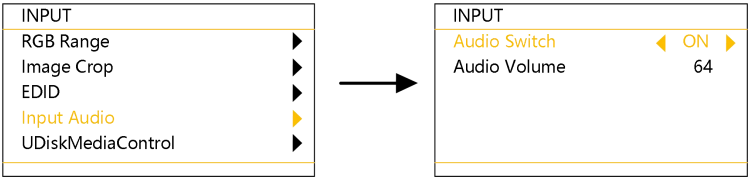
picture

Interception the resulting

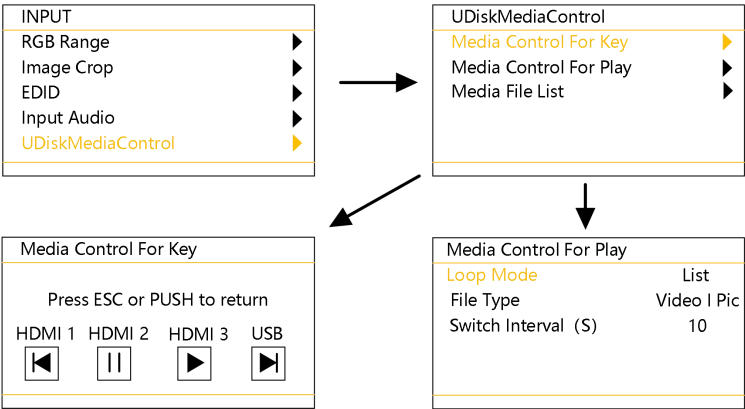
EDID setting:



Input audio:



U-disk media control:



EDID	Supports the 3-way HDMI input EDID settings
input audio	Support input audio switch, and audio output volume adjustment, default volume 64, volume parameter range 0-64
U disk media Key control	HDMI 1 key is to switch forward key, switch on a video / picture to play
	The HDMI 2 button is a pause button to pause the current playing video / picture playback
	HDMI 3 key is the key to play the current video / picture
	The USB button is to switch the back button and switch the next video / picture to play
U disk media control	Loop mode: there are single or list of two cycle modes When the loop is single, the video / picture file ranked first When the loop mode is the list, play the video / picture in the loop, play the video first, and then play the picture;
	File type: can be set to "Video", "picture" or "Video I picture" three: set to "Video" type, only video files can be played and patrol; When set to the "picture" type, only the picture file can be played and round patrol; When set to "Video I picture" type, video and picture files can be played, and video and pictures are preferred;
	Picture switching interval (S): default 10s, the switching time parameter range is 0.5-120s

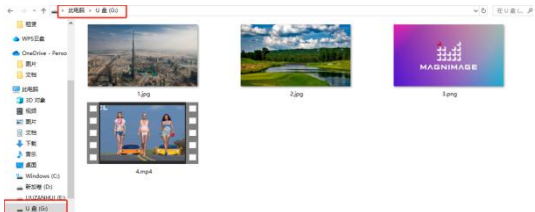
Note: After setting the EDID parameters, different computer or graphics card types may need to restart the computer or unplug the signal line. Select the corresponding resolution in the display Settings menu of the computer.

U-disk playback operation process:

1. The U disk format supports three formats: FAT 16, FAT 32 and NTFS;



2. Copy the material to the U disk root directory and name the material in turn to determine the playback order of the material, there is no requirement for the playback order, there is no need to rename the material file;



3. Set the file type in the U Disk Media Control menu:

When set to "Video" type, only video files can be played and rotated;

When set to "picture" type, only the picture file can be played and rotated, and the interval between pictures can be set in the U disk media play set menu;

When set to "Video I picture" type, the video and picture files can be played, the video is preferred, and the video files in U disk can be played after the pictures;

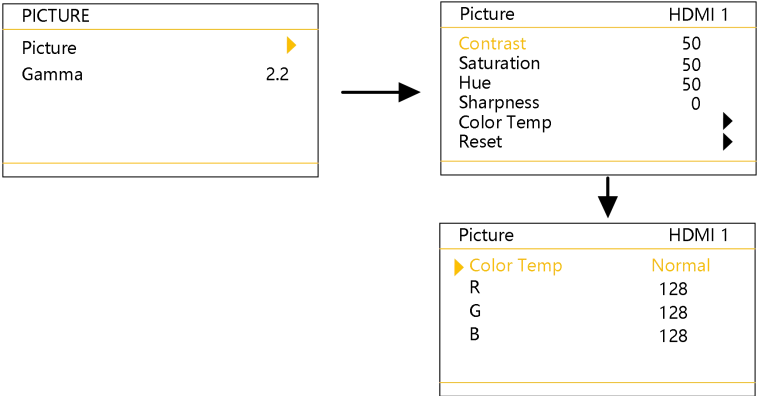
Media Control For Play	
Loop Mode	List
File Type	Video I Pic
Switch Interval (S)	10

- 4. Plug the U disk into the USB port of the F802Pro / F804Pro back board;
- 5. In the F802Pro / F804Pro front panel input button select button USB input to play;
- 6. U disk material audio can be output by Audio out to audio and power amplifier;

Description: U disk playback supports 1080 P @ 30 fps video files

picture format	JPG、BMP、PNG、JPEG
Video format	MPEG 1 / 2, MPEG 4, SorensenH.263, H.263, H.264 (AVC 1) H.265 (HEVC), RV30 / 40, Divx, and Xvid
Audio format	MPEG 1 / 2 LayerI, MPEG 1 / 2 LayerII, MPEG 1 / 2 LayerIII, AACLC, VORBIS, PCM, and FLAC

Image Settings:



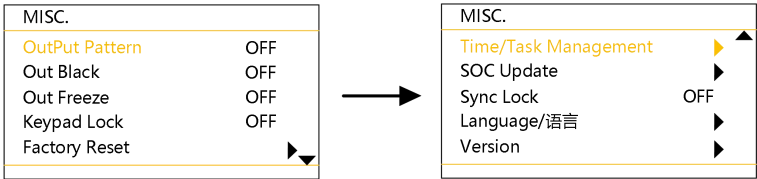
Picture	Contrast: image contrast adjustment, parameter range 0-100, default parameter 50 Saturation: image saturation adjustment, parameter range 0-100, default parameters 50 Tone: image tone adjustment, parameter range 0-100, default parameter 50 Sharpness: image sharpness adjustment, parameter range 0-100, default parameter 0 Color temperature: support "normal" "warm color" "cold color" and "user" selection Reset: The reset user adjusts the image parameters to the initial state of the device
Gamma	Image gamma was adjusted with default gamma value of 2.2 and parameter range 0 – 5

Color-temperature rendering diagram:

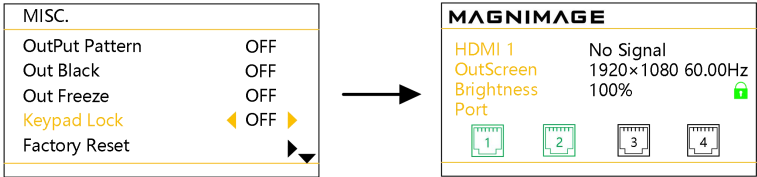


Warm colors are normal and cool colors

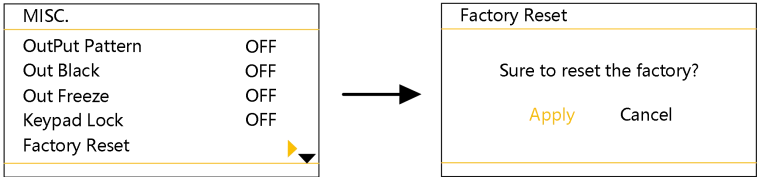
Functional options:



Key lock:

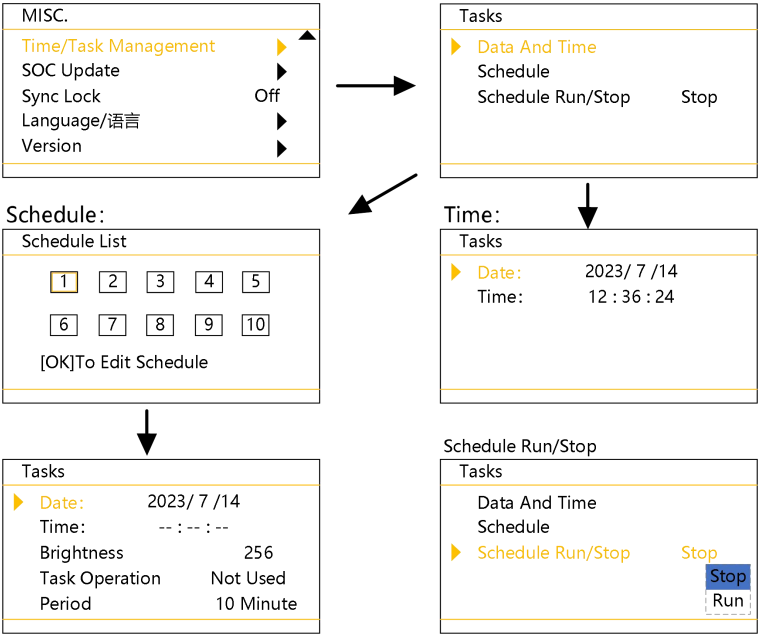


factory reset:



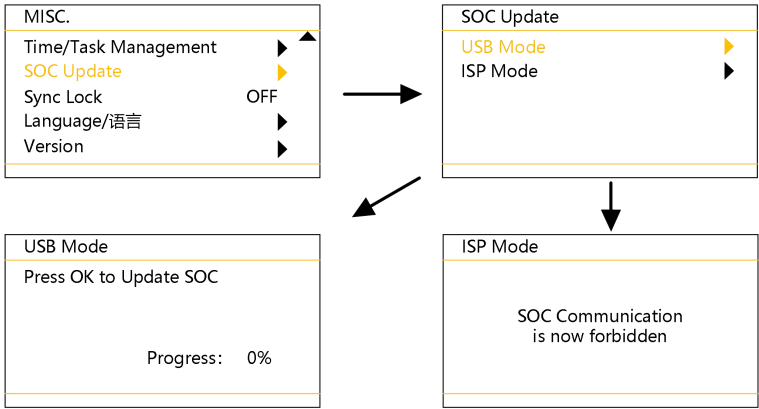
Output Pattern	Support output card test, support 10 card test styles
Output black	Show the current output on a black screen
Output freeze	Freeze the current frame of the device output screen
Key lock	Support device key lock, short press LOCK button to lock and unlock the operation
factory reset	Return the factory setting, confirm to continue after prompt “reset completed, please restart”; power restart

Time task management:

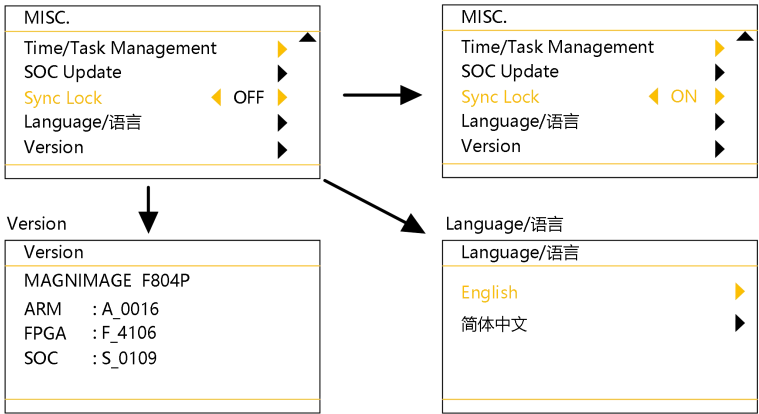


Time task management	Time setting	Set the time and date of the machine itself
	schedule	Can set 10 time tasks, can be edited separately, select a trigger time, and then select the trigger time point screen brightness ,task operation:Once;Every day; Period; Period time range 1-480 minutes. For example, when task 1 is daily at 18:00:00, the screen brightness is adjusted to 128, the time is set to 18:00:00, the brightness is set “;128” ;; the task operation is set to “every day” ; and then return to the running schedule, and task 1 will show yellow
	Schedule Run/Stop	Run or stop the schedule

SOC update:



Synchronous Lock Settings:



SOC update	USB mode	Upgrade the SOC file (file suffix. Bin) copy to the U disk inserted into the device' s USB interface to update the SOC program
	ISP mode	ISP (In-System Programming) mode, upgrade SOC program with SOC dedicated burner, and open ISP mode when burning
Sync Lock	The default is "off" state, you need to open the synchronous lock function when multi-machine splicing	
Language / 语言	Set the display language of the menu system to English or Simplified Chinese	
Version information	Displays the hardware versions of the machine model, ARM, FPGA, and SOC	

Warranty instructions

Complete machine warranty period

- 12 months from the date of the users purchase invoice;
- If the user purchase invoice is lost, the 60 days after the production date of this product is the warranty start date for that product.

Non-warranty provisions

- Fault or damage caused by other abnormal use reasons, such as immersion, collision and use of the machine;
- Disassembly and refit without the consent of our company;
- Fault or damage caused by use in the working environment specified by the product (e. g. too high temperature, too low or voltage instability, etc.);
- Fault or damage caused by irresistible force (such as fire, earthquake, etc.) or natural disasters (such as lightning strike, etc.);
- Product is out of the warranty period.