TVWall User's Manual (for WindowsXP/2003/Win7/Vista)

Document edition:V4.0

Document suit for all of the NVS and NVD made in our company.

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Preface

Thank you for using our products, TVWall also called TVwall center management software. We use it to implement the function of digital matrix. If the monitor is connected to the TVWall, you can send the audio and video from IPC, DVS or FTP to it. By using this software, you can easily to manage the videopoll and sencepoll, what's more, its interface is friendly and it is easy to use. It is convenient for you when applied to large remote video applications.

Statement :

- Contents in this manual may be different from the edition that you are using. Should any unsolved problem occur given that the product is used according to this manual, please contact our technical support department or your product suppliers.
- 1 The content of this manual may be updated at irregular intervals without prior notice.

Readship:

This manual is suitable for engineers as follow:

- I System planning person
- I Support and maintenance person
- I Administrator
- I User

Note :

- NVS mentioned in the manual refers to Network Camera or Network Video Server.
- NVD mentioned in the manual refers to Network Video Decoder.
- I Click: Press the left mouse button once.
- I Double-click: Press the left mouse button twice.
- "[]":Window name, menu name and datasheet.
- I DVS : Digital Video Server
 - NVS: Network Video Server
 - IPC: Network Camera
 - IPCamera: Network Camera
 - NVD: Network Video Decoder

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1 About TVWall

Main functions of TVWall:

Can manage 360 TV scenes at the same time.

Can manage 360 NVD at the same time.

Support videopoll management.

Support scenepoll management.

Listen and call.

Preview.

PTZ control.

...

We use TVWall to implement the function of digital matrix. If the monitor is connected to the TVWall, you can send the audio and video from IPC, DVS or FTP to it. By using this software, you can easily to manage the videopoll and sencepoll, what's more, its interface is friendly and it is easy to use.

2 TVWall Installation

2.1 Software Environment

Operating system

32 bit Chinese/English Windows2000、Windows2003、WindowsXP、Win7、Windows Vista and 64 bit Chinese/English Windows2000、Windows2003、WindowsXP、Win7、Windwos Vista

Recommended Allocation of Hardware Environment

CPU: Pentium 2.6GMhz

Menory:1G

Graphics Card: Nvidia Geforce FX5200 or ATI RADEON 7000(9000) 128M <graphics card have to support scaling of hardware >

Audio Card: Must be prepared when use the listen and call function.

Software Environment

DirectX8.0 and above editions.

TCP / IP Network protocla

Supported Resolution

Support 1024*768、1280*600、1280*720、1280*768、1280*800、1280*1024、1440*900、 1680*1050、1920*1080、1920*1200.

System Requirment

If you want to install TVWall on your PC, its graphics card has to support ICON color converting and scaling. We tested these graphics card: Nvidia Tnt/Tnt2、Geforce、Mx200/400/420/440, Fx5200/5600, ATI Radeon 7000/7200/7500/8500/9000/9200/9500/9600, MatroxG450/550, INTEL845G/865G。Note: Driver of graphics card have to support scaling of hardware.

2.2 Software Installation

Run the TVWall v4.0.1.1exe from the location you saved it, then will pop up the dialog box as follow:

InstallShield Wizard
Choose Destination Location Select folder where Setup will install files.
Setup will install TVWall V4.0.1.1 in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\TVWall\TVWallV4.0.1.1
InstallShield
< <u>B</u> ack <u>Next</u> ≻ Cancel

Follow the installation wizard, click **[Next]** until appear **[Finish]**, click **[Filish]** to exit the installation wizard. The default installation directory is C:\Program Files\TVWall\TVWall\V4.0.1.1.

3 Software Operation

3.1 Software Main Interface and Function Introduction

System menu	Imitate TVWall	l		Mode cut list
K Set Decoder manage	Tall nanage Videod oll nanage Scei	winge and the second se		00
Current Wall: df	Becoder : (15988 (192, 168.)	33.173) Video: IPCam10001	SaveScene	Video Scene Vall
Decoder: XD5900(192.168.33.179) Video.	Ļ	Decoder: XD5988(192.158.33.173) Video:IPCam 10001		→ Vides → →
Decoder Video		Decoder: Video:	PTZ control Video Preview	

Operate steps :

- 1. Set decoder devices
- 2. Set TVWall mode(relate the decoder device to the monitor number)
- 3. Set encoder devices
- 4. Set videopoll
- 5. Set scene and scenepoll
- 6. Start the video connection or poll

3.2 Decoder manage

Select [Decoder manage], pop up a window as follow:

	Decode	er Manage		
Decoder Edit				
Noma	TP Address	Subpat	Port	Мас
	100 100 00 170		5000	00-74-00-40-01-01
D5900(192.168.33.1(9)		255,255,255,0	5000	00-7A-20-A0-01-01 00-7A-20-AC-01-0C
D3500 (152, 100, 33, 113)	192.100.33.113	200.200.200.0	3000	OUTA ZU AC OI OC
·				
			1	
	Delete	Close		
	Delete	Close		
Decoder Search	Delete	Close		
Decoder Search	Delete	Close		
Jecoder Search	Delete	Close		
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Add	 Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	 Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	 Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC
Decoder Search	Delete Search IP Address	Close Add Subnet	Port	MAC

- 1. Search decoder devices, and add them into the system.
- 2. If you want to delete the decoder device, select it and click [Delete].
- 3. At last click [close] to save the current settings.

3.3 Wall manage

Select [Wall manage], pop up a window as follow:

TVWall User's Manual Wall Manage X -New Wall Edit-Name Count Name: df Type: 2 2 -Х • Add Delete -Monitors Config Num Device name 1 XD5900 (192, 168, 33, 179) 2 XD5988 (192, 168, 33, 173) 3 4

1. Edit new wall name, choose the type of wall, there are several types: 2*2, 2*3, 3*3, add new

TV wall.

- 2. Choose the TV wall name and click [Delete] to delete it.
- 3. In [Monitors config], you can choose the encoder device related to the monitor.
- At last close the window to save the current settings. 4.

3.4 Encoder manage

Select [Encoder manage],pop up a window as follow:

Encoder Edit-		Encoder <i>I</i>	lanage			X
Name	IP Ad	dress Port	Gateway	Chann	Туре	Device
IPCam10001	192, 168, 33	3. 120 5032	192. 168. 33. 1	1	TCP	10001
EPC am 10001	192, 168, 33	3. 45 5000	192.168.33.1	1	TCP	10001
[PCam384304	192, 168, 33	3.124 5000	192.168.33.1	1	TCP	384304
C Encoder Search-	Edit	De	lete	Close		
Encoder Search-	Edit	De Search	leteAdd	Close		
<↓ Encoder Search- Name	Edit Chann	De Search IP Address	Lete Add Subnet	Close Gat	eway	Port
Encoder Search- Name	Edit Chann	De Search IP Address	lete Add	Close Gat	eway	Port
Encoder Search- Name	Edit Chann	De De Search IP Address	Lete Add Subnet	Close Gat	eway	Port
≪】 Encoder Search- Name	Edit Chann	De Search IP Address	Lete	Close Gat	eway	Port
< Encoder Search- Name	Edit	Jearch IP Address	Lete Add Subnet	Close Gat	eway	Port
Encoder Search- Name	Edit	June De Search JP Address	Lete Add Subnet	Close Gat	eway	Port
Encoder Search- Name	Edit Chann	June De De Search JP Address	Lete Add Subnet	Close Gat	eway	Port
Encoder Search- Name	Edit Chann	June De De Search June June June June June June June June	Add Subnet	Close	eway	Port
Encoder Search- Name	Edit	De Search IP Address	Lete Add Subnet	Close Gat	eway	Port

- 1. Click [Search] to search encoder device, choose the device you want to add and click [Add] to add it in the system.
- 2. Choose the encoder in [Encoder Edit] and click [Delete] to delete it.
- 3. Choose the encoder in [Encoder Edit] and click [Edit], then will pop up a window as follow, you can edit the chosen encoder:

r <u>v</u> Wall	User's Manual	
	Encoder Edit	x
⊢S	t video server	_
	Server Name PCam384304	
	Open DDNS 🔽	
	Server IP 192.168.33.124	
	Ded Sooo	
	Port 5000	
	Channel Number 1	
	User name admin	
	Password *****	
	evice Channel	
Ch	annel 1 💌 Stream type Preferred Stream 💌	
	Camera Description CAM-1	
	Default OK Cancel	

In this window, you can modify the encoder's server name, port, user name, password and so on.

4. At last close the window to save the current settings.

3.5 Videopoll manage

Select [Videopoll manage],pop up a window as follow:

	Video Switch Mana	ge	x
-Video Switch		dit fd	
		ame • 1	
		Add	Delete
Video Config	Devri de Deve	Cheppel	Tipe(Sec)
1	IPCam10001	1	10
2	IPC am 384304	1	10
3	IPCam10001	1	10
4		1	10
5		1	10
		-	10
6		1	10
6 7		1	10 10 10
6 7 8		1 1 1 1	10 10 10 10
6 7 8 9		1 1 1 1 1	10 10 10 10 10
6 7 8 9		1 1 1 1 1 1	10 10 10 10 10

VideoPoll manage : Send video to decoder to output decoded video.

Edit name and click [Add], you can create a new videopoll. After that, you can see a list including 100

numbers, you can choose camera by click each line, also can set the channel and time.

3.6 ScenePoll manage

Select [ScenePoll manage], pop up a window as follow:

		Scene Switcl	h Manage				X
-Scene Switch- Name			F Edit-				
gfg			Name:	bvb			
gighg							
					_		_,
				Add		Delete	
-Scene Config-							
-Scene Config- Num		SceneName		ime(sec)	[
-Scene Config- Num 1	d	SceneName		ime(sec)			
Scene Config- Num 1 2	d dsf	SceneName	10	ime(sec)			
Scene Config- Num 1 2 3	d dsf	SceneName	10 10 10	ime(sec)			
-Scene Config- Num 1 2 3 4	d dsf	SceneName	10 10 10 10 10	ime(sec)			
Scene Config- Num 1 2 3 4 5	d dsf	SceneName	10 10 10 10 10 10 10	ime(sec)			
Scene Config- Num 1 2 3 4 5 6	d dsf	SceneName	10 10 10 10 10 10 10 10	ime(sec)			
Scene Config- Num 1 2 3 4 5 6 7	d dsf 	SceneName	10 10 10 10 10 10 10 10 10 10	`ime(sec)			
Scene Config- Num 1 2 3 4 5 6 7 8	d dsf 3 3 4 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	SceneName	10 10 10 10 10 10 10 10 10 10 10 10	ime(sec)			
Scene Config- Num 1 2 3 4 5 6 7 8 9	d dsf 	SceneName	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ime(sec)			
Scene Config- Num 1 2 3 4 5 6 7 8 9 10	d dsf 3 3 4 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3	SceneName	10 10 10 10 10 10 10 10 10 10 10 10 10 1	'ime(sec)			

ScenePoll manage : Send different scenes in a group to decoder to output decoded video.

Edit name and click [Add], you can create a new scenepoll. Select the scene name, click [delete] to delete it. After add the scenepoll successfully, you can see a list including 100 numbers, you can choose scene by click each line, also can set the time.

3.7 Local Set

Select [Local Set], pop up a window as follow:



You can set the software's language and examine its edition in this interface.

3.8 Operation

The operation of video, scene, wall are shown as follow:



Click "+" to expand folders, then will appear the menu as Figure A. You can drag the video or video switch that you need to the corresponding monitor directly, also you can right click the video you want to preview, choose "open channel", "close channel", "real-time view" and "stop view".

Scene:

Click "+" to expand folders, then will appear the menu as Figure B. You can double click scene to decode of it, and double click scene switch to realize polling between different scenes.

Wall:

Click "+" to expand folders, then will appear the menu as Figure C, double click wall to open it.

3.9 PTZ Control

When the previewed device is dome, you can control PTZ (including zoom, focus, aperture, PTZ position, set and call preset) in this interface:



3.10 Operate NVD

Right click the monitor on the analogue TV wall, if the device in this window is decoder, will pop up a menu as follow:



[Login NVD] If you want to set and control the NVD, you have to login it.

[Set NVD**]** Enter the setting interface.

[Control NVD] Enter the controlling interface.

[Video Parameter] In this interface, you can adjust light, chroma, saturation and contrast. [On wall]

Decode and output the video in the current window.

[Down wall] Stop decoding and output the video in the current window.

3.10.1 Control Decoder

Click [Control NVD] enter to the interface as follow:

Decoder control						
Picture Single Four	Select Channel					
Menu	Screen					
Show Close	Title Open Title Close Refresh					
Audio	Link					
Open Close	Start Single Start Loop Stop All					

You can choose picture shown mode, display menu or not, open or close listen, select channel, set screen and link.

3.10.2 Set NVD

3.10.2.1 System setting

Click [Set NVD], you can enter to the interface of decoder parameter set, first enter to [System], the interface shown as follow:

Decoder Parameter Set 🛛 🕱							
System Network Alarm Ou	tput Alarm Info Address	sBook Single Connect	Loop Connect ViewAreSet				
System parameters							
Name	KD5988	ID	7758				
Machine Model	HH57-D 💌	Software Version	2.0.0.1				
Language	Chinese 💌	Remote Control ID	5				
Output Mode	HDMI 💌	Monitor					
Standard	720P60 💌	Status display					
RS485 Address	0	Image Quality	Good				
RS485 Function	Transparent data 💌	RS485 Baud rate	2400 💌				
		Set					
Decoder clock							
Decoder clock 2011- 3-29 11:35:32 Sync with PC Set							
Decoder Update	- Decoder Update						
Update file			Update				

[System parameters] You can set decoder name, language, output mode, standard, RS485

parameters, ID, remote control ID, also can check machine model and software version.

[Output mode] You can set output mode of decoder here, HD decoder has four output mode:

VOUT—PAL,NTSC;VGA—1280*1024_60;

YpbPr-720P60,1080I50,1080I60; HDMI-720P60,1080I50,1080I60;

Decoder has only one output mode: VOUT-PAL,NTSC;

[Status display] You can choose 1 or 4 mode to display video on TV wall.

[Image Quality] You can choose "Normal" or "Good".

[Decoder clock] You can modify decoder time here, choose "Sync with PC", the decoder time will be synchronize with PC's.

[Decoder Update] Click "Update file" and choose the right file, click "update" then you can update the decoder.



Notice : Don't cut off the power and internet connection while

upgrading.

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3.10.2.2 Network setting

			De	coder P	arameter Set			X
System	Network	Alarm Output	Alarm Info	AddressE	ook Single Connect	Loop Connect	ViewAreSet	
								1
		Port			5000			
		IP			192.168.33.173	-		
		Subnet	tmask		255.255.255.0			
		Gatewa	ау		192.168.33.1			
		Preferr	ed DNS		202 . 96 . 134 . 133			
		MAC			00-7a-20-ac-01-0c			
					Set			1

Click [Network], you can enter to the interface shown as follow:

Set network parameters: port, IP, subnet mask, gateway, preferred DNS,MAC.

Note: After revise and save parameters, the device will restart. If it

is applied in LAN, please pay attention to avoid conflict between its IP

address and the IP addresses of other devices or PC in the LAN.

3.10.2.3 Alarm output setting

R

Click [Alarm output], you can enter to the interface shown as follow:

TVWall	User's	Manual

	Decoder Parameter Set
System Network	Alarm Output Alarm Info AddressBook Single Connect Loop Connect ViewAreSet
	Alarm Output
	Sensor Alarm
	Sensor Alarm Output 🔽 1 🔽 2 🔽 3 🔽 4
	Video Motion Alarm
	Move Alarm Output 🔽 1 🗖 2 🗖 3 🗖 4
	Video lost Output 🔽 1 🔽 2 🔽 3 🔽 4
	RFSensorAlarm
	RFSensor Alarm Output
	- NetErrAlarm
	NetErr Alarm Output V 1 2 3 4
	Set

When the encoder which is related to the current decoder alarming(sensor alarm, video motion alarm, video lose alarm, RFsensor alarm, neterralarm),you can decide whether the decoder output alarm or not.

3.10.2.4 Alarm Info

Click [Alarm Info], you can enter to the interface shown as follow:

Decoder Parameter Set							
System Network Alarm Output Alarm Info AddressBook Single Connect Loop Connect ViewAreSet							
_Alarm information:							
IP	Port	Alarm Time	Alarm Sensor	Alarm Move	Alarm Lost		
192.168.33.1	20 5000	2011-02-19 12:10:11	1-1 2-0 3-0 4-0	1-0 2-0 3-0 4-0	1-0 2-0 3-0 4-0		
192.168.33.1	20 5000	2011-02-19 12:18:09	1-1 2-0 3-0 4-0	1-0 2-0 3-0 4-0	1-0 2-0 3-0 4-0		
	-						
		-			-		
					2		
	Search						

Click "search", if the encoder which is related to the current decoder alarmed, [Alarm information]

will lists all of the alarm information.

3.10.2.5 AddressBook

Num	Name	URL	Port	Channel	Type		
1							
2							
3							
4						Number	0
5							F.
6							
r D							
0						Name	
5 10							
11							
12						URL	
13							
14					L L		
15						Pout	-
16						Fort	p
17							
18							
19							
20						Channel	
22							
23							
24							
25						Protocol	_
26							
27							
28							
29							
< -	-		,				
Set							

Click [AddressBook], you can enter to the interface shown as follow:

Click "AddressBook", you can inquire about the address information of decoder. Select any record in the list and you can modify the content in [Address Book Edit].

3.10.2.6 Single Connect

Click [Single Connect], you can enter to the interface shown as follow:

	Decoder Parameter Set				
System Network Alarm Out	put Alarm Info Addre	essBook Single Connect Loop Connect ViewAreSet			
Auto reconnection 🥅	Talk 🔽				
	Name	IPC			
	URL	192.168.33.120			
	Port	5000			
	Channel	All channel			
	Protocol	ТСР			
	User name	admin			
	Password	admin			
		Set			

Set parameters of encoder which is linked with current decoder: encoder name, IP, port, channel,

protocol, user name, password and auto reconnection.

3.10.2.7 Loop Connect

Decoder Parameter Set х System Network Alarm Output Alarm Info AddressBook Single Connect Loop Connect ViewAreSet Loop Connect Edit Num Name URL Channel Type Port **192, 168, 33, 45** 192, 168, 33, 14 5000 AllChannel Multi. Number 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 223 24 25 26 27 28 29 xx Name 192.168.33.14 URL 5000 Fort Channel 1 • Protocol Multicast 💌 admin User Password admin Time 4 Search Set

Click [Loop Connect], you can enter to the interface shown as follow:

Click "Search", you can inquire about the loop connect information of decoder. Select any record in the list and you can modify the content in [Edit].

3.10.2.8 ViewAreSet

Click [ViewAreSet], you can enter to the interface shown as follow:

	Decode	r Parameter Set		×
System Network Alarm Output Alarm I	nfo Addre	ssBook Single Conn	ect Loop Connect ViewAreSet	
	Х	0	•	
	Y	0	-	
		1.		
	Width	1280	-	
	Height	720	-	
	rieigin	120		
		Set		

You can set the display region dimension by choose values of X, Y, Width and Height.

Appendix 1 Default Parameters of Decoder

The default network ports of decoder are:

TCP	5000	audio/video data transmission port
UDP	5000	audio/video data transmission port

Default network parameters

Cabled Network: IP Address: Subnet mask: Gateway:	192.168.55.200 255.255.255.0 192.168.55.1	Data port:	5000	

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TVWall User's Manual Appendix 2 Default Parameters of Encoder

	80	Web port	
ТСР	5000	Communication port, audio/video data transmission port,	
		talkback data transmission port	
UDP	5000	Audio/video data transmission port	
Multi-cast	Multicast original port + channel number		
port			

The default network ports of encoder are:

Default network parameters

Cabled Network:	
IP Address: 192.168.55.160	Data Port: 5000
Subnet mask: 255.255.255.0	Web Port: 80
Gateway: 192.168.55.1	DHCP: Of f
Wireless Network:	
IP Address: 192.168.1.160	Frequency: Auto
Gateway: 192.168.1.1	Mode: Auto
Subnet mask: 255.255.255.0	

Default user information:

Administrator's name: a dmin	Password: a dmin			
Username: user1	Password: user1			
Username: user2	Password: user2			
Note: Username and password are case sensitive.				

1、 Can't visit DVS through TVWall.

Possible reason: Network is disconnected.

Solution : Connect your PC to network, checking whether it works properly or not. Check whether there is cable failure or network failure caused by PC virus, until PCs can be connected with the command of Ping.

Possible reason: IP Address has been occupied by other devices

Solution : Stop the connection between IP camera and Network, hook up IP camera to PC separately, reset IP address according to the proper operations recommended.

Possible reason: IP addresses are in different subnets.

Solution : Check IP address, subnet masking address of the DVS and the settings of

Gateway.

Possible reason: Web port has been modified

Solution : Contact Network Administrator to obtain related information.

Possible reason: Unknown

Solution : Press RESET to restore default settings then connect it again, the default IP address is 192.168.55.160, subnet mask is 255.255.255.0

2 The color of images is abnormal (green or other colors)

Solution: Sometimes IP camera images cannot display properly for the difference between

Graphics Cards, the images appears to be green or other colors, then you should run the programme Config.exe (or run C:\windows\system32\Config.exe)to set the following parameters of display buffer: auto-detection, used display card memory or system memory, then reopen IE and connect IP camera.

3 There is no sound while monitoring

Possible Reason: No audio input connection

Solution: Check audio connection of the host

Possible Reason 2: the audio option of IP camera is off

Solution: Check audio parameter settings to see if you have opened the audio.

4. Can't get good effect of audio.

Possible Reason: When you hear lot of noise and distortion is very serious, please check whether the audio input type is line in. It is often caused saturation distortion when the input type of audio is not matched with server's.



Solution: Adopt proper line in type according to the DVS's acceptable range.

5. Normal data can't through the switch.

Possible Reason:

- 1. If you use second layer switch, the IP address is wrong.
- 2. If you use third layer switch, maybe not bind the port and MAC address.
- 3 . Maybe didn't consider the server when configured the rule of firewall.

Please ping the device's address before check network fault, watch the returned information is important. If it is impassability, it means that there is network fault.

If the IP address and the MAC address have been bound, you have to set parameters in switch, add a new bind between IP address and MAC address. If didn't consider the server when configured the rule of firewall, Please review the NVS's ports, and config the switch again.

