

## ANGUSTOS VIDEO WALL CONTROLLER



# 2021 | 2022 ACVW CONTROLLER USER MANUAL



About ANGUSTOS

computer signals.

Angustos was founded in 2000 and is now regarded as of digital and analogue ky M solutions.

fortune 500 corporations.

use.

For more than 20 Vears our customers have been convinced by our co standardised distributing standardised

We are confirmed to established international standards. We can provide Ustomers with complete data center solutions as well as OEM/ODM

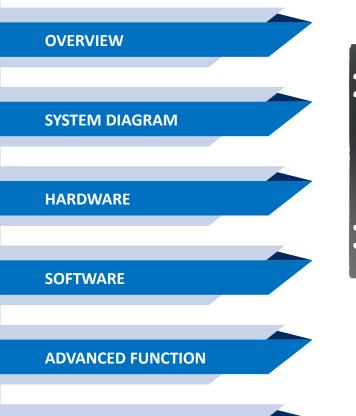
We are confirmed to established international standards. We can provide the established international standards are solutions as well as other the established international standards are approved wendor for IBM. Guntermann standards is the established international standards are approved wendor for IBM. Guntermann standards are approv

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We can cover even from medium to small business, home office and person operations, military and government installations, home office and person We can cover even from medium to small business, factory and industrial and personal business, home office and personal business.

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**SPECIFICATION** 







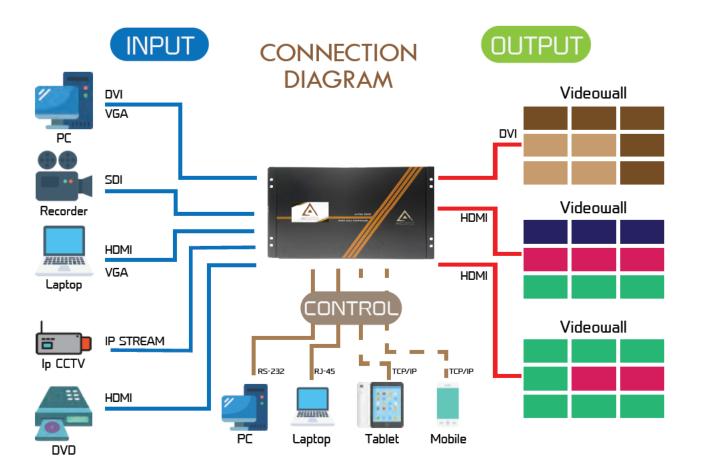
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## 1. Overview

ANGUSTOS video wall controller is a high performance video processing equipment based on hardware architecture. Which avoids common problems of crash, blue screen, viruses. It supports 4 layer \*up to 8 Layer video windows per display arbitrary layering, overlap, moving, stretching,zooming in/out, roaming, Picture In Picture.

## 2. System Diagram



## 3. Hardware

The front panel built-in with a touch screen (For 20U unit, please see chapter 4 Software for connection guide), which you can control the scene mode save/recall, IP gateway settings etc.. As shown below:



3U Chassis rear panel for description

In the normal state (when power on the system or the touch screen is not touched for 12 or more seconds), the touch screen content will shown logo and controller temperature in the picture below :



Clicking on the touch screen, the interface will show as below.

1	2	3	4	5	Status
6	7	8	9	10	
11	12	13	14	15	Scene
16	17	18	19	20	
		Recall	:		Ç Setup

Touch the number item and recall menu to recall the saved scene mode by software. The setting interface is as following picture.

Baudrate	: 11	5200	•	IP :	192.168.3.1	01	9
Language	: Er	iglish	Sub N	Aask :	255.255.25	5.0	Status
Buzzer	:	0N	Gate	way :	192.168.3.	1	
DHCP	: 0	FF	٩	MAC : 10	-B8-2C-2B-	AB-89	
						đ,	Scene
1	2	3	4	5	6	$\langle \times \rangle$	
7	8	9	0		-		
A	В	С	D	Ε	F		< Q Setup

1. **[Baud rate]**: Set the baud rate. Click the [ENTER] button to enter the secondary menu, there are 4 baud rate options [1. 4800; 2. 9600; 3. 19200; 4. 115200]

2. [Language]: Language setting. There are two language choices Chinese and English.

3. [ Buzzer]: Buzzer switch. Turn on/off the buzzer sound when operating the device.

4. **[Automatic search]**: IP automatic search function. Turn on/off the automatic search function of the device control port IP address.

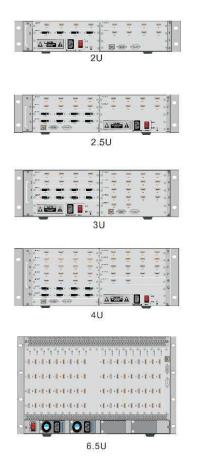
5. [IP]: IP settings. Modify the fixed IP address through following numbers and letters.

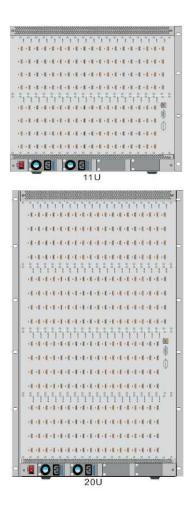
6. [Subnet mask]: Modify the subnet mask through following numbers and letters.

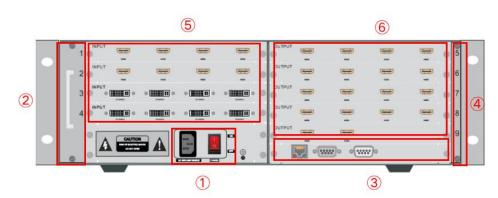
7. **[Gateway]**: Gateway settings.Modify the gateway through the following numbers and letters.The gateway needs to match the fixed IP address.

8. [MAC address]: Modify the MAC address through the following numbers and letters.

#### 3.2 Rear Panel







3U Chassis rear panel for description

- ① Power supply and switch: AC220V 50HZ. Redundant power supply is optional.
- 2) Fan: The fan starts to work when power on.
- ③ RS232 IN and RJ45 network ports: Serial communication input to be connected with control computer or other control equipment. Or connect the equipment to the network for remote control;
- ④ Dust-proof net: Prevent dust from entering the machine to protect the board.
- (5) Input board: Input signal interface to be connect ed with external signal source;
- (6) **Output board:** Output signal interface to be connected with video wall displays.

Notes: Product images and description only for reference purpose, please see the subject product.

#### 4. Software

Double click the application program to open the control software interface. The user name and password both are "admin".

Vi	deo Wall Control Sof	tware	
User Name:	admin 🔹		
Password:	•••••		
Connection:	192.168.3.100	Settings	
Communication	unication 🔘 Dem	10	
Log	in	Cancel	

\*The software is included when purchasing the following model :

- ACVW4 Series video wall controller : ACVW4-1609, ACVW4-3218, ACVW4-2420, ACVW4-3636, ACVW4-7672 and others.

- ACVM Series video wall controller : ACVM-0404, ACVM-0408, ACVM-0412, ACVM-0808, and others
- AVW Series video wall controller : AVW2-1208, AVW3-1620, AVW3-1618, and others.
- ACV2 Series video wall controller : ACV2-0404A, ACV2-0508, ACV2-0812A and others.

Image: Construction       Image: Construction<	Settings Operation	Tools Management			
Image: Construct 1       1       2       3         Image: Construct 5       Construct 5       3         Image: Construct 5       Construct 5       1	COII LAN Discon Nex Connect		1 Save Cycle Open Close On Of Previe	w Echo Control	
Image: Second 19         Image: Second 19<	GB Channel 1 GB Channel 2 GB Channel 3 GB Channel 4 GB Channel 5 GB Channel 6 GB Channel 7 GB Channel 8	1	2	3	
Vertice: Mageriar	💌 Channel 9				
		4	5	6	

## 4.1 Control Port Connection

Click sub-menu [**Connect**] in **[Setting]** to pop up a dialog box as follows. The default baud rate is 115200. Select the corresponding COM port and click **[Set up]** to connect.

For the network connection control, click **[Search]** button to automatically obtain the IP address and device port. Then click **[Set up]** button to connect.

Connect				
COM Port	COM8		IP Address:	192.168.3 .100
Baud Rate:	115200	Ŧ	IP Port:	5000
Interval(ms):	1	÷	Interval(ms):	1
Delay(ms):	1	∆ ¥	Delay(ms):	1
	Set up			Set up
IP Address: 192	.168.3 .100	Modify IP	Gateway: 192.16	68.3 .1 Modify
ubnetMask: 255	.255.255.0	Modify	Aut	to IP
Baud Rate: 115	5200 🔻	Modify	Fixe	ed IP
Controller in the s	ame LAN			
Search				

#### 4.2 Video Wall Setting

Take 8 input and 6 output 2 layer windows video wall controller setting for example. Choose the machine type 2U **2windows-1** and Video wall type **Videowall** Row **2** and Column **4**, Max **2 windows** in single display Then click the icon **[Create]** and then **[Modify MCU]**.

Settings	Operation	Tools	Managem	ent			
Connect VideoWall	Input Previe	w Intial Mode	Sr IP Streaming	ScreenCo	1920x1080 60.0	00Hz 🔻	
Video Wall Setting							×
VideoWall							
							VideoWall VideoWall
1			2	Ì	3		Vedio Wall Type O LED Resolution Resolution: 1920x1080 60 00Hz *
							Protocol Type Start Channel: 1 +
4							Column: 3
							BackPic O Null O Yes Banner Preview Create
							Modify MCU Card Setting

### 4.3 Input Source Setting and Management

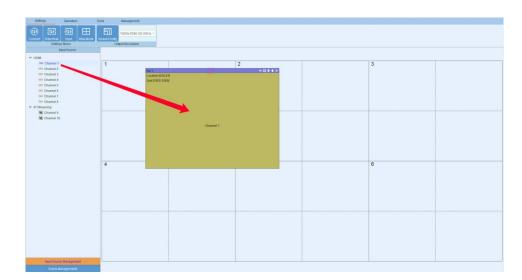
#### **Input Source Setting**

The user can set each card specification as the interface shown below.

(†‡†) Conne		Previev	, Intial		Freaming S	GcreenConfig		0 60.00Hz 🔻			
	Set	ings Menu				0	utput Resolutio	on			
🗧 Input	Source Setting										×
No.	Name	Channel	Card ID	Machine ID	Card Type	Source	Status	Win Size	Con Size	Input	Video Wall
1	Channel 1	1	0	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Videovvali i
2	Channel 2	2	1	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Parameters Setting
3	Channel 3	3	2	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Device Source 10
4	Channel 4		3	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Device Source 10 -
5	Channel 5	5	4	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Source Group No.: 1 🌐
6	Channel 6	6	5	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Create
7	Channel 7	7	6	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Create
8	Channel 8	-	7	1	MIN	HDMI	True	(0,0,0x0)	(0,0,0x0)	0x0	Parameters Setting
9	Channel 9	9	8	1	H26x	IP Stream	True	(0,0,0x0)	(0,0,0x0)	0x0	Channel No. 1
10	Channel 10	10	9	1	H26x	IP Stream	True	(0,0,0x0)	(0,0,0x0)	0x0	
											Card ID: 0
											Machine ID: 🕇 🍦
											Card Type: MIN
											Card Type. Will 4
											Source Type: HDMI 🛛 👻
											Channel Status: Open Channel
<										>	Confirm Cancel

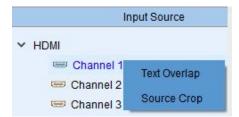
#### Input Source Management

On the left side of the software interface, there is a input sources list. As shown below. Select one input signal and drag it to the right side of the display area to realize signals switching. Double-click the input signal to change its name.



#### Input source setting

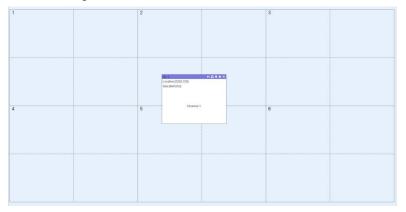
Right click the input source, it will pop up a sub-menu for input source setting. Such as text overlap in inputs and input source cropping.



## 4.4 Video Window Operation

#### Open video window

Press and drag the left mouse button in the operation interface to create a rectangle window, as show in the figure below.



#### Adjust video window size and position

Move the mouse pointer on the video window, then press and drag it to move the window to an appropriate position. Move the mouse pointer to the bottom right of the window, and then drag it to change the window size when it turns into a two-way arrow.

#### Window menu operation

X

+

There are five menus at the top of each window. Its available for users to do windows operation. The black full line in operation area represents screen frame. The dotted line represents blocks in single screen unit.

Close: Close the current video window

**Top and Bottom:** Change window level to be on the bottom or the top.

**Full screen display:** Click the menu to realize current operation window to be displayed in the entire video wall. Click this button again, it will return to previous size.

1 Indexes (1) United (1) Down (1)	2	3	RA ANALASIANA
4	5	6	- Davi

**Return:** Click the menu, the operation window will be displayed fully in the single screen of the current upper-left angle.

Click sub-menu [Clear] of [Operation] menu, all the video windows will be deleted.

Click sub-menu **[New]** of **[Operation]** menu, video windows will be displayed in single screen of the video wall, as shown in the figure below.

and the second se		◆日手ま× №2		+ □ + ± × №		- <del>6</del> 8 4
ation (0,0)		Location (1920.0)		Lo	cation [3840,0]	
[1920,1080]		Size [1920,1080]		50	ze [1920, 1080]	
	Channel 1		Channel 1		Channel 1	
4		40日至ま× No.5		← [] Ŧ ± × No		68
ation (0, 1080)		Location [1920, 1080]			cation (3840, 1080)	
[1920,1080]		Size [1920,1080]		Siz	ze [1920, 1080]	
	Channel 1		Channel 1		Channel 1	
	California 1		Constitution		Citation	
		1				
		1				
		1				
		1				

Click sub-menu **[Lock]** of **[Operation]** menu to lock all video windows, and all the windows cannot be moved but the user can open a new window on it.

Click sub-menu [Unlock] of [Operation] menu to unlock all the windows.

Click sub-menu **[Initial mode]** of **[Settings]** to select the window layers for single screen before you operate the **New** function.

#### 4.5 Scene Mode Save/ Recall and Cycle

#### Scene Mode Save

Click the sub-menu [Save] in [Operation] menu to save current video wall layout.

The scene name can be edited.

Save Scene			×
	ID:	▲	
	10:	1 7	
	Scene Name:	Scene_1	
	Confirm	Cancel	

#### Scene mode recall

There are **[Scene Management]** menu at the bottom left interface.

Click the menu [Load] to recall the mode and choose [Confirm] to take it effect.

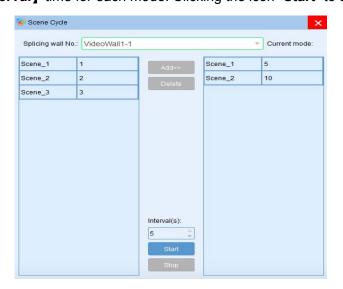
Click the menu [Delete] to delete the saved scene mode data.

	Scene Man	agement	
1	Scene_1	Load	Delete
2	Scene_2	Load	Delete
3	Scene_3	Load	Delete

cater 30.0)	-65++>	Disc 2 Location (1928.0)	40 + 8 + 3 + 8 0 m 3 Lecalus (3840.0)	4×214
a (1920, 1080)		Stee [1820, 1993]	Baak (1920),1000(	
	Channel 1	Channel 1	Ganoel 1	
callen (0, 1200) La (1100), 1080)	4.註●●)	1965 Looden (1920, 1980) Soc(1920, 1980) Soc(1920, 1980)	4-125 # 2 / Ann Lineter 2040 1000 Stul (160: 1000)	4- 22 B
	Channel 1.	Olassal 1	Channel 1	

#### Scene mode cycle

Click the sub-menu **[Cycle]** in **[Operation]** menu, then add the cycle scenes to the list and choose **[Interval]** time for each mode. Clicking the icon "**Start**" to start the cycle.



## 5. Advanced Function

### 5.1. IP Streaming Setting - Optional for Streaming card

Firstly set the IP input card type to 26X via Settings-Input-Card type and select the **[Source type]** as IP Stream. As shown in the following picture:

Set	tings Operation	1	Tools		Management	1					
(11) Connec	Setti	Preview ngs Menu	Intial N		aming S	CreenConfig Ou	1920x1080				
No.	Source Setting Name	Channel	Card ID	Machine ID	Card Type	Source	Status	Win Size	Con Size	Input	Video Wall
1 2	Channel 1 Channel 2	2	0 1	1	MIN MIN	HDMI HDMI	True True	(0,0,0x0) (0,0,0x0)	(0,0,0x0) (0,0,0x0)	0x0 0x0	VideoWall1   Parameters Setting
3 4 5	Channel 3 Channel 4 Channel 5	4	2 3 4	1 1 1	MIN MIN MIN	HDMI HDMI HDMI	True True True	(0,0,0x0) (0,0,0x0) (0,0,0x0)	(0,0,0x0) (0,0,0x0) (0,0,0x0)	0x0 0x0 0x0	Device Source 10
6 7	Channel 6 Channel 7	6 7	5 6	1	MIN MIN	HDMI HDMI	True True	(0,0,0x0) (0,0,0x0)	(0,0,0x0) (0,0,0x0)	0x0 0x0	Create
8 9 10	Channel 8 Channel 9 Channel 10	9	7 8 9	1 <mark>1</mark> 1	MIN H26x H26x	HDMI IP Stream IP Stream	True True True	(0,0,0x0) (0,0,0x0) (0,0,0x0)	(0,0,0x0) (0,0,0x0) (0,0,0x0)	0x0 0x0 0x0	Parameters Setting Channel No. 9
							<u></u>	<u></u>			Card ID 8 0 Machine ID 1 0 Card Type H26x * Source Type IP Stream * Channel Status 7 Open Channel
<										3	Confirm Cancel

Select the sub-menu [IP streaming] of [Settings] menu, the interface as shown below.

IP Streaming Inputs		Sele	ectAll	Select None	Inverse	Add	Delete				Searc	hIP	Clear IP
Channel 9		-											
Channel 10		NO.	Check	К			IP Stream	ming Address					Add
Channel TU		1		192.168.3.11									
				192.168.3.10									
		3		192.168.3.12									
		4		192.168.3.15									
		Start IF	1	1	IP 192.168.0.2			Password	admin S	uffix			Batch Ad
		NO.	Check	k		IP Streamin	ng URL			Iser Nam	Password	Preview	Delet
	*1 2*2 3*3 4*4	1		rtsp://192.168.3	3.11:554/Stream	ing/Channels/10:	2?transport	mode=unicas	t&profile=Prof	il admin	abc12		
	rtsp:// admin:abc123456@192.168.3.1	2		rtsp://192.168.3	8.10:554/stream	1?usemame=ad	min&passw	vord=0659C79	992E2689623	admin	abc12		
	stream1?us emame=admin&password=065	3		rtsp://192.168.3	8.12:554/cam/re	almonitor?chann	el=1&subtyp	oe=0&unicast	=true&proto=0	D admin	abc12		
ofile_2	7FAFE88364	4		rtsp://192.168.3	8.15:554/cam/re	almonitor?chann	el=1&subty	oe=0&unicast	=true&proto=0	D admin	abc12	Verify	De
tsp:// rdmin.abr123456@1921683:	rtsp:// admin:abc123456@192.168.3.1 cam/realmo.nitor?												

Note: In this interface, you need to click **[Search IP]** first. The process takes about 1 minute to search the IP streaming cameras which on a same network segment with the control computer. The software will list the searched camera IP address in the blank space above. Then manually add other IP streaming cameras that need to be displayed on the video wall to the blank space below. All the camera IP address are different but the administrator account and password can be repeated.

Select the display mode and drag the camera signals to the window. Then click **[Save]** and **[Update all]**. Finally restart the controller.

Right clicking the IP streaming signal, it will appear the display mode and network setting. The user can change the display mode and modify IP input card address here.

IP Streaming			Network	×
Channel 9	Split Mode 🕨	Show 1x1		
Channel 10	Network	Show 1x2	IP Address: 192.168.3 .200	Update
		Show 2x1		
		✓ Show 2x2	SubnetMask: 255.255.255.0	Update
		Show 3x3	Gateway: 192.168.3 .1	Update
		Show 4x4		

#### 5.2 Preview and Echo - Optional for Preview Card

Click the sub-menu [Preview] of [Settings], the software interface as shown below.

**Search:** Search the preview board IP address.

Clear: Clear the selected echo board IP.

Board ID: Preview board ID.

Display mode: 1 \* 2, 2 \* 2, 3 \* 3, 4 \* 4

Preview board type : 2 to 4 by default

Modify IP: Modify the preview board IP address, gateway, etc.

Setting: Set the display mode to be effective.

Channel selection: There are 4 sub-channels and each sub-channel corresponds to 4

display layout, that is the input signals number each sub-channel can echo.

Application: Input signals are arranged on the channel selection in the lower right

corner according to requirements.

Reset: Clear all preset echo channels.

		Search	Board IP	192.168.0	.231	▼ Cle	ar
NO.		Boards IP	Board ID	17		4	
	192.168.0.231-17		Bound ib	<u> </u>		<b>V</b>	
2	192.168.0.137-13		Mode:	2*2		*	
			Board Type:	🖲 2 to 4	🔵 4 to 4		
			IPSetting			Setti	ing
N		1	IPSetting			Setti	ing
	iuli hannel 1	Channel SubChannel-1 🔻 🗹 El			Rese	_	
c c	hannel 1 hannel 2	Channel SubChannel-1 • I E			Rese	_	
C C C	hannel 1 hannel 2 hannel 3	Channel SubChannel-1 V Er		• 	Rese	_	
0 0 0	hannel 1 hannel 2 hannel 3 hannel 4	Channel SubChannel-1 V Er		• 	Ress Channel 2	_	
с с с с	hannel 1 hannel 2 hannel 3 hannel 4 hannel 5					_	
с с с с	hannel 1 hannel 2 hannel 3 hannel 4 hannel 5 hannel 6					_	
с с с с с	hannel 1 hannel 2 hannel 3 hannel 4 hannel 5 hannel 6 hannel 7					_	
с с с с с с	hannel 1 hannel 2 hannel 3 hannel 4 hannel 5 hannel 6					_	
с с с с с	hannel 1 hannel 2 hannel 3 hannel 4 hannel 5 hannel 6 hannel 7					_	

After the setting, open the input source preview.

Input Source Management		
Input Source Preview	Preview	Echo
Scene Managements	Video (	

## 5.3 Screen Control - Optional for RS-232 Screen

Control Clicking the sub-menu [Control] in menu [Operation], it will show as below.

Select the **[Load]** or **[Close]** to power on or power off the video wall display.

Sc	Control reen Control		
S	creen control		×
	screen1	screen2	SelectAll
	screen3	screen4	Cancel All
	screen5	screen6	Load
			Close
			Spare Use 1
			Spare Use 2
			Spare Use 3
			Spare Use 4

	Text Bezel Co Common Too	and the second	Management
Video Wall	19		
COM Setting	18	*	Baud Rate: 115200 * Set
Existing Protocols     Custom     Custom Command     Screen Power On Co	Send HEX (		Text Command Interval(ms): 1 +
ππ			πσ
Spare User 1			Spare User 2
Spare User 3			Spare Use 4
Add New Protocol	Protocol Name	4	

#### Screen control setting

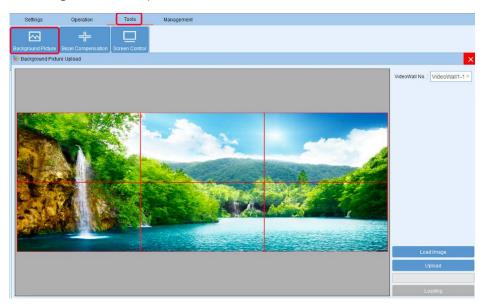
The user can load the existing screen control protocol or custom control protocols.

The custom protocol should be sent in HEX or character.

## 5.4 Background Image - Optional for Background card

[Load] the background picture and click [Upload]

Clicking [Loading] after the Upload finished. Then restart the controller.



## 5.5 Scrolling Text - Optional for Background card

Set the font display position, color and background color, scrolling speed or no scrolling.

Then click Upload and Apply.Restart the device after the setting is finished.

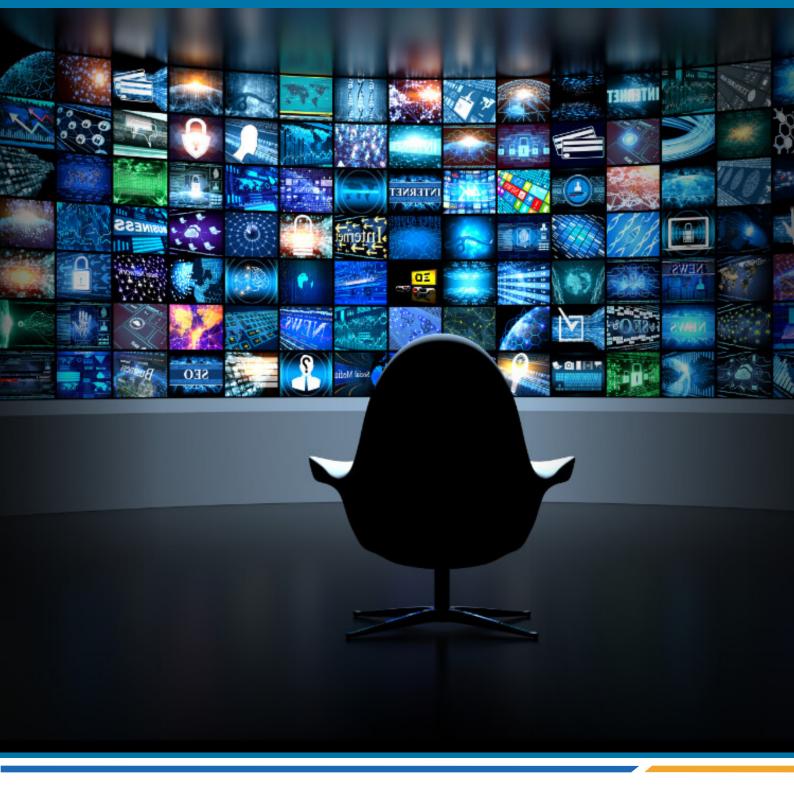
	Management		2
		VideoWall No.: —Text Parameter Model Horizontal Start Verical Start Width Height _ Scroll Speed	VideoWall1-1
Banner Test		Text Setting Position X: Position Y: Banner Test	0
		Center Horizontal	
			cyan v

Note: The background image and text can only controlled by LAN port.

#### 5.6 User Right Setting

User can add account and set up account rights in Management Tabs. Right click on admin and click [Add User] => Set up new account with rights. Set up password and click [Confirm.

Settings	Operation	Tools	Management			
RR ser Management Software	Import File Export File Config File	English	About			
	😵 User Rights Manag	ement				
Source		User	Nameadmin			
HDMI	✓ admin user	Add Us	ser ser:admin			
📟 Chann			Save Restriction		ect All	Cancel All
📟 Chann	1			58	PCLAII	CalicerAli
📟 Chann		[	Permission Assigment The software function selection	License File	Export File	Import File
Chann			About			
Chann						
Chann Chann	1		Video Wall	🗹 Input	CBD Setting	Background Picture
Chann			Text Overlap	Add Resolution	Initial Mode	Screen Control Setting
📟 Chann			Color Adjust	Signal Preview	Scene Cycle	Change Resolution
📟 Chann	e		Bezel Compensation			
📟 Chann	e					
📟 Chann	e	1	/ideoWall No.: VideoWall 1			<ul> <li>Setting</li> </ul>
			Save Scene	Scene Recall	Delete Scene	
			V New	🖂 Clear		
			Open Window	Close Window	Channel Switch	Move Window
		L				
			Change Password			
			-	New Password:	Confirm Password:	Confirm
		(	Jiu FassWolu.	New Fassword.	Commin PassWord:	Contirm





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