

User Guide (VN Ver. 0.91)

Model: D4VN, D8VN, D16VN

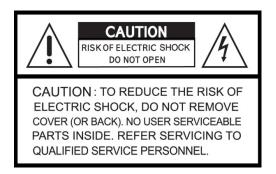
4, 8 & 16 Channel HD TVI Digital Video Recorder



About the User's Guide

Before operating the unit, please read this user's guide thoroughly and retain it for future reference.

Cautions



Explanation of Graphic Symbols



This symbol indicates the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



This symbol indicates the presence of "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock, property damage, personal injury, or death.

WARNING

To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

CAUTION

Changes or modifications not approved by the manufacturer will void the warranty of the product. Using an incompatible battery may increase the risk of fire or explosion.

Replace only with the same or equivalent type battery recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

These Precautions must be followed for Safety Reasons



- Do not use if the unit emits smoke.
- Do not disassemble the unit.
- Do not place any heavy or sharp objects on the unit.
- Do not place on uneven surface.
- Do not expose to shock or vibration.
- Do not move the unit when the unit is powered on.
- Do not block, and allow dust to accumulate in the air vents.
- Do not restrict airflow of the unit; doing so can damage the unit.
- Only qualified and experienced personnel should perform installation and servicing.
- Turn off the power of the DVR when connecting Cameras, Audio or Sensor Cables.
- The manufacturer is not responsible for any damage caused by improper use of the product or failure to follow instructions for the product.
- The manufacturer is not responsible for any problems caused by or resulting from the user physically opening the DVR for examination or attempting to repair the unit.
- The manufacturer may not be held liable for any issues with the unit if the warranty seal is removed.

Product Components

Please make sure the following components are included as specified below.

DVR Unit	
Remote Control	
Battery1.5V (AAA x 2EA)	(ĝ =)p (ĝ =)
Quick Start Guide & Quick User Guide	Control Contro Control Control
Mouse	
Software & Manual CD	
Adaptor (DC12V 3A) & Power cable (110V)	Star Barras

Specifications

	MOI	DEL NAME		D4VN	D8VN	D16VN	
Video	Input	Number of	Channels	4	8	16	
		Camera Ty	/pes	960H, HD-TVI 1/2/3/4/5/8MP			
	Output	Main Moni	tor	VGA and HDMI		VGA and HDMI	
				(Max. 19	(Max. 3840x2160)		
		Sub Monite	or	CVBS or SPO	T (Selectable)	N/A	
Audio	Input	Local Input			4		
	Output	Local Output			1		
	Audio Coo	dec			G.711		
Alarm	Sensor In			4	4	4	
	Alarm Out	tput			1	1	
Serial	RS-232C				None		
	RS-485				1		
Recording	Compress	sion			H.265 / H.264		
			8MP@15fps	1920x2160 7fps	1920x2160 7fps	1920x1080 15fps	
			5MP@20fps	1280x1944 10fps	1280x1944 10fps	1280x1944 10fps	
	Local Re	esolution &	QHD@30fps	1280x1440 15fps	1280x1440 15fps	1280x1440 15fps	
	Frame Rate		QHD@15fps	2560x1440 10fps 2560x144		2560x1440 10fps	
			3MP@18fps	2048x1535 13fps	2048x1535 13fps	2048x1535 13fps	
			2MP@30fps	1920x1080 15fps	1920x1080 15fps	1920x1080 15fps	
	Recording	g Quality Gra	de		5 Levels	1	
	Recording	g Mode		Smart / Continuou	ıs / Motion / Sensor	/ Schedule /Manual	
	Pre Recor	rding			Max. 20 Minutes	3	
	Post Reco	ording			Max. 60 Seconds	S	
Playback	Search			EZ Se	arch, Date/Time, E	vent, Log	
	Multi-Dec	oding		1, 4	1, 4, 8	1, 4, 9, 16	
	Playback	Speed		x0.25, x	(0.5, x2, x4, x8, x16	5, x32, x64	
Backup	Media			USB d	rive, External HDD	, Network	
	File Format			JPEG, AVI, Proprietary Format and EXE			
	Huge Bac	kup			Yes (Max. 24 hour	rs)	
Storage	HDD		Capacity of 1 HDD	10TB			
			Internal HDDs	1			
			e-SATA		N/A		
	USB	USB Front		1			
			Rear		1		
User I/F	Input Met	hod		IR Remote C	ontrol, Mouse, Key	board Controller	
Network	Interface			100	/lbps	1Gbps	
	Dynamic DNS			Yes (Free Speco DDNS)			

	Dual Streaming	Yes
Features	Camera Control	OSD and PTZF Control via UTC
	Digital Zoom	Yes
	DLS (Day Light Saving)	Yes
	NTP (Network Time Protocol)	Yes
	S.M.A.R.T	Yes
	Internal Beep	Yes
	Multi-Language	Yes
	System Event Notification	Health, Restart, Shutdown, Panic Recording, Alarm,
		Motion, HDD Alert and email
Network	3G/4G Mobile Viewer	Speco Player (iPad / iPhone / Android))
Access	PC Web Viewer	Windows (IE, Edge, Chrome and Firefox)
	PC Client	SecureGuard CMS and SpecoTech Multi-Client Viewer
	Remote Setup and Upgrade	Yes
Power	Power Supply Voltage	DC 12V3A
Temperature	Operation	41° F ~ 104° F (5°C ~ 40°C)
	Storage	14° F ~ 122° F (-10°C ~ 50°C)
Humidity	Operation	20% ~ 80% (Non-condensing)
Weight	Unit Weight (Gross weight)	Approximately 4.35 lbs
Dimension	Unit Dimension (W x H x D)	11.8"x 2.0"x 9.9" (300 x 53 x 252mm)

Please note that specifications and unit exterior design are subject to change without notification.

Table of Contents

1.	Main Features	9
2.	Initial Boot up Process	10
	2-1. Initial Boot up and Basic Time Setup	10
	2-2. Setting Daylight Saving Time	11
	2-3. Setting NTP (Network Time Protocol)	12
	2-4. EZ Setup	15
3.	Name, Function and Connection	16
	3-1. Front Panel	16
	3-2. Connectors	17
	3-3. Remote Control	18
4.	Setting up the DVR	19
	4-1. Setup – Main Live Screen	19
	4-2. Setup – System Mode	20
	4-3. Setup – Record Mode	24
	4-4. Setup – Device Mode	27
	4-4-1. Digital Deterrent	28
	4-4-2. Keyboard Controller & PTZ Setup	29
	4-5. Setup – Display Mode	33
	4-6. Setup – Network Mode	34
	4-6-1. Network Types	35
	4-6-2. DDNS	35
	4-6-3. Network Port and Web Port	36
	4-6-4. Network Stream	36
	4-7. Setup – User Management Mode	38
	4-8. Setup – Storage Mode	41
	4-9. Setup - Config Mode	42
	4-9-1. Software Upgrade	43
5.	Live, Search and Playback	45
	5-1. Live View	45
	5-1-1. PTZ Control	48
	5-2. Digital Zoom in Live and Playback Screen	49
	5-3. Search Screen	49
	5-3-1. EZSearch	50
	5-3-2. Time Line Search	51
	5-3-3. Event Search	51
	5-3-4. Go To First Time	52
	5-3-5. Go To Last Time	52
	5-3-6. Go To Specific Time	
	5-3-7. Archive List	

	5-3-8. Log List	53
	5-4. Playback Mode	53
6.	Export and Back Up	55
	6-1. Still Image Backup onto USB Flash Drive	55
	6-2. Video Backup onto USB Flash Drive during playback	56
	6-3. EZCopy: Video Backup onto USB Flash Drive during playback	57
	6-5. Playback of Backup Video	58
	6-5-1. AVI Format	58
	6-5-2. NSF Format	59
7.	Network Access Using the Multi-Sites Network Viewer	60
	7-1. Overview	60
	7-2. PC Requirements	60
	7-3. Installation of the Program	61
	7-4. Live Window	62
	7-4-1. Main User Interface	62
	7-4-2. Control Buttons	63
	7-5. Search and Playback Window	64
	7-5-1. Main User Interface	64
	7-5-2. Main Control Panel	65
	7-5-3. SMART SEARCH	67
	7-6. Setup of SpecoTech Multi Client	69
	7-6-1. General	69
	7-6-2. Event	70
	7-6-3. Record	71
	7-6-4. Display	72
	7-6-5. Language	72
	7-6-6. About	73
	7-7. Remote Setup	74
	7-8. Operation	81
8.	Network Access Using the Web-Browser Viewer	90
9.	Network Access Using the Smart Phone Viewer	92
	9-1. App Viewer for iPhone	92
	9-2. App Viewer for Android Phone	
AP	PENDIX: Network Connection - LAN	98
AP	PENDIX: Network Connection – Internet and DDNS	. 100

1. Main Features

- Easy Record, Copy and Setup
- Easy Search by Thumbnail Preview
- Easy Copy
- Digital Deterrent function
- H.265 & H.264 high quality compression saves HDD space
- Simultaneous live view/playback while continuing to record/network transfer or backup
- Remote monitoring/recording/playback/configuration and control via internet
- 4 Channel Audio Recording
- Switch between low and high quality stream during simultaneous Continuous + Motion or Continuous + Sensor recording modes for storage optimization

NOTE: Under federal law, The Fourth Amendment to the U.S. Constitution, Title III of the Omnibus Crime Control and Safe Streets Act of 1968, as amended by the Electronic Communications Privacy Act of 1986 (18 U.S.C. § 2510, *et seq.*), and the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801, *et seq.*) permit government agents, acting with the consent of a party to a communication, to engage in warrantless interceptions of telephone communications, as well as oral and electronic communications.

- Automatic camera detection (Plug & Play)
- Covert camera operation provides enhanced security and administrator control
- Dynamically programmable recording priority, motion detection, alarms and scheduling
- Simple and Easy Graphic User Interface
- HDMI Output (Up to 3840 x 2160, 16Ch model)
- Password to secure access
- Network software supports 10/100/1000Mbps
- USB 2.0 port for video clip exporting and easy firmware upgrade via USB Flash Drive
- Exclusive File Format Backup and Player
- Variety of ways to Remote access via SecureGuard
 © CMS, SpecoTech Multi-Client Software, Web-Viewer, and Mobile App
- S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology for HDD)

2. Initial Boot up Process

2-1. Initial Boot up and Basic Time Setup

1. During the first boot up, the following logo and message will be displayed.



2. After the logo, select the language as specified below.

Change Your Password For Cyber Security !	
New select	
Confirm select	
Password Match	
ok	
	New select Confirm select Password Match

1) User has to set a password before using.

Can not use '1111' when the initial boot up password set.

But user can set '1111' as a password through [Setup > User Management > Password Setup]

2) DVR will not proceed when user put the password '1111'.

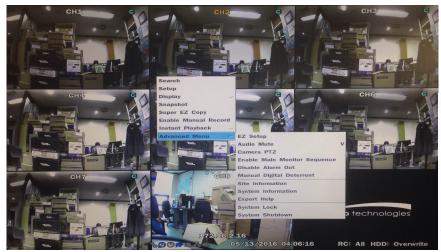
Initializing system It may take a few seconds or minutes to check the system	
90%	
Initialize Network Done	
Select EZ Setup	
Please select one of the options below.	
EZ Network for Network Setup	
○ EZ Record for Date/Time and Record Setup	
	next >> cancel

(EZ Setup Page Reference, Page 16 ~ 17)

2-2. Setting Daylight Saving Time

To enable Daylight Saving feature/NTP synchronization, take the following steps.

1. Enter the Setup mode. The default Username is "admin" and enter a password set on the initial boot-up process.



Search Setup Display Snapshot Super EZ Copy Enable Manual Record Instant Playback Advanced Menu

Login - Setup		
User ID	admin	_
Password		select
	ok	cancel

2. Go to Setup > System > Date & Time Setup

°¢	System			
0	Description		select	
	Language		english	-
×	Date Display Format		yyyy/mm/dd	-
Ţ	Date & Time Setup		select	
	Client Access		on	-
	NTP Setup		off	- select
	e-Mail Setup		off	- select
***	Unit Name		DVR	
	System Restart	ß	select	
	System Shutdown		select	
	EZ Setup		select	
	System Event Notification		select	
			Apply	Cancel

3. Select 'ok" from the Daylight Saving dropdown menu.

								_	
Time Display Format	24hour	24hour							
Time Zone	gmt -5:00 (montreal/	new	/ york)					-	
Daylight Saving	on	_			<i>r</i>			-	
Begin	mar	-	second	l	sun	-	2 h	-	
End	nov	*	first	·	sun	*	2 h	-	
Set Date & Time	6 7 29)	· / 2021		× 15 × :	6	- : 9	~	
							ok cano	el	

2-3. Setting NTP (Network Time Protocol)

1. Setup > System > NTP Setup > On > Select

° O	System		
0	Description	select	
	Language	english	-
	Date Display Format	mm/dd/yyyy	•
	Date & Time Setup	select	
÷	Client Access	on	-
	NTP Setup	on	- select
	e-Mail Setup	off	- select
3	Unit Name	DVR	
()	System Restart	select	
	System Shutdown	select	
	EZ Setup	select	
	System Event Notification	select	
		Apply C	ancel

2. Select the proper GMT Time Zone.

Primary SNTP Server	Pool.ntp.org	select
Secondary SNTP Server	Time.nist.gov	select
Time Zone	GMT -5:00 (Montreal/New York)	
Connection Mode	time	
Connection Period	03:00 AM	
	ok	cancel

	State	Standard Time	Daylight-Saving Time
AL	Alabama	GMT-6	GMT-5
AK	Alaska	GMT-9	GMT-8
AK	Alaska (Aleutian Islands)	GMT-10	NA
AZ	Arizona	GMT-7	NA
AZ	Arizona (Navajo)	GMT-7	GMT-6
AR	Arkansas	GMT-6	GMT-5
CA	California	GMT-8	GMT-7
СО	Colorado	GMT-7	GMT-6
СТ	Connecticut	GMT-5	GMT-4
DC	District of Columbia	GMT-5	GMT-4
DE	Delaware	GMT-5	GMT-4
FL	Florida	GMT-5	GMT-4
FL	Florida (W)	GMT-6	GMT-5
GA	Georgia	GMT-5	GMT-4
HI	Hawaii	GMT-10	NA
ID	Idaho (N)	GMT-8	GMT-7
ID	Idaho (S)	GMT-7	GMT-6
IL	Illinois	GMT-6	GMT-5
IN	Indiana	GMT-5	GMT-4
IN	Indiana (SW / NW)	GMT-6	GMT-5
IA	lowa	GMT-6	GMT-5
KS	Kansas	GMT-6	GMT-5
KS	Kansas (W)	GMT-7	GMT-6
KY	Kentucky (E)	GMT-5	GMT-4
KY	Kentucky (W)	GMT-6	GMT-5
LA	Louisiana	GMT-6	GMT-5
ME	Maine	GMT-5	GMT-4
MD	Maryland	GMT-5	GMT-4
MA	Massachusetts	GMT-5	GMT-4
MI	Michigan	GMT-5	GMT-4
MI	Michigan (W)	GMT-6	GMT-5
MN	Minnesota	GMT-6	GMT-5
MS	Mississippi	GMT-6	GMT-5
MO	Missouri	GMT-6	GMT-5
MT	Montana	GMT-7	GMT-6
NE	Nebraska	GMT-6	GMT-5
NE	Nebraska (W)	GMT-7	GMT-6

Table 2.3.1. GMT Time Zone

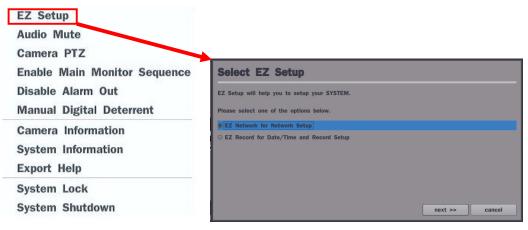
NV	Nevada	GMT-8	GMT-7
NH	New Hampshire	GMT-5	GMT-4
NJ	New Jersey	GMT-5	GMT-4
NM	New Mexico	GMT-7	GMT-6
NY	New York	GMT-5	GMT-4
NC	North Carolina	GMT-5	GMT-4
ND	North Dakota	GMT-6	GMT-5
ND	North Dakota (W)	GMT-7	GMT-6
ОН	Ohio	GMT-5	GMT-4
OK	Oklahoma	GMT-6	GMT-5
OR	Oregon	GMT-8	GMT-7
OR	Oregon (E)	GMT-7	GMT-6
PA	Pennsylvania	GMT-5	GMT-4
RI	Rhode Island	GMT-5	GMT-4
SC	South Carolina	GMT-5	GMT-4
SD	South Dakota (E)	GMT-6	GMT-5
SD	South Dakota (W)	GMT-7	GMT-6
TN	Tennessee (E)	GMT-5	GMT-4
TN	Tennessee (W)	GMT-6	GMT-5
ТХ	Texas	GMT-6	GMT-5
ТХ	Texas (W)	GMT-7	GMT-6
UT	Utah	GMT-7	GMT-6
VX	Vermont	GMT-5	GMT-4
VA	Virginia	GMT-5	GMT-4
WA	Washington	GMT-8	GMT-7
WV	West Virginia	GMT-5	GMT-4
WI	Wisconsin	GMT-6	GMT-5
WY	Wyoming	GMT-7	GMT-6



NOTE: If you want the unit to automatically synchronize the local time, the Time Zone must be properly set according to your local time zone.

2-4. EZ Setup

VN Easy Setup(Click the right button on mouse > Advanced Menu > EZ Setup)





2.4.1. Setup Date/Time and Record configuration

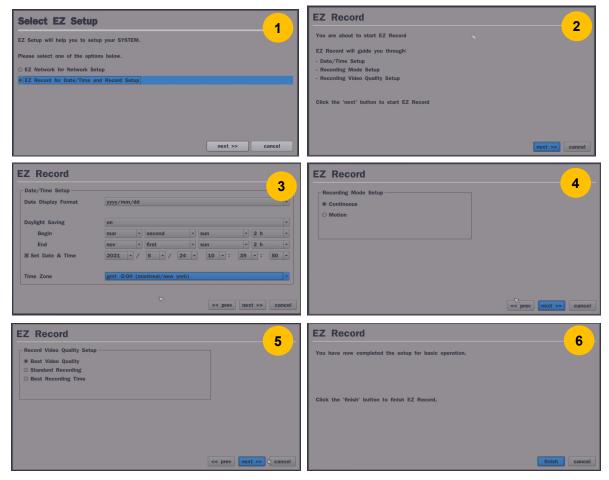


Figure 2.4.1. EZ Record Setup Procedure

- ① Select EZ Record for Date/Time and Record Setup, click "next" to proceed.
- 2 When the description of EZ Record Setup is displayed, click "next" to proceed.
- ③ Set up the Date/Time settings and click "next" to get to the recording setup.
- ④ Select the recording mode and click "next" to get to the recording setup.
- (5) Select one of options and click "finish" to finish the setup.

2.4.2. EZ Network (Using an internet connection)

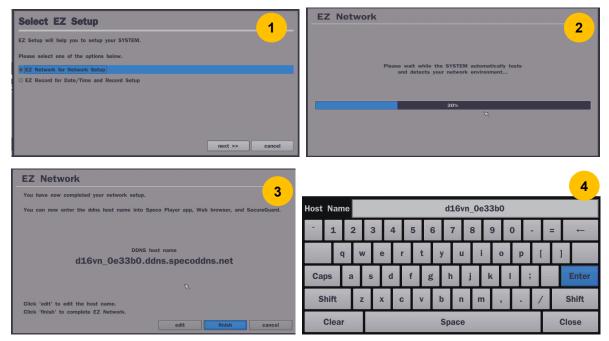


Figure 2.4.2. EZ Network Setup Procedure

- ① DVR automatically checking the network and configuration by scanning in few seconds.
- 2 DVR will show the DDNS host name when configuration is finished automatically.
- ③ If you need to edit the host name please select 'edit' button.
- ④ Everything is OK, then select 'finish'. Host name and status pop-up screen will be showed.

3. Name, Function and Connection

3-1. Front Panel

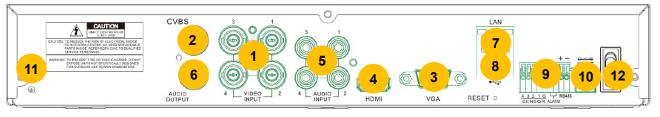


Figure 3.1.1. Front panel

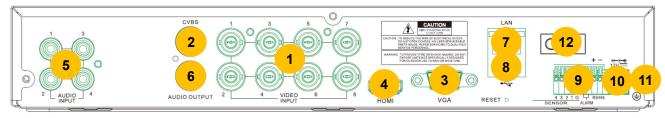
Name	Description
POWER	LED light is on when power is applied to the system.
HDD	LED light is on when the system is recording video data.
USB Port	This USB port for archiving footage into a USB device. (USB 2.0 connector)

Table 3.1.1. Front LED and Port of VN model

3-2. Connectors







D8VN

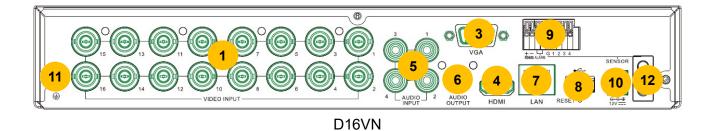


Figure 3.2.1. Rear Panel Connections

- ① VIDEO IN: Video input port.
- 2 VIDEO OUT: CVBS Composite Video Output / SPOT (D16VN does not have this port.)
- ③ VGA: VGA (Video Graphics Array) output port. Connects to the PC VGA monitor.
- HDMI VIDEO OUT: HDMI Video Output, Connections to the HDMI monitor (D4VN & D8VN: Max.1920x1080, D16VN: Max.3840x2160).
- (5) AUDIO IN: Four connectors for audio input.
- 6 AUDIO OUT: One connector for audio output.
- ⑦ ETHERNET: Network terminal
- (8) USB: USB terminal
- ③ SENSOR IN, ALARM OUT, RS-485: External sensor terminal, External alarm out terminal & RS-485 for PTZ Camera control
- 10 POWER: DC12V input
- (1) Ground: Use for ground port
- 2 Power Switch: Power On / Off



Typical Remote Control

- ① ID: To set the remote control ID.
- ② REC: To start and stop manual recording
- ③ SEARCH: To go to SEARCH menu.
- ④ F/ADV:
 - During playback To move the playback position 60 seconds forward .
 - During Pause To move the playback position moves 1 frame forward
- 5 F/REW:
 - During playback To move the playback position 60 seconds back.
 - During Pause To move the playback postion 1 frame back.
- 6 FF: To fast forward the recording.
- ⑦ PLAY/PAUSE: To play or to pause the recording in playback mode
- (8) REW: To rewind the recording.
- 9 ESC:
 - During setup To retun to the preivous menu screen.
 - During Playback To exit playback mode
 - System lock To lock a system when pressing ESC button for 5 seconds.
 - System unlock To unlock a system when pressing ESC button for 5 seconds.
- (1) SETUP: To open the SETUP menu.
- (1) Direction buttons: To move menu items or select a channel.
- 2 SEQ: To start auto sequencing the screen in full screen mode. (Toggle)
- (3) BACKUP: To start a backup operations in live or playback mode
- (4) 0~9: To select channel (1,2,3,..) or to enter a DVR ID number or use as number key.

4. Setting up the DVR

The following sections detail the initial setup of the DVR.



Menu screen will close if user input is not received in 5 minutes.

4-1. Setup – Main Live Screen

To enter the setup menu, right click on the mouse and select setup from the submenu or press the setup button on the remote control.

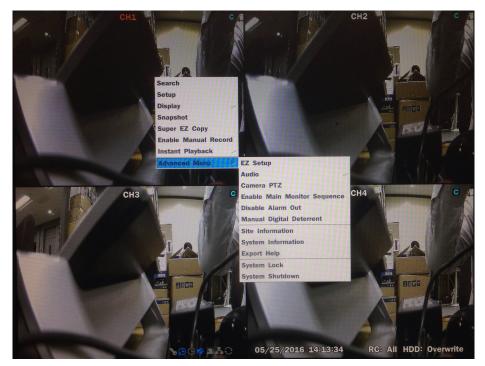


Figure 4.1.1. Live Screen and Quick Operation Window

Login - Setup			Pase	word													
			-	1	2	3	4	5	6	7	8	4	9 (,	•	=	←
USER	admin	-		q	Ŀ	ve		,	t	у	u	i.	0	р	ſ	l	
Password		select	Ca	ps	a	5	d	1	g	h	1	k		Т	;	· I	Enter
			s	hift	Z	ε,		•	v	ь	n	m	,		1	Г	Shift
	ok	cancel		Clear		Γ				Spac	e				Т	С	lose

When the DVR prompts the Login window, the default User ID is "admin" and enter the password set on the initial boot-up procedure by a virtual keyboard, or a remote control. It is highly recommended to assign a new password to protect the system frequently. New passwords can be set up in the Security setup menu.

4-2. Setup – System Mode

In the Setup menu, select the System tab. Then, the System menu is displayed as pictured below. Navigate through the menu items using the mouse or the remote control and change the value of the menu.

°°	System			
0	Description		select	
• •	Language		english	•
▓	Date Display Format		yyyy/mm/dd	•
Ļ	Date & Time Setup		select	
	Client Access		on	•
	NTP Setup		off	- select
•••	e-Mail Setup		off	- select
***	Unit Name		DVR	
	System Restart	ß	select	
	System Shutdown		select	
₹	EZ Setup		select	
	System Event Notification		select	
			Apply	Cancel

Figure 4.2.1. System Setup Screen

ltem		Description
Description	Press "select" to view t	he system information. (Software Version, Storage Size, IP
	Address, MAC Address a	nd DDNS Status)
	Model Name	D16VN
	Software Version	Ver 8.2.0_20210610
	Storage Size	388 GB
	IP Address	172.16.200.239
	MAC Address	00:02:69:0e:33:b0
	DDNS Status	Ready - d16vn_0e33b0
		ok
Language	Select the display langua	ge using the mouse or the remote control. Once a language is
0 0	. , ,	uage will change. (English, Spanish and French)
Date Display	Select the date display	format using the mouse or the remote control. Options are:
Format	MM/DD/YYYY, YYYY/MM/D	D, DD/MM/YYYY, YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY
Date & Time	Select the display date a	nd time using the mouse or the remote control and press "ok"
Setup	button to set the present of	date and time.

Time Display Format	24hour						
Time Zone	gmt -5:00 (m	ontreal/new	york)				-
Daylight Saving	on						
Begin	mar	-	second	-	sun	▼ 2 h	
End	nov	•	first	-	sun	- 2 h	
Set Date & Time	6	- / 29	· / 2021		~ 15	• : 6 • : 9	

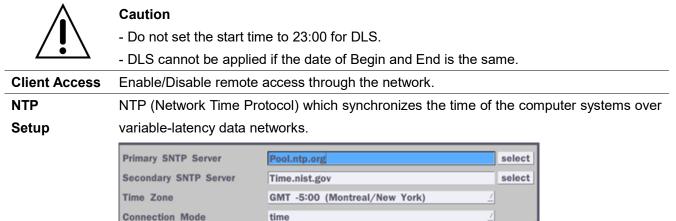
Select Daylight Saving using the mouse or the remote control and select the appropriate daylight saving time zone. The options are:

OFF: Daylight saving is turned off.

Connection Period

ON: Applies the USA daylight saving time.

Select Begin or End using the remote control and press the "ok" button.



					ok	cancel
--	--	--	--	--	----	--------

03:00 AM

Primary SNTP Server: Input the address of the primary NTP time-server.

Secondary SNTP Server: Input the address of the secondary NTP time-server.

Time Zone: NTP synchronizes with GMT (Greenwich Mean Time) regardless of geography, user must set their own time difference.

Connection Mode: Select the NTP time-server connection mode from Time, Interval, and Once.

- **TIME** Refresh the time at the designated time (e.g. 01:00 AM)
- INTERVAL Every 1 hour ~ 24 hours
- **ONCE** Synchronizes time only once. NTP will not synchronize unless the Connection Mode is changed.

Connection **P**eriod: Set the time (12:00 AM \sim 11:00 PM) when select "Time" on Connection Mode.



DVR sends e-Mail Notification when the NTP server time is faster than the system time with bellow message.

	"NTP server time is faste	r than the system time.	
	In this case, NTP server	time is ignored to protect the user c	lata.
	User must set the time m	nanually.	
	System Time: Mon Oct 1	0 13:46:49 2011	
	Server Time: Mon Oct 10) 13:33:12 2011	
	DVR ID: DVR		
	IP ADDRESS: 172.16.2.4	16"	
e-Mail Setup	-	-	2
e man oetap	Server Type Mail Server	MANUAL	select
	Mail Port	25	select
	Secure Option	NONE	
	Mail ID		select
	Password		select
	Mail To Mail From		select
	mail From	test	R
		ok	cancel
	Server Type: Manual, G	mail, Hotmail, Aol or Yahoo	
	Mail Server: Enter the a	ppropriate mail server information.	
	Mail Port: Assign Mail P	ort number.	
	Secure Option: Select the	he secure mail server connection m	ethod. (SSL or TLS)
	Mail ID: Enter the approp	oriate mail server ID.	
		propriate mail server Password.	
		opriate email address to enable se	ending e-mail reports using a
	virtual keyboard.		
	-	nail address sent to the destination	host
			nost.
	Test: Test the user's ema		
Unit Name	Name the DVR (e.g. Fac	• /	
	This feature is to identify	the name of the DVR under the sal	me network.
System	Make the system restart.		
Restart			
System	Make the system shutdo	wn.	
Shutdown			
EZ Setup	Refer to Page 16 ~ 17		

System Event Notification

Health Check	select		HDD Bad Se	ctors	109	K
HDD Temperature	60°C (140°F)	_	HDD Almost	Full	909	6 _
Video Clip Setup						
Pre Record	2 second(s)	1	Post Record		1 s	econd(s)
Event And Notification -						
	Alarm-Out	Beep	e-Mail	SNS	select	Cloud select
Health Check	•	· ·	yes 🧾		-	•
Restart	•	· ·	yes 🧾	yes	1	
Shutdown	•	-	yes 🧾	yes	1	
Panic Record	•	-	yes 🧾	yes	1	•
Alarm-In	no 🔮	-	no 🔮	no	1	no
Motion Detection	no 🔟	-	no 🧾	no	_	no
Video Loss	no 🤟	no 🔟	no 🧾	no	1	-
HDD Temperature Over	1 _	yes 🧾	no 🟒	no	1	
HDD Bad Sectors Over	•	-	yes _	yes	1	-
HDD Almost Full Over	•	-	yes 🧾	yes	_	÷ -
HDD Full	•	-	yes _	yes	_	-
HDD Failure	no 🧾	yes 🧾	yes 🧾	yes	1	

Health Check

(Allows the user to set e-Mail Status periodically) : Daily or Weekly or Monthly

Period	daily	$\overline{\Delta}$
	first 🔟 sun	<u> </u>
		ok cancel

Video Clip Setup: Setup the duration of video clip for Pre Record and Post Record. **Event And Notification –** Yes or No

(Allows the user to set Event Notification On or Off)

Health Check / Restart / Shutdown / Panic Record

- Enable Email Notification in the event a problem occurs with the VN.

Alarm-In – Enable Email Notification when the camera detects sensor.

Motion Detection – Enable Email Notification when the camera detects motion.

Video Loss – Enable Email, Beep and Alarm output Notification when the camera signal is lost.

HDD Temperature Over – Enable Email, Beep and Alarm output Notification when the HDD temperature.

HDD Bad Sectors Over – Enable Email Notification when the HDD has bad Sectors.

HDD Almost Full Over – Enable Email Notification when the HDD is almost full **HDD Full –** Enable Email Notification when the HDD is full

HDD Failure – Enable Email, Beep and Alarm output Notification when the HDD fails.

4-3. Setup – Record Mode

In the Setup menu, select the Record tab. Then, the Record menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

0°	Record	
•	Site	ch 1 select
	Resolution	1920 x 1080 -
×	Frame Rate	15 fps -
	Quality	level 5(h)
	Recording Mode	continuous - select
	Sensor Recording	
	Pre Record	1 minute
	Post Record	10 second(s)
	Audio	off
	Schedule	select
₹	Codec Type	h.265
<u> </u>		
		Apply Cancel

Figure 4.3.1. Record Setup Screen

Table 4.3.1.	Menu Items	in Record	Setup Screen

				•									
Menu Item			[Description	1								
е	Select a chann	el for apply	ing the f	following se	ettings usin	ng a mouse	e or a						
	control. Select the "select" button beside of channel button to change the values of												
	5												
	all channels.												
	Resolution	Frame Rate	Quality	Recording	Pre Record	Post Record	Audio						
	All 1920 x 1080	15 fps	level 5(H)	continuous T	1 min(s)	10 sec(s)	off						
	1 1920 x 1080	15 fps	level 5(H)	disable	1 min(s)	10 sec(s)	off						
	2 1920 x 1080	15 fps	level 5(H)	motion sensor	1 min(s)	10 sec(s)	off						
	3 1920 x 1080	15 fps	level 5(H)		1 min(s)	10 sec(s)	off						
	4 1920 x 1080	15 fps	level 5(H)	schedule	1 min(s)	10 sec(s)	off						
	5 1920 x 1080	x 1080 15 fps le	level 5(H)	c + m	1 min(s)	10 sec(s)							
	6 1920 x 1080	15 fps	level 5(H)	C + S	1 min(s)	10 sec(s)							
	7 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	8 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	9 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	10 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	11 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	12 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	13 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)	- 1						
	14 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
	15 1920 x 1080	15 fps	level 5(H)	continuous	1 min(s)	10 sec(s)							
			10	continuous	1 min(s)	10 sec(s))[

Resolution	Select 1920x2160, 1280x1944, 2580x1440, 1280x1440, 2048x1535, 1920x1080,									
	1920x540, 1280x720 and 640x360 using a mouse or a remote control.									
	*Selectable recording resolutions are differ from input camera resolution.									
Frame Rate	Set the frame rate for the specified channel. The sum of the frame rate values per channel cannot exceed the maximum frame rates for a specific recording resolution.									
Quality	Select the recording quality for the selected channel. Options are; Level 1 (Low), Level 2, Level 3, Level 4, and Level 5 (High)									
Recording Mode	Assign the recording mode for the selected channel. Options are: Continuous, Motion, Sensor, Schedule, Disable and Smart Recording (c + m : continuous & motion, c + s : continuous & sensor) When Motion Recording is selected, Continuous + Motion recording option can be used. Motion Recording Setup Mode Motion 1920 x 1080 / Icvel 5(H) / 15 fps / I920 x 1080 / Icvel 3 / 1 fps / ok cancel									
Sensor	Select the sensor setting for the selected channel.									
Recording	-									
Pre Record	Enable/disable pre-event recording. Pre-event recording time is up to 20 minutes.									
Post Record	Set the post event recording time duration for the specified channel.									
	(10~60 seconds)									
Audio	Enable/disable audio recording for the specified channel. It supports only on Ch1~4.									
Schedule	Set the recording schedule. (Refer to Page 27 Recording Schedule)									
Codec Type	Select the recording codec (H.264 or H.265)									
	H.265 is over 30% better than H.264 while recording.									

4-3-1. Recording Schedules

To setup a recording schedule, select Schedule in the Record menu. Navigate through the menu items or change the settings using the mouse or the remote control. Select the Channel; select one of the recording settings: None, Continuous or Motion, then highlight the area for the selected setting. To copy a schedule to a different channel, select the channel from the Copy Schedule menu, then click the Copy button.



Figure 4.3.2. Schedule Recording Setup Screen

- **none**: Disable recording
- continuous: Continuous recording (Highlighted in Green)
- **motion**: Motion recording (Highlighted in Yellow)
- sensor: Sensor recording (Highlighted in Red)

4-4. Setup – Device Mode

In the Setup menu, select the Device tab. Then, the device menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

0°O	Device		
0	Alarm Out	select	
	Digital Deterrent	select	
	Controller & PTZ	select	
Ţ	Spot Out	select	
	Site	ch 1	•
	Motion Zone	full zone	- select
	Motion Sensitivity	5	-
***	Key Tone	off	-
	Remote Controller ID	0	-
	Sensor	1	-
.	Туре	off	-
	Software Trigger	select	
		Apply	Cancel

Figure 4.4.1. Device Setup Screen

Table 4.4.1. Menu Items in Device Setup Screen									
Item	Description								
Alarm Out/	Set the sensor, motion, and video loss for triggering alarm relay								
Alarm Duration	HDD Error and Video Loss can trigger beeping								
	Alarm Duration Infinite / Type normal open / ok cancel								
Digital Deterrent	Set schedule and audio recordings for Digital Deterrent. (Refer to								
	Page 29)								
Controller & PTZ	Set the PTZ baud rate, protocol, and ID. (Refer to Page 30~31)								
Spot-Out	CVBS Out is can be used as Composite Video Output or Spot-Out								
	depending on the Sub Monitor Out of Display setup menu. *D16VN								
	does not have CVBS/Spot-out port due to the limited space on a								
	rear panel.								
	(Spot-On Event on/off, Spot Event Dwell Time, Sequence On/off,								
	Sequence Dwell Time, Spot Channel) *The last image will keep on								
	the screen until the next event occurred.								

Site	Select specified of	hannel for	motion	zone set	up.					
Motion Zone	Select either Full Zone or Partial Zone for motion detection. (Refer									
	to #33)									
	Press the right	button of	mouse	to exit f	rom Motion	Zone grid				
	screen.									
Motion Sensitivity	Set the motion se	ensitivity fo	r the sel	ected ch	annel.					
	Control the motion sensitivity from 1 to 9. (1 : Low, 9 : High)									
Key Tone	Enable/disable key tone.									
Remote Controller ID	Set the remote control ID.									
	1. Select ID.									
	2. Input the remo	te control l	D numb	er. (0 is a	all)					
	3. An icon will indicate on the Live Screen if the remote control ID is									
	synchronized. The options are from 0 to 99									
Sensor	Select the type of	each sen	sor.							
	Option is Off, Nor	mal Open	or Norm	al Close	•					
Software Triger	Remote trigger c	hannels. l	Jser car	n set the	channels th	at want to				
	make a sensor i	recording	through	remotel	y with Softw	are record				
	mode.									
	Software Trigger									
		(mmm)	_							
			-							
	Mix Of Channels	1	□ 2	□ 3	□4					
		□ 5	□ 6	□ 7	□ 8					
		0 9	10	11	12					
		□ 13	□ 14	15	□ 16					
				L	ok cancel					

4-4-1. Digital Deterrent

Trigger audio message via motion detection or sensor.

Import From USB	select
Export To USB	select
Record	select
Schedule	select
	ok

Figure 4.4.2. Digital Deterrent setup screen

Table 4.4.2. Item for Digital Deterrent Setup Screen							
ltem	Description						
Import From USB	Import up to 8 sound files from USB.						
Export To USB	Export the sound file to USB						
Record	Select a channel and set up the date and the duration.						
	And, select the sound file to play.						

Channel	ch 1		Z
From	5 _/ / 16 _/ / 2016 _/ 0	/: 58	/:22 /
То	05/16/2016 00:58:32		
Duration	10 second(s)		
File Name	sound_1		∠ 💽
		start	close

Schedule

Schedule the sound file considering the expected situation.

	nor	Te			uen	ault		-	soui	nd_:	-		500	nd_	.4		50	unu	_3		50	oun	u_4	<u> </u>
S	oun	d_5	5	s	our	nd_@	3	5	soui	nd_	7	L	sou	nd_	8		c	lea	r					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
sun	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
mon	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
tue	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
wed	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
thu	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
fri	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
sat	D	D	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
Cop			edu																_					0
□ ch 1 □ ch 2								□ ch 3					□ ch 4					_ all						
□ c	h 5	5		□ ch 6					🗆 ch 7					□ ch 8					сору					

4-4-2. Keyboard Controller & PTZ Setup

To control the PTZ functions of the camera, connect the PTZ controller to the RS-485 port on the back of the chassis with CAT5 (or equivalent) cable.

① Connect the RS-485 cables of PTZ camera to the RS-485 port on the rear panel.

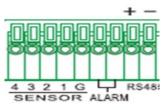


Figure 4.4.3. Sensor, Alarm & RS-485 Ports

② Open the PTZ sub menu by selecting the submenu button.

Controller	-	-
Speed	9600 -	Apply
ID	0	-
Channel	1	•
Camera	utc general	-
Speed	9600	~
ID	0	-
		Ok Cancel

Figure 4.4.4. PTZ Control Setup Screen

Note: Connect PTZ cameras that support RS-485 directly to the RS-485 port. If the camera is controlled through an RS-232C interface, use an RS-232C to RS-485 to RS-232C signal converter.

Use the PTZ setup screen to select the following options for the camera PTZ controller:

- **Channel**: Channel connected to a PTZ device
- Camera: Protocol Type
- **Speed:** 19200, 14400, 9600, 4800, 2400 (Baud rate)
- **ID:** 0-63

Controller (Keyboard Controller): If a PTZ controller is used, select a controller protocol from Controller menu. Set Speed (Baud Rate) and ID number.

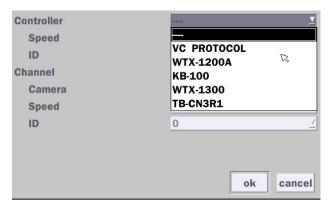


Figure 4.4.5. Controller Selection Screen

Notice : VN series can use UTC feature.

: UTC(Up To Coax) allows for control of the camera's OSD menu via the coax cable.

User does not need extra connection via RS-485 to control the camera's OSD menu

- How to set (Setup > Device > PTZ & Controller > UTC General)

Controller		•
Speed	9600 - Apply	
ID	0	•
Channel	1	•
Camera	utc general	
Speed	utc general utc ptz	
ID	speco-c pelco-c pelco-d elmo vendor	
	Ok Canc	el

Figure 4.4.6. Setup – UTC Camera Protocol

4-4-3. Spot Out

SPOT		
Spot On Event	off 🔊 🔀	
Spot Event Dwell Time	3 second(s)	
Sequence	off	
Sequence Dwell Time	3 second(s)	
Spot Channel	_ all	
	⊥1 ⊥2 ⊥3 ⊥4	
	ok cancel	

Figure 4.4.7. Spot-Out Setup Screen

ltem	Description	
Spot Out	Only 1 Spot Out is available to use.	
Spot Type	Spot 1 supports only Full type. (1 channel only)	
Spot On Event	Enable/disable channel change if an event occurs on a channel.	
Spot Event	Set the dwell time for the display of the event activated channel.	
Dwell Time	(3-10 sec)	
Sequence	Enable/disable sequential display of spot channel in full screen.	
	If select "on", the selected channel will be displayed on the monitor	

	periodically.	
Sequence Dwell	Set the dwell time for the spot channel display.(3-10 sec)	
Time		
Spot Channel	Select a channel for spot monitoring using the mouse or the remote	
	control and press "ok" button.	

4-4-4. Motion Zone Setup

Select Motion Zone using the mouse or the remote control and select either Partial Zone or Full Zone using the mouse control. The default value is Full Zone.

If Full Zone is selected, the motion zone grid screen is not displayed. Only set the level of sensitivity for Motion Sensitivity.

Full Zone: The motion sensor is active on the whole screen.

Partial Zone: The motion sensor is active in the set detection frame.

Select the motion detection position using the mouse or the remote control. Then left click on the mouse or left click and drag the mouse pointer to select or deselect the area. Highlighted area indicates the partial motion detection zone. Press the "ESC" button or right click on the mouse to return to the previous menu.

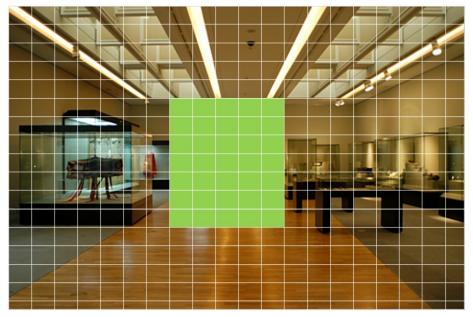


Figure 4.4.8. Motion Zone Grid Screen

4-5. Setup – Display Mode

In the Setup menu, select the Display tab. Then, the Display menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control. To return to the previous setup menu screen, press the "ESC" button on front panel or select the other menu tab with mouse.

ಂಧಿ	Display		
0	OSD	selec	t
	OSD Contrast		100
×	Main Monitor Sequence	on	- select
	Sequence-Dwell Time	3 second(s)	•
	AŶite	ch 1	•
	Name	CH 1	
	Covert	off	-
***	Color Tuning	selec	t
	Video Output (HDMI)	1920 x 1080	-
	Sub Monitor Output	cvbs	-
₹			
		Apply	Cancel

Figure 4.5.1. Display Setup Screen

	Table 4.5.1. Menu Items in Display Setup Screen		
ltem	Description		
OSD	Enable/Disable displaying Channel Name/ Video Loss/ Status Bar &		
	Icon/ Camera Type and Record Mode		
	Channel Name on 🗵		
	Video Loss on 🔟		
	Status Bar / Icon on 🧾		
	Camera Type off 🗾		
	Record Mode on 🧾		
	ok cancel		
OSD Contrast	Set the visibility level of the On Screen Display (OSD) (50~100)		
Main Monitor	Enable/disable sequential display of video in full screen mode.		
Sequence			
Sequence-Dwell	Set the dwell time of each,		
Time	Single channel display time in sequence mode (3~60 seconds)		
Site	Select a channel to apply the name and covert settings change using the		
	mouse or the remote control.		
	22		

***** •• **A** . .

	Select a channel to apply the following settings using the mouse.	
Name	Set the channel name. Press the mouse button and set the channel	
	name on the virtual keyboard. Press "Enter" key when finished its	
	naming. The name can be made up to 36 characters.	
Covert	Enable/disable display of the specified video channel in live display.	
Color Tuning	Control the Brightness, Contrast, Hue and Saturation.	
Video Output	Select video output resolution	
(HDMI)	(D4VN & D8VN: Max. 1920 X 1080, D16VN: Max. 3840 X 2160)	
Sub Monitor	Select Sub Monitor Video out through BNC port.	
Output	CVBS or Spot	

4-6. Setup – Network Mode

Select the Network tab. Then, the network menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

Ô	Network		
0	Network Type	dhcp	-
•6	IP Address	172.16.2	00.239
×	Subnet Mask	255.25	5.0.0
Ļ	Gateway	172.16.	1.254
	DNS (Primary)	203.248	.252.2
	DNS (Secondary)	164.124	.101.2
•••	DDNS	sele	ct
	Network Video Port	544	5
	Network Audio Port	5446	
	Web Port	80	443
Ł	Network Stream	select	
		Apply	Cancel

Figure 4.6.1. Network Setup Screen

Item Description		
Network Type DHCP: DVR will automatically retrieve an IP address.		
	Static: Network information must be manually configured.	
IP Address	Enter IP address that is assigned for the DVR	
Subnet Mask Enter Subnet Mask that is assigned for the DVR		

Table 4.6.1. Menu Items in Network Setup Screen

Gateway	Enter Gateway that is assigned for the DVR.
DNS (Primary)	Enter Primary DNS address that is assigned for the DVR
DNS (Secondary)	Enter Secondary DNS address that is assigned for the DVR
DDNS	Dynamic Domain Name System (DDNS) allows a DNS name to be
	constantly synchronized with a dynamic IP address. In other words, it
	allows using a dynamic IP address to be associated with a static
	domain name so others can connect to it by the static name.
	Enable/disable using domain name address through DDNS server.
Network Video Port	Enter the port number, (Default: 5445)
Network Audio Port	Display the network audio port (Network Port + 1).
Web Port	Enter the port number for connection using web. (Default: 80)
Network Stream	Set the value for network streaming.

4-6-1. Network Types

4-6-1-1. DHCP

An IP address is automatically assigned by the DHCP server, which automatically assigns the IP address and other parameters to new devices.

4-6-1-2. Static

IP address, Subnet Mask, Gateway, and DNS are manually assigned by the user.

- IP Address: The fixed IP address of the DVR unit.
- Subnet Mask: The subnet mask for the LAN.
- Gateway: The IP address of the Gateway.
- DNS (Primary) The primary address of Domain Name Server
- DNS (Secondary): The secondary address of Domain Name Server



NOTE

Unless DNS is properly set, the DDNS and the e-mail features will not work.

4-6-2. DDNS

DDNS (Dynamic Domain Name System) allows a DNS name to be constantly synchronized with a dynamic IP address. It allows using a dynamic IP address to be associated with a static domain name.

Once the setting is completed, the DDNS address will be:

http://hostname.ddns.specoddns.net

For example, if you enter the host name as "D8VN", then the address will be:

http://d8vn.ddns.specoddns.net

Select Network > DDNS. The menu displays as below.



Figure 4.6.2. Network Setup Screen – DDNS

ltem	Description
Enable DDNS	Enable/disable the Dynamic Domain Name Service.
Host Name	This item allows the user to setup a domain name manually,
	using virtual keyboard displays as shown.
Subnet/Update	When manual host name input is done, move the cursor to this
	item and select ON to submit the settings.
ezDDNS	Enable/disable ezDDNS to register the host name automatically.

4-6-3. Network Port and Web Port

Connecting DVR/DVRs through an IP sharing device, each DVR must be assigned a unique TCP port number for access from outside the LAN. This port number is displayed on Network > Network Port Setup Menu.



NOTE

If you access the DVR only within the same LAN, the TCP port number does not need to be changed.

Network access beyond a router

To access DVR beyond a router (firewall), you must open the proper TCP ports for live/playback streaming, for commands, for remote backup, and for audio streaming. If these ports are not opened properly, you can't access the DVR beyond a router.

• **For live/playback streaming, for commands, for remote backup**: Open the port number on Network > Network Video Port menu. The default port number is 5445.



- **For bi-directional audio:** Open the port number on Network Audio Port. The default port number is [Network Video Port number + 1].
- For web-viewer downloading and remote firmware upgrading: Open the port number on Network > Web Port menu. The default port number is 80.

4-6-4. Network Stream

User can set the Resolution, Frame Rate, and the Quality for the network stream.

- D4VN: Up to 60 fps @ 640x360, 320x 240 for 4 channels.
- D8VN: Up to 120 fps @ 640x360, 320x 240 for 8 channels.
- D16VN: Up to 240 fps @ 640x360, 320x240 for 16 channels.

<Note> Individual Channels can be set with different Resolution, Frame Rate, and Quality.

	NET RESOLUTION	FRAME RATE	NET QUALITY
ALL			level 5(h)
1	640 x 360	15 fps	level 5(h)
2	640 x 360	15 fps	level 5(h)
3	640 x 360	15 fps	level 5(h)
4	640 x 360	15 fps	level 5(h)
5	640 x 360	15 fps	level 5(h)
6	640 x 360	15 fps	level 5(h)
7	640 x 360	15 fps	level 5(h)
8	640 x 360	15 fps	level 5(h)
9	640 x 360	15 fps	level 5(h)
10	640 x 360	15 fps	level 5(h)
11	640 x 360	15 fps	level 5(h)
12	640 x 360	15 fps	level 5(h)
13	640 x 360	15 fps	level 5(h)
14	640 x 360	15 fps	level 5(h)
15	640 x 360	15 fps	level 5(h)
16	640 x 360	15 fps	level 5(h)
			ok cancel

Figure 4.6.4. Network Setup Screen – Network Stream

4-7. Setup – User Management Mode

In the Setup menu, select the User Management tab. Then, the User Management menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

User Management		
Authority Setup	selec	t
User Name Setup	selec	ot
Password Setup	selec	ot
Playback Authority	selec	ot
Remote Playback Timeout	disable	-
Import Certificate From USB	selec	ct
Advanced Setup	selec	ot
USER MANAGEMENT	open	-
Network Connection Status	selec	ct
Network User Limits	selec	ct
Use Https	off	•
	Apply	Cancel

Figure 4.7.1. User Management Setup Screen

Table 4.7.1. Menu Items in User Management Setup Screen

ltem	Description			
Authority	Only the Admin will have access to the menu.			
Setup	Password Check: Select the Checkbox to enable the functions or leave the Checkbox			
	blank to disable the functions.			
	Setup: Enable/Disable of access to Setup			
	PB: Enable/Disable of access to Playback			
	PTZ: Enable/Disable of access to PTZ Control			
	Rec Off: Enable/Disable of manual Record			
	Network: Enable/Disable of access to Network			
	Selected Checkbox: The DVR will ask for a password when the given function is selected for all users.			
	Blank Checkbox: The DVR will not ask for a password when the given function is			
	selected for all users.			

	Password	Setup	PB	PTZ	Rec Off	Network
Password Check		×	×	M	×	×
ADMIN		×	×	×	×	×
USER1		×	×	×	×	×
USER2		×	×	×	×	×
USER3		×	×	×	×	×
USER4		×	×	×	×	×
USER5		×	M	M	×	M
USER6		×	×	M	×	M
USER7		×	×	M	×	×
USER8		×	×	×	×	×
USER9		×	×	×	×	×
						ok cance

ADMIN, USER1, USER2, USER3, USER4, USER5, USER6, USER7, USER8, USER9:

Selected Checkbox: The user can access the function.

Blank Checkbox: The user cannot access the function.

User NameChange the name of USER1, USER2, USER3, USER4, USER5, USER6, USER7,SetupUSER8, and USER9. Click "select" and change the user name on the virtual keyboard.



PasswordOptions are ADMIN, USER1, USER2, USER3, USER4, USER5, USER6, USER7,SetupUSER8, and USER9:

Select User Password using the mouse or the remote control. Select "User ID" and enter the current password. And enter a new password and enter the same password again to confirm and select "ok". Then the message "Password Changed" is displayed.

It is highly recommended to change password to protect the system frequently.

Playback Authority Set authority level of playback on each user.

Checked box: authorized to playback. Blank check box: no authority.

	1	2	3	4	5	6	7	8
ADMIN	×	×	×	×	×	×	×	×
USER1	×	×	×	×	R	×	×	×
USER2	×	×	×	×	×	×	×	×
USER3	×	×	×	×	×	×	×	×
USER4	×	×	×	×	R	×	×	×
USER5	×	×	×	×	×	×	×	×
USER6	×	×	×	×	×	×	×	×
USER7	×	×	×	×	×	×	×	×
USER8	×	×	×	×	×	×	×	×
USER9	×	×	×	×	×	×	×	×
							ok	cance

Remote	Disconnect the remote playback after the specific time (Disable, 5min, 10min, 15min,					
Playback	30min, 60min.					
Timeout						
Import	Upload https certificate through USB					
Certificate From						
USB						
Advanced	Send IP address and ports information to the control center					
	Send in address and ports information to the control center					
Setup	Open or Clean the parts for remote checking					
Debug Port	Open or Close the ports for remote checking					
Network	Shows the current network connection status (User, IP Address, Date/Time).					
Connection	And do disconnect the user's network connection to click 'disconnect' button.					
Status	Live Connections					
	User IP Address Date / Time Action					
	ADMIN 172.16.3.105 02/10/2016 22:45:05 disconnect					
	USER1 172.16.3.105 02/10/2016 22:45:15 disconnect					
	USER2 172.16.3.105 02/10/2016 22:45:29 disconnect					
	USER3 172.16.3.105 02/10/2016 22:45:40 disconnect					
	ADMIN 172.16.3.105 02/10/2016 22:40:35 disconnect					
	USER1 172.16.3.105 02/10/2016 22:46:00 disconnect					
	USER2 172.16.3.105 02/10/2016 22:46:08 disconnect					
	USER3 172.16.3.105 02/10/2016 22:46:22 disconnect					
	ADMIN 172.16.3.105 02/10/2016 22:41:23 disconnect					
	USER1 172.16.3.105 02/10/2016 22:46:33 disconnect					
	USER2 172.16.3.105 02/10/2016 22:46:40 disconnect					
	USER3 172.16.3.105 02/10/2016 22:46:49 disconnect					
	close					
Network User	User can select network access user number (4 users of 12 users).					
Limits	DVR system will be restarted if user change this network user number.					
	Network User Limits					
	Network User Limit 4 users					
	Selecting '4 users' enables Multi-Streaming.					
	If you change the setting, the system will restart.					
	apply cancel					

4-8. Setup – Storage Mode

In the Setup menu, select the Storage tab. Then, the Storage menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

°°	Storage		
0	Overwrite	on	-
26	Disk Format	sele	ect
×	Disk Info	sele	ect
	Recording Limit	off	
_	Recording Limit Days	30 day(s)	

**	R		
₹			
		Apply	Cancel

Figure 4.8.1. Storage Setup Screen

Table 4.8.1.	Menu	Items in	n Storage	Setup	Screen
	monia		. 0.0.490	ootap	0010011

ltem	Description				
Overwrite When enabled, the DVR will continue recording and overwrite the old					
	recorded data once the hard drive is full. When disabled, recording will stop once				
	the hard drive is full.				
Disk Format	User will have an option for formatting the Hard Drive.				
^	After formatting HDD, the DVR will reboot.				
	Caution: It is recommended to archive any data that you may need in the				
<u>/ • \</u>	future before formatting the hard drive.				
	WARNING				
	Are you sure to format the HDD?				
	If YES, the system will restart to format the HDD. Please wait a few seconds.				
	If NO, the data will be kept.				
	yes no				

Disk Info	Hard drive	e information.						
	Displays the following information:							
		: 1740 GB (Free : 722 GB) Time : 05/25/2016 17:22:00						
		Model Name	Temperature	Health (Good/Normal/Bad)				
	HDD 1	WDC WD20PURX-64P6ZY0	39 °C (102 °F)	Good				
	HDD 2							
Recording Limit	Enable recording limit: The amount of data recorded in HDD will be limited to the most recent number of days as set by "Recording Limit Days".							
	Disable re	ecording limit: When Overw	rite is on, DVR	R will continue to re	cord wher			
		ll and overwrite older data. \ HDD is full.	When Overwrite	e is off, DVR will sto	p recording			
Recording Limit	Set the re-	cording limit days. (1- 90 day	ys)					
Days	If the Reco	ording Limit Days are set to	1. the data will b	oe overwritten after	24 hours			

4-9. Setup - Config Mode

In the Setup menu, select the Config tab. Then, the configuration menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

°¢	Config		
0	Export To USB	sele	ct
• *	Import From USB	sele	ct
X	Load Default	selee	ct
	Load Factory Default	selee	ct
Ļ	Software Upgrade	selee	ct

₽			
		Apply	Cancel

Figure 4.9.1. Configuration Setup Screen

	iano non comgunator cotap				
Item	Description				
Export To	User can save the current configuration (Setting values) of the DVR to the				
USB	USB flash drive. Plug in the USB flash on the front panel and press the				
	button to start the saving process.				
Import From	User can upload the configuration of the DVR to another DVR using the USB				
USB	Flash drive. Plug in the USB flash drive on the front panel and press the				
	button to start the loading process.				
Load Default	Press the button to reset the system to the default settings.				
	The following settings such as Language, DVR ID, Security User				
	Authentication, Security User P/W, Date Format, DLS settings, Network				
	settings, HDD overwrite, Limit recording, HDD serial number, and HDD				
	ERROR time will not be included.				
Load Factory	Press the button to reset the system to the factory default settings.				
Default					
Software	Upgrade softeware to the latest version.				
Upgrade	After connecting USB flash drive to USB port on the DVR, click SEARCH.				
	It will automatically find the upgrade file.				

Table 4.9.1. Configuration Setup

4-9-1. Software Upgrade

- 1. In the USB flash drive root directory, create a new folder named "upgrade"
- 2. Create sub-folder for each model under "upgrade" folder and copy each software file to their folder.
 - "d4vn" for D4VN: "main_d4vn_speco_*.*.*_202****"
 - "d8vn" for D8VN: "main_d8vn_speco_*.*.*_202****"
 - "d16vn" for D16VN: "main_d16vn_speco_*.*.*_202****"

Organize * Share with *						-	0
🙀 Favorites		Name		Date modified	Type	5	Size
E Desktop	3	🗼 dBvx		12/15/2011 8:56 AM	File folder		
Downloads		🌲 d16vx		12/14/2011 1:20 PM	File folder		
3 Recent Places							
100 million (1997)							
Cill Libraries	* 4		10			_	

- 3. Plug in the USB flash drive.
- 4. Navigate to Config menu of Setup.
- 5. Select Software Upgrade.
- 6. Follow the procedure from Figure 4.9.2 to Figure 4.9.5.

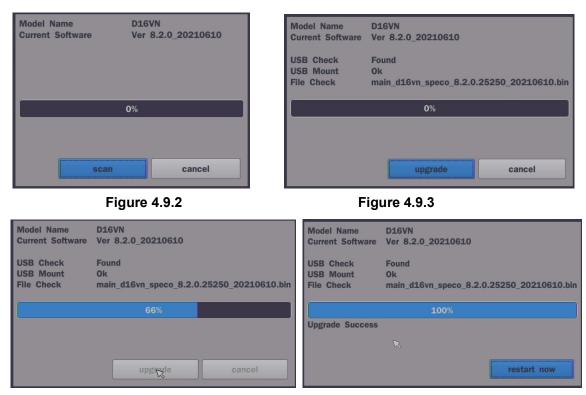


Figure 4.9.4

Figure 4.9.5

NOTICE

If selecting "Restart Now" when the USB flash drive is plugged, the following message will pop up with beep sound.



5. Live, Search and Playback

5-1. Live View

In the Live screen, video inputs from the cameras are displayed as they are configured in the Display Setup screen. When the mouse is right clicked, and the quick operation window will be displayed as below.

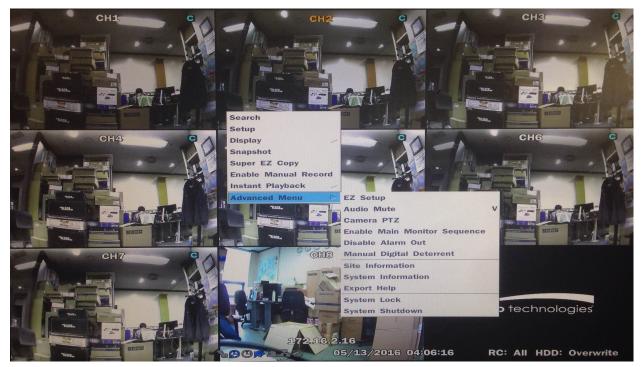


Figure 5.1.1. Live Screen and Quick Operation Window

On the bottom of the screen, various On-Screen Display (OSD) symbols, which indicate the status of the DVR, are described in Table 5.1.1.

lcon	Description
	Indicates the DVR is locked.
	Note) to unlock, right click on the live view screen and select on Unlock.
	Audio mute.
	Audio channel output can be selected from the quick operation menu
\bigcirc	Indicates that alarm is set.
\mathbf{G}	Indicates that alarm output is activated.
•	Event indicator. When there is an event (motion recording, video loss, HDD
<u></u>	fail, S.M.A.R.T), this icon will be highlighted.
	Indicates that a network client is connected to the DVR.
0	Indicates that sequencing mode is enabled.
2009/04/14 17:23:40	Displays the current date and time.
RC: ALL	Remote control ID display. If a remote ID is not set, the message "ALL" is displayed.
15%	When Overwrite is not enabled, this displays the percent of the hard disk
	usage from 0-99%.
	When Overwrite is enabled, the Bar will indicate with Overwrite
C	Continuous recording in progress.
	Manual recording in progress. To set the Manual recording mode, press the
	Record button on the front panel.
	Motion alarm recording in progress.
S	Sensor recording in progress.

Table 5.1.1. Status Indicator Icons in Live Viewing Screen

lcon	Description
Search	Select this option to enter the Search menu.
Setup	Select this option to enter the Setup menu.
Display	Display layout. Select between different multi-view display formats.
	D8VN: 1x1, 2x2, 3x3; D16VN: 1x1, 2x2, 3x3, 4x4
Snapshot	Click this option to create a snapshot of selected channel image.
	(JPEG Still Image)
Super EZ Copy	Direct Backup of the selected channel to USB flash drive without

	going through the search mode.
Enable Manual	Manual Record button. Click this button to enable manual recording.
Record	Also known as Panic Record.
Instant Playback	Instant playback on each channel for 10 / 20 / 30 / 60 seconds

Advanced Menu

EZ Setup	Select this option to	start EZ Setup Wizard			
Audio Mute	Select audio output	on or off			
Camera PTZ	Select this option ar	nd the PTZ user interface will appear.			
	(Refer to 5-1-1, PTZ	Control on page 49)			
Enabel Main	Select this option to	enable/disable sequence function.			
Monitor Sequence	·				
Disable Alarm Out	Click this button to enable/disable Alarm outputs				
Manual	Window where users can manually trigger the digital deterrent audio				
Digital Deterrent	"Right now it just sa	,			
g					
	Manual Digital Deterrent				
	Select Digital Dete	errent Source			
	Source Name	Default ⊻			
	ok	close			
Camera information	Press the button to view the camera signal information of a selected				
Camera mormation	channel.				
System Information		view the system information			
System mormation	Fress the button to	Press the button to view the system information.			
	Model Name	D16VN			
	Model Name Software Version	D16VN Ver 8.2.0_20210610			
	Software Version	Ver 8.2.0_20210610			
	Software Version Storage Size	Ver 8.2.0_20210610 388 GB			
	Software Version Storage Size Network Type	Ver 8.2.0_20210610 388 GB Dhcp			
	Software Version Storage Size Network Type IP Address	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239			
	Software Version Storage Size Network Type IP Address MAC Address	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0			
	Software Version Storage Size Network Type IP Address MAC Address DDNS Status	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0			
	Software Version Storage Size Network Type IP Address MAC Address DDNS Status Unit Name	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0 DVR			
	Software Version Storage Size Network Type IP Address MAC Address DDNS Status Unit Name Remote Controller ID	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0 DVR 0			
	Software Version Storage Size Network Type IP Address MAC Address DDNS Status Unit Name Remote Controller ID Network Link Status	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0 DVR 0 WAN (100Mbps/Full)			
Export Help	Software Version Storage Size Network Type IP Address MAC Address DDNS Status Unit Name Remote Controller ID Network Link Status Displays window with	Ver 8.2.0_20210610 388 GB Dhcp 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0 DVR 0 WAN (100Mbps/Full) ok			
Export Help System Lock System Shutdowm	Software Version Storage Size Network Type IP Address MAC Address DDNS Status Unit Name Remote Controller ID Network Link Status	Ver 8.2.0_20210610 388 GB Dhop 172.16.200.239 00:02:69:0e:33:b0 Ready - d16vn_0e33b0 DVR 0 WAN (100Mbps/Full) Image: constructions for exporting video. user access.			

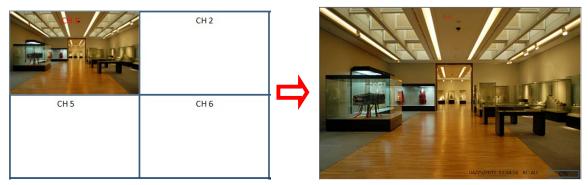
Image	Item	Description
PTZ ×	INITIALIZE	Initialize the PTZ settings of the selected camera
	PAN/TILT	Select PAN/TILT using the ▲▼◀ and ▶button,
CH 5 ⊻		then press SEL. Adjust the tilt (UP/DOWN)/pan
INITIALIZE		(LEFT/RIGHT) position using the ▲▼◀and ▶
		buttons.
PAN/TILT	ZOOM/FOCUS	Select ZOM/FOCUS using the▲▼◀ and ▶
ZOOM/FOCUS		buttons, then press SEL. Adjust the zoom
		(UP/DOWN)/ focus (LEFT/RIGHT)position using the
г ^ ¬		▲▼◀ and ▶ buttons.
< >	OSD	Select OSD to enter the menu. Control keys are
		Right, Left, UP, Down, Select, Far (REW KEY), and
		Near (FF KEY). Press the ESC button to return to
SEL ESC		the previous menu. Press the PTZ button to close
		the OSD menu.
OSD	AUTOSCAN	Press the right key(\blacktriangleright) to start auto scan. Press the
AUTOSCAN		left key (◀) to stop auto scan.
Actocont	PRESET	Select PRESET, then press the left key(\blacktriangleleft). A
PRESET		number input window will appear. Set the number
TOUR		(3digits) using the number key, then press the SEL
TOUR		to confirm the preset number for the current
1 2 3		position. Press the right key (\blacktriangleright) and enter the
		number (3digits) to go to the preset position.
No: 🛩	TOUR	Select TOU and press the right (▶) key. A number
		input window will open. Select a number (1digit)
SET GO		using a number key, then press SEL to start the
		tour. Press the left (◀) key to stop the tour.
		Preset the number of the tour group in the OSD
	NUMBER	For the TOUR and PRESET menu.
	×	Press ESC to return to the main menu

Table 5.1.3. Menu Items in PTZ Control Window

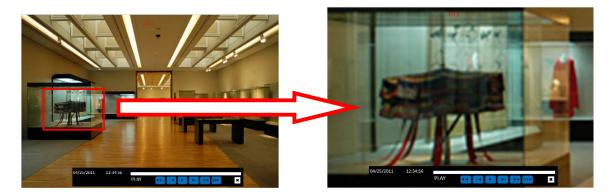
5-2. Digital Zoom in Live and Playback Screen

VN series supports Digital Zoom feature during live and playback mode.

1. Double click the target channel.



2. Click the left button of the mouse and drag to make rectangular shape.



5-3. Search Screen

To enter the search screen menu, select Search menu on the screen using the mouse or press Search icon on live screen.

• EZSearch			
O Time Line			
O Event			
○ Go To First Time			
⊖ Go To Last Time			
⊖ Go To Specific Time			Ĭ
2021 • / 6 • / 24	• 11	• : 59 •	: 30 -
O Log			
	< prev	next >	close

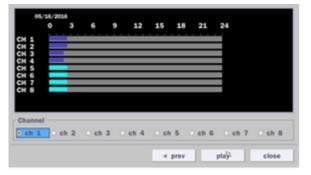
Figure 5.3.1. Search Screen

There are 7 options in the Search Menu, they are: EZSearch, Time Line (Calendar), Event, Go To First Time, Go To Last Time, Go To Specific Time, Archive list, and Log list on the screen.

5-3-1. EZSearch

The EZSearch window is used to find stored video with ease using the thumb nail playback screen.

			Aug, 2016			۲
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
	1		< 1	prev	next >	close



U				
00:00:00 ~	01:00:00 ~	02:00:00 ~	03:00:00 ~	04:00:00 ~
NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
05:00:00 ~ No data	06:00:00	07/00/00	08:00:00 ~ NO DATA	09:00:00 ~ NO DATA
10:00:00 ~	11:00:00 ~	12:00:00 ~	13:00:00 ~	14:00:00 ~
NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
15:00:00 ~	16:00:00 ~	17:00:00 ~	18:00:00 ~	19:00:00 ~
NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
20:00:00 ~	21:00:00 ~	22:00:00 ~	23:00:00 ~	
NO DATA	NO DATA	NO DATA	NO DATA	εੈхіт

Figure 5.3.2. Calendar Screen

Step1. 24 Hourly Thumbnail Screen

Figure 5.3.3. Channel Selection Screen

ODDODATO	07/02/30	07/05/00	07/07//30	07/10/00
07%12830	07/515100	07/41/7/30	07:20:00	07:22:30 ~ No data
07:25:00 ~	07:27:30 ~	07:30:00 ~	07:32:30 ~	07:35:00 ~
No data				
07:37:30 ~	07:40:00 ~	07:42:30 ~	07:45:00 ~	07:47:30 ~
No data				
07:50:00 ~	07:52:30 ~	07:55:00 ~	07:57:30 ~	PREVIOUS
No data	No data	No data	No data	





Figure 5.3.4. Second Thumbnail Screen

When the EZSearch menu is selected, a calendar is displayed that highlights dates with recorded data.

- 1. Select a specific date on the calendar.
- 2. Select a channel from Channel Selection Screen.

Then the Thumbnail Search screen displays 24 thumbnails, one for each hour of the day.

- 3. Second step shows every 2 minutes and 30 seconds screen.
- 4. Playback the selected image.

5-3-2. Time Line Search

The Calendar Search window is used to find the stored video by using the time line bar.

Aug, 2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
		1	< t	orev	next >	close

00/01	/2016	00:00:	00				1			
0	3	6	9	12	15	18	21	24		
au 4						: : :	: :	-		
CH 1 CH 2	_	_	_	_	_		_			
CH 2 CH 3					_		_			
CH 4										
Channel -				ah 2		0 0	h 3		○ ch 4	
	0 c	h 1								
• Channel — • all	0 C	h 1		CII Z						
	0 0	h 1		CII Z						

Figure 5.3.5. Calendar Screen



When the Timeline menu is selected, the user can see a calendar, which displays recorded dates with highlights. Select a specific date and time. Click and drag the red time indicator bar to the desired hour. User can select a specific minutes using a button in the above red box. Press the "play" button after selecting the specific time. Press the "prev" to return to the Search window.

5-3-3. Event Search

The Event Search window is used to find stored video.

Channel CH1	СН2 СН3 СН4		select
Event Mot	ion Sensor Manual C	ontinuous Software	
			< 1 / 2 >
Channel	Log	Date	i ا
CH2	Continuous	08/31/2016 00:00:01	
СНЗ	Continuous	08/31/2016 00:00:01	
CH4	Continuous	08/31/2016 00:00:01	
CH2	Continuous	08/31/2016 01:00:01	
СНЗ	Continuous	08/31/2016 01:00:01	
CH4	Continuous	08/31/2016 01:00:01	
CH2	Continuous	08/31/2016 02:00:01	
230 log(s) fe	ound		backup
		< prev play	close

Figure 5.3.7. Event Search Screen

When the Event menu is selected, a calendar is displayed that highlights dates with recorded event data. Select a specific date and the event log will be displayed. After selecting the event, Press the "play" button to playback the recorded data or press the "backup" button to export the data. User can find a data of the specific channel and event using a button in the above red box as following Figure 5.3.9. Press the "prev" to return to the Search window.

Channel —	CH1	☑ CH2	r CH3	I CH4
Event				
⊠ All	Motion	Sensor 🛛 I	Manual 🛛 Conti	nuous 🛛 Software
				ok cancel

Figure 5.3.8. Event Search Screen

5-3-4. Go To First Time

You can access the oldest recorded data on the DVR hard drive by selecting Go To First Time on the Search window. Press the "prev" to return to the Search window.

5-3-5. Go To Last Time

You can access the latest recorded data on the DVR hard drive by selecting Go To Last Time on the Search window. Press the "prev" to return to the Search window.

5-3-6. Go To Specific Time

User can search for video data from a specific instance by setting the date and time in the GO TO SPECIFIC TIME menu. Use the mouse or the remote control to change the date and time value and press the PLAY button after setting. If there is no video data in the set date and time, No Data Exist message displays.

5-3-7. Archive List

The ARCHIVE Search window is used to find previously stored video or images.

	1/1 >
Log	Date
LIVE BMP (SPLIT)	08/31/2016 15:05:49
CH2 AVI(0 min)	08/31/2016 15:16:54
LIVE BMP (SPLIT)	08/31/2016 15:29:27
CH2 PLAY BMP	08/31/2016 15:35:47
CH1 NSF(1 min)	08/31/2016 15:40:38
CH1 NSF(0 min)	08/31/2016 15:45:43
6 log(s) found	
	< prev display close



Figure 5.3.9 Archive Search Screen

When the Archive menu is selected, the user can see a calendar, which has archive data. Select a specific date and then the archived data will be displayed. Press the Display button to view the still image or the first frame of the selected video, then the user can export the selected data.

5-3-8. Log List

You can access the LOG list search screen by selecting LOG on the SEARCH window.

		_	< 1/1 :
Log		Date	,
NTP : Keep(earlier than system time)		08/31/2016	04:00:00
System Start : [25] Software Upgrade		08/31/2016	13:58:33
Video In : CH1		08/31/2016	13:58:34
Video In : CH2		08/31/2016	13:58:34
Video In : CH3		08/31/2016	13:58:34
Video In : CH4		08/31/2016	13:58:34
NTP: Keep(earlier than system time)		08/31/2016	13:59:00
7 log(s) found			backup
	< prev	next >	close

Figure 5.3.10. Log List Screen

When the Log menu is selected, the user can see a calendar, which has a log data. Select a specific date and press NEXT button, and then the log data will be displayed. Press the SAVE button to save the data and then the data is saved as a text file format.

5-4. Playback Mode

During playback of a recorded event, the mode changes from SEARCH to PLAY. While in PLAY mode, you may return to the SEARCH screen by pressing the X button on the status bar.



Figure 5.4.1. Play Mode Screen

The following status bar hides automatically and appears again if a mouse pointer is positioned to the bottom of the screen.

Table 5.4.1. Button Functions in PLAY Mode						
Button	Description					
	• 1x, 2x, 4x, 8x,16x, 32x for D4VN					
	• 1x, 2x, 4x, 8x,16x for D8VN					
	• 1x, 2x, 4x, 8x for D16VN					

Table 5.4.1. Button Functions in PLAY Mode

	Single Channel backward playback speed 1x, 2x, 4x, 8x, 16x, 32x, 64x
	Jump/Step backward. The playback position moves 60 seconds backward.
	Press to play or pause recorded video.
	Jump/Step forward. Playback position moves 60 seconds forward.
	• 2x, 4x, 8x,16x, 32x for D4VN
	• 2x, 4x, 8x,16x for D8VN
	• 2x, 4x, 8x for D16VN
	Single Channel forward playback speed 1x, 2x, 4x, 8x, 16x, 32x, 64x
1/4	Slow Mode play. Forward playback speed x1/4, x1/2
	Press to back up the video. User can select archive file formats (Still image,
	NSF, AVI and EXE).
EZ	EZCopy button. User can copy video data as NSF, AVI and EXE format.
×	Return to the previous menu screen, search window, or exit from the Menu.

6. Export and Back Up

6-1. Still Image Backup onto USB Flash Drive

Still images can be captured and archived onto a USB flash drive or an USB external hard drive in live mode or while playing back recorded video.

- 1. Select a specific channel, which wants to back up on live screen.
- 2. When you press "Snapshot" button on Quick operation window, the media selection window screen will display.

Setup		
Display	•	
Snapshot		Please Select Media Type USB Drive
Super EZ Copy		
Enable Manual Record	d	
Instant Playback	Þ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Advanted Menu	Þ	<pre></pre>

3. Once you press "start" button, the system will capture a still image and archive onto a USB flash drive.



NOTICE USB Flash Drive must be in FAT32 file format.

6-2. Video Backup onto USB Flash Drive during playback

Video can be captured and archived onto the USB flash drive or a hard drive while playing back the

recorded video. In playback mode, press the **Export**" button to launch the backup function.

1. When you press **L**⁺ "**Export**" button on the selected channel or all channels, the DVR will ask

whether to archive a Still Image, NSF, AVI or EXE and select the proper media type.

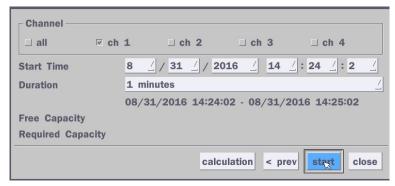
Please Select Archive Media Type Still Image 	Please Select Media Type ⊙ USB Drive
NSF - Proprietary Format	
O AVI - Separated Subtitle, Mac Compatible	
• EXE - Single EXE File Format	
calculation < prev close	calculation < prev start close

2. Select USB Drive (Flash Drive) to back up less than an hour.

Select USB HDD (Large Backup) to back up from 1 hour to 24 hours. (Only for NSF type)

Please Select Media Type	
• USB Drive	
 USB HDD (Large Backup) 	
	calculation < prev next > close

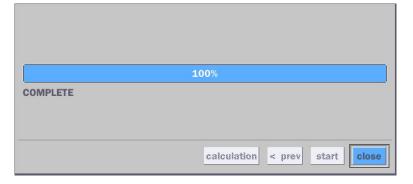
3. Once you select the channel and duration, the system will start to archive the data to the USB drive.



4. The following image shows the progress of archiving the data.

CHANNEL 1
74%
calculation < prev stgt close

5. The following shows the image to complete the backup. Select lose to return to the previous screen.

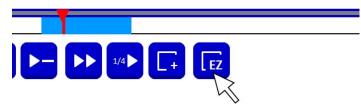


6-3. EZCopy: Video Backup onto USB Flash Drive during playback

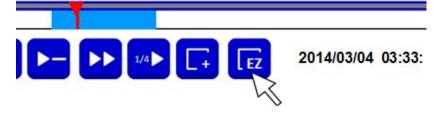
Using EZCopy feature, Video can be easily archived onto the USB flash drive or a hard drive.

In playback mode, press the **EZ** "**EZCopy**" button to launch the backup function.

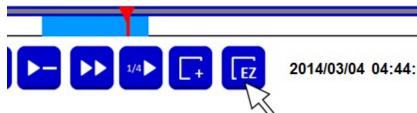
1. Press "EZCopy" button on the selected channel or all channels.



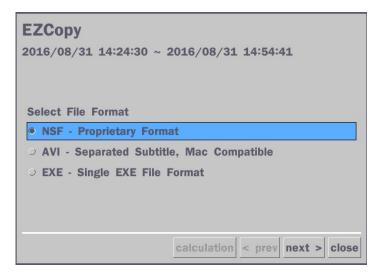
2. Then, EZCopy START time will display.



3. Move time bar cursor to the time of end of backup and press EZCopy button. Then, EZCopy STOP time will display.



4. EZCopy window will display. The DVR will ask whether to archive a NSF, AVI or EXE.



5. After backup format is selected, also select media type and channel(s) to archive the data to the media.

6-5. Playback of Backup Video

6-5-1. AVI Format

AVI format: AVI format video can be played back by Window Media Player™ or other media player that is compatible with AVI format video.

1. Please install the Decoder Filter that the DVR copies "DvrPlayer" folder on USB flash drive with the video. Decoder Filter is exported to the "/DvrPlayer" folder of the USB drive.



2. Otherwise, the video and time stamp over video can't be properly played back and won't be displayed on Window Media Player[™].





Timestamp On AVI. The subtitle is embedded to the video clip file.

The subtitle is embedded to the AVI file. To display a subtitle, user should install a special filter called "Decoder Filter".

6-5-2. NSF Format



NSF format: NSF format video can be played back using the HDPlayer HDplayer that the DVR copies to "DvrPlayer" folder on USB flash drive with video. Use the mouse scroll to use digital zoom in and out feature.



7. Network Access Using the Multi-Sites Network Viewer

7-1. Overview

The SpecoTech Multi Client is a multiple site monitoring client software with; video, audio, and alarm signals from the DVRs over the network. The SpecoTech Multi Client does not limit the number of DVR units to register.

The program displays up to 16 DVRs and supports dual monitors.

On the program, user may control PTZ cameras on the DVRs. By attaching a microphone and speaker system to devices on site, the user may make bi-directional audio communication over the network.

7-2. PC Requirements

Minimum PC Requirements

CPU	Intel Core i3
	1.8Ghz
Memory	2GB DDR2
VGA	512MB
Resolution	1280x720
Disk Space	1GB
OS	Windows 7, 8, 10
Network	10/100Base T
Others	Direct X 9.0c or Higher

Recommended PC Requirements

CPU	Intel Core i5
	2Ghz or higher.
Memory	4GB DDR3 or higher.
VGA	512MB or higher.
Resolution	1920x1080
Disk Space	1GB
OS	Windows 7, 8, 10
Network	10/100/1000Base T
Others	Direct X 10 or higher.

Before installing the program, check the PC specifications. The DVR remote software may not perform correctly if the PC does not meet the minimum requirements.

7-3. Installation of the Program

1. Insert the provided CD in the CD drive and double-click "SpecoTech Multi Client (XXXX).exe"



2. Select a destination folder and click "Next".



3. Select the program folder and click "Next".

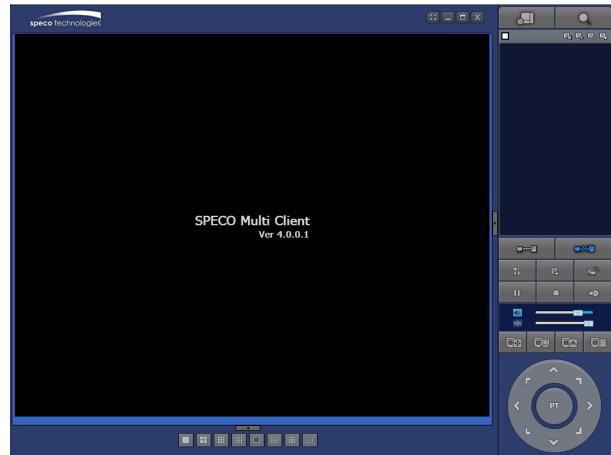
Select Program Folder		
Please select a program folder.		
Setup will add program icons to the Pr		
name, or select one from the existing f	olders list. Llick Next to continue	э.
Program Folders:		
SpecoTech Multi Client		
Existing Folders:		
Accessories		
Administrative Tools		â
Adobe		
AlViewer		
AnvSoft		
avast! Free Antivirus CMS		
DTS+AC3 Filter		
DVR		-
allShield		

- 4. The installation status screen is displayed.
- 5. After the installation is completed, "SpecoTech Multi Client" icon displays on the desktop screen.



7-4. Live Window

When installation is completed, double click the **"SpecoTech Multi Client"** icon on your desktop to start the program.



7-4-1. Main User Interface

7-4-2. Control Buttons

Button	Description
LOCAL PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the local PC.
REMOTE PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the remote DVR.
■ E E E E	 THUMBNAIL REFRESH: Click this icon to refresh and renew thumbnail image of the connected sites. SITE ADDITION: Click this icon to open 'Site Addition' window. SITE DELETE: Click this icon to delete site from the index window, after disconnect a site. NET FINDER: Select the site from the index window and click this icon to modify the information of specific site.
CONNECT	Click this icon to connect the selected site/sites.
DISCONNECT	Click this icon to disconnect the selected site/sites.
SETUP	Click this icon to setup configuration of SpecoTech Multi Client.
CAPTURE	Click this icon to capture a still image.
EVENT LIST	Opens list of events logged by the SpecoTech Multi Client.
PAUSE	Click this icon to play/pause live video.
ALARM ON	Click this icon to turn on/off alarm outputs.
RECORD ON	Enable or disable recording of live video to local disk, which has set in setup menu.
AUDIO	Use the volume control bar to set the audio level.
MIC	Use the microphone volume control bar to set the micro phone level.
PRESET/TOUR/SCAN/MENU	User can control PRESET/TOUR/SCAN/MENU
	To select the numbers of display channel/channels (Single, quad, 9
CHANNEL SPLIT	channels, and 16 channels) of highlighted site.
DVR SITE SPLIT	To select the numbers of DVR/DVRs (1 DVR, 4 DVRs, 9 DVRs, 16 DVRs) on main display screen.

7-5. Search and Playback Window

7-5-1. Main User Interface

You can access to search window by clicking the search icon (Local Playback / Remote Playback) on the upper right of the Live Window.



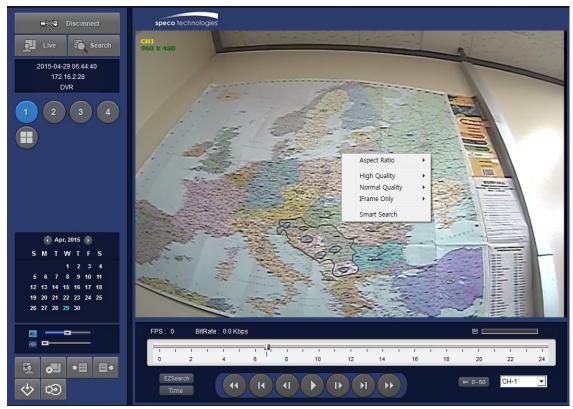
Button Description Click this icon to run a playback window to search and play videos that *-LOCAL PLAYBACK are recorded in the local PC. Click this icon to run a playback window to search and play videos that REMOTE PLAYBACK are recorded in the remote DVR. Display the site information and the connection status. 다 다 다 다 D16VN V Click this icon to connect the selected site/sites. CONNECT Click this icon to disconnect the selected site/sites. DISCONNECT Ĥ Click this icon to setup configuration of SpecoTech Multi Client. SETUP ٥, Click this icon to capture a still image. CAPTURE 5 Opens list of events logged by the SpecoTech Multi Client. **EVENT LIST** Click this icon to set the beginning time for backup of the recorded EZCopy Start video in AVI format. Click this icon to set the ending time for backup of the recorded video EZCopy End in AVI format. Click this icon to backup the recorded video in AVI format. DO BACKUP 49 Use the volume control bar to set the audio level. AUDIO To select the numbers of DVR/DVRs (1 DVR, 4 DVRs, 9 DVRs, 16 DVRs) on main display screen. To select the numbers of display channel/channels (Single, quad, 9 Ħ channels, and 16 channels) of highlighted site. To select the channel to playback. The calendar shows dates with recorded video in color. 2011 To display the recorded data of selected channel or all channels on a All time line scale.

7-5-2. Main Control Panel

	To change a timeline scale from 24 hours to 60 minutes.
(H 0-60) 24 HOUR	The timeline shows recorded data in color on the bar. You can adjust
	the timeline scale and move it to the time you wish to playback. Then
	click the play icon to display the recorded video.
	Playback buttons.
EZSearch	EZSEARCH: Thumbnail search over the network.
Ezsearch	- Shows 24 thumbnail images, one for each hour from 00:00 to 23:00.
	- Each hour is further broken up 24 segments; each is 150sec.
	- Then select the tile to play
	* Click the "PREVIOUS" button to go the previous step.
	Digital Zoom Window in Live and Playback. (Only available in Single
	Channel Viewing)
- All	

7-5-3. SMART SEARCH

- 1) User can search with selected area
- 2) Click right mouse button when playback





- 3) 'Smart Search' will search in the selected area only.
- 4) 'Smart Search' checking the motion and event from the selected area.
- 5) User can set, Sensitivity, Internal, Thumbnail size, Date and Time

Smart Search - CH01		X
Image: Sensitivity Image: Sensitivity Low High Image: Sensitivity Image: Sensitivity Dotion Date/Time Format Option Date/Time Format Time Start 2015-04-29 Start Sensitivity Start D15-04-29 Start Start 2015-04-29 Start 2015-04-29	Date/Time	
	Start	Stop

	Date/Time	
	2015-04-29 06:53:42	
	2015-04-29 06:53:43	
	2015-04-29 06:56:01	
	2015-04-29 06:56:02	
015-04-29 06:56:59 Mouse Button – Left(Select), Right(Unselect) Sensitivity	2015-04-29 06:56:03	
Low High 1 sec	2015-04-29 06:56:04	
Dption Date/Time Format YYYY-MM-DD	2015-04-29 06:56:08	
Time	and the second second	
	2015-04-29 06:56:09	
Start 2015-04-29 🗸 오전 6:50:45 📩		
Start 2015-04-29 오전 6:50:45 · End 2015-04-29 오후 6:59:45 ·	A DECEMBER OF A	
	2015-04-29 06:56:10	

6) Select any of search Thumbnail then selected event will playing.

7-6. Setup of SpecoTech Multi Client

Click the setup icon to setup the configuration of SpecoTech Multi Client software. The SETUP window is displayed as below.

7-6-1. General

Security Option: Set a password for security options. Select security options and set a password.

Then when you access any of selected functions, you need to enter the password.

You can also set the save path for capturing and backup.

Save Path: Specify the location to save captured still image for Capture and Backup data.

Miscellaneous

Automatic Reconnection: If enabled, the software will automatically try to reconnect to the last successful IP address. But, when CLIENT ACCESS is OFF on the DVR, the software will not try to reconnect even if it is enabled.

Always On Top: If enabled, the software display will be continuously on the top of other windows. **Time Format**: Change the way the Client software displays the time.

Setup		X
 General Event Event search Record 	Security Opti	Shutdown Setup Password
Disk Display	-Save Path Capture :	C:\Storage\Capture\
Language 🂡 About	Backup :	C:\Storage\Backup\
	Miscellaneou V Automati Always O Time Forma	ic reconnection
		OK Cancel

7-6-2. Event

Event log can be archived and searched.

Event Log: Specify the location to save event logs and select event to archive.

General	Log				
Sevent Event	Path :	C:\Storage\Log\			
Event search	Size :	10		(MA)	(: 100MB)
Record					
Disk Display	Event		Log	Event list	
Language	1 Star	tup		V	
? About	🚱 Shutdown		\checkmark	V	
8 ribour	🚱 Setu	ip Change	V	V	
	Sen	sor in	V		
	Q E Alar			V	
	式 Moti	on		V	
	🕺 Can	nera loss		V	
		work loss		V	
	<mark>,</mark> ■ Rec	ord	\checkmark	V	

Event Search: Event log can be searched from the selected time.

Setup						X
 General Event Event search Record Disk 	From : To : Path :	First	2011-04-26 2011-04-26 ge\Log\		2:00:00 AM 7:48:54 PM	Find Browse
Display Language	Туре	Site	Address	Event	Date	Time
					ОК	Cancel

7-6-3. Record

Record Setup: You can set the recording conditions as the following; Always, Event, or Auto record. And you can also select target DVR/DVRs and channel/channels. When you set the recording condition to event, you can set event for motion or alarm with duration.

 General Event Event search Record Disk Display Language About Always Event Always Event Alarm Duration : 5 Alarm Channel Site : Site 1 All site All NO. CH 1 Channel 1 2 Channel 2 	
Event search Record Disk Disk Channel Site : Site 1 All site About NO. CH 1 Channel 1 2 Channel 2	
 Record Motion Alarm Duration : 5 Channel Site : Site 1 All site All NO. CH 1 Channel 1 2 Channel 2 	
Channel Site : Site 1 ■ All site About NO. CH 1 Channel 1 2 Channel 2	Sec
Language Site : Site 1 → All site About All NO. CH 1 Channel 1 2 Channel 2	
About NO. CH I Channel 1 2 Channel 2	
NO. CH 1 Channel 1 2 Channel 2	
2 Channel 2	<u> </u>
	E
Channel 3	
a Channel 4	
5 Channel 5	
6 Channel 6	-

Record Local Storage Setup: You can select the local disk to record and the amount of disk space you want to allow the program to use for recording. You can also select the option to overwrite data or stop recording when the maximum amount of disk space is full.

etup		X
 General Event Event search Record Disk Display 	Disk Space : C:\	
Language Robut	 Disk full ● Replace oldest files. ● Stop recording. 	
	OK Car	ncel

7-6-4. Display

You can select the OSD (On Screen Display) to be displayed.

Setup		X
 General Event Event search Record Disk Display Language About 	OSD Site : Site 1 • [Info Display network statistics Date/Time	 All site Event Alarm Motion Sensor Record Video Loss
		PC when having a shattered image on of multi monitor. If option is enabled, the

7-6-5. Language

English, French and Spanish is selectable.

Setup				X
 ☑ General ▲ Event ☑ Event search 砜 Record ☑ Disk ☑ Display ④ Language ? About 	Language :	English French English Spanish		
			ОК	Cancel

7-6-6. About

"About" provides network client version information.

Setup		×
 General Event Event search Record Disk Display Language About 	SPECO Multi Client Version 4.0.0.1 (Build 200220) Copyright (C) 2011 This product licensed to : Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.	
	OK	Cancel

7-7. Remote Setup

The menu settings for the DVR unit can be set over network.

Put the cursor of the mouse on the channel, which is connected to the site and right click on the mouse to open the submenu. Then the following window is displayed as below. Select the **REMOTE SETUP**.

	07 L7 8 L4	- eo		
speco technologies				Q
Disconnect High Quality Normal Qualit IFrame Only	CH2 NO VIDEO	CH3 NO VIDEO	CH4 NO VIDEO	Connected
CHS Setup NO VIDEO Remote Setup Lock Site Informatic Full Screen Aspect Ratio		CH7 NO VIDEO	CHB NO VIDEO	
CH9 NO VIDEO	CHIU NO VIDEO	CH11 NO VIDEO	CH12 NO VIDEO	
CH13 NO VIDEO	CH14 NO VIDEO	CH15 NO VIDEO	CH16 NO VIDEO	
	2014-03-	0 15:45:53		

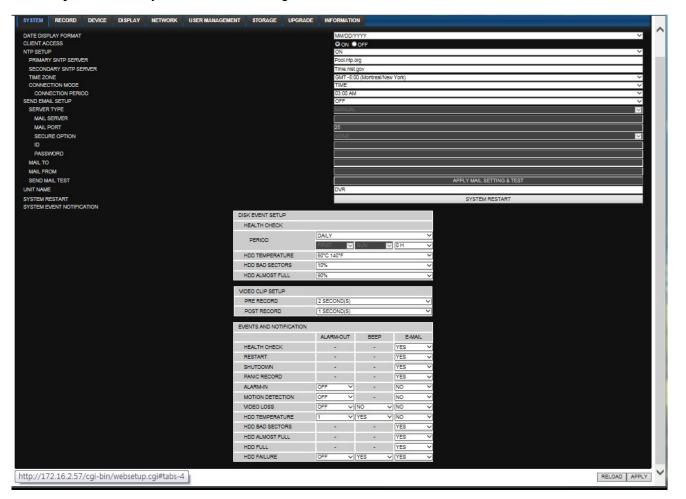
Then the setup window is displayed. The specified menu screen is displayed on the upper left of the screen. Enter the password of the DVR when prompted. (NOTE: The password is same with DVR setup password.) Setting is the same as with the DVR menu setting. Refer to the corresponding pages for details on the setting items.





7-7-1. System

Select **System** to set system and time settings.



- DATE DISPLAY FORMAT: Select the date display format.
- CLIENT ACCCESS: Enable/Disable remote access through network client software.
- NTP SETUP: Sets whether to synchronize the time using NTP server or not.
 - **Primary SNTP Server**: Input the NTP primary server address.
 - Secondary SNTP Server: Input the NTP secondary server address.
 - Time Zone: Select the time zone.
 - Connection Mode: Select the connection mode to NTP time server.
- SEND E-Mail SETUP: Sets whether to enable/disable e-mail sending function.
 - **SEVER TYPE:** Select GMAIL, HOTMAIL, AOL, YAHOO or MANUAL)
 - MAIL SERVER: Input the SMTP server name as well as the user ID and password.
 - **MAIL PORT:** Mail port setting.
 - SEURE OPTION: Select a secure mail server connection. (SSL or TLS)
 - ID : Email User ID
 - PASSWORD : Email User Password
 - MAIL TO: Input the appropriate email address to enable sending e-mail reports
 - MAIL FROM (Return Mail Address): Set the source e-mail address to be notified to the destination.

- **SEND MAIL TEST**: Examine the function with registered information.
- **USER NAME**: Name the DVR
- SYSTEM RESTART

• SYSTEM EVENT NOTIFICATION

Allows the user to set EVENT NOFICIATION ON or OFF

• HEALTH CHECK

(Allows the user to set MAIL STATUS periodically): DAILY or WEELY or MONTHLY

- HDD TEMPERATURE
- HDD BAD SECTOR
- HDD ALMOST FULL
- VIDEO CLIP SETUP: Setting the duration for pre and post recording.
- EVENTS AND NOTIFICATION
- HEALTH CHECK / RESTART / SHUTDOWN / PANIC RECORD

Enable Email Notification in the event a problem occurs with the VN.

- o ALARM-IN : Enable Email Notification when the camera detects sensor
- MOTION DETECTION : Enable Email Notification when the camera detects motion
- VIDEO LOSS: Enable Email, Beep and Alarm output Notification when the camera signal is lost.
- HDD TEMPERATURE : Enable Email Beep and Alarm output Notification when the HDD reaches the maximum temperature
- HDD BAD SECTOR: Enable Email Notification when the HDD has bad sectors.
- HDD ALMOST FULL: Enable Email Notification when the HDD is almost full.
- HDD FULL: Enable Email Notification when the HDD is full.
- HDD FAILURE: Enable Email, Beep and Alarm output Notification when the HDD fails.

7-7-2. Record

Select **RECORD** tab to set the recording conditions.

SYSTEM	RECORD	DEV	ICE	DISPLA	Y	NETWOR	к	USER	MANAG	EMENT	S	TORAG	E I	JPGRAI	DE	INFORM	NOITAN							
SITE											ſ	CH1												
RESOLUTI	ION											D1												
FRAME RA	ATE										Î	30 FPS												
QUALITY												LEVEL	5(H)											
RECORDI	NG MODE											MOTION	V											
SENSOR I	RECORDING											-		-				ŀ			• •		4	-
PRE RECO	ORD											1 MINU	TE(S)											
POST EVE	ENT RECOR											10 SEC	OND(S)										
AUDIO												0		OFF										
SCHEDUL	E																							
SENSOR						-	•	-		•	40		40	40			10	17	10	10				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUN			C				М		S															
MON			C	C					S															
TUE				С			М																	
WED			С	С					S															
THU							М																	
FRI			С				М		S															
SAT			С				М		S															
EZRecord																								
RESOLUTI	ION											D1												
FRAME R/	ATE											30 FPS												
QUALITY												LEVEL												
RECORDI	٧G											NOTION	V											
DAYS TO	RECORD											29 DAY	(S) 7 H	OUR(S)										

These settings apply to the specified channel only.

- Recording Setup
 - **RESOLUTION**: Sets the resolution for the recordings. The value applies to an individual channel.
 - o FRAME RATE: Sets the recording rate.
 - o **QUALITY**: Sets the image quality in 5 levels.
 - **RECORDING**: Sets the recording mode.
 - RECORDING MODE: CONTINUOUS, SCHEDULE, MOTION, SENSOR
 - o **PRE RECORD**: Sets whether to perform or not prerecording.
 - POST EVENT RECORD: Sets the duration of the event recording.
 - AUDIO: Sets whether to perform or not audio recording.
 - **SECHDULE**: Sets the schedule recording.

These settings apply to all channels.

- EZRECORD
 - **RESOLUTION**: Sets the resolution for the recordings. The set value applies to an individual channel.
 - **FRAME RATE**: Sets the recording rate.
 - o **QUALITY**: Sets the image quality in 5 levels.
 - o **RECORDING MODE**: Sets the recording mode.
 - **RECORD DAYS**: By the setting value, the Recording Days will change accordingly.

7-7-3. Device

Select **Device** to set Spot Out, Enable/Disable CVBS Out, motion zone.

	WED	SETU		1.10.16)				_																	
SYSTEM	RECORD	DEVICE	DISPL	LAY	NETWORK	USE	R MANAG	EMENT	STORAG	E UF	PGRADE	INFORM	IATION												
ALARM-OUT												1													~
ALARM D DIGITAL DE												I	NFINITE												~
FILE UPU																									
																									UPLOAD
CHANNEL													:H1												~
SOUND T	YPE												IONE	_			_	_					_	_	~
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	JN																								4
	DN		\rightarrow												0										4
	JE		_																						4
	ED		\rightarrow																						4
T	1.00		\rightarrow																						4
	RI		\rightarrow																						4
S																									
CONTROLLI SPEED	ER												600												~ ~
ID												9													~
PTZ																									
CHANNEL													:H1												< <
SPEED													600												÷
ID												0												_	~
SPOT OUT																									
SPOT ON	EVENT EVENT DWEL												FF	(1)											≤ <
SEQUEN		LIME											FF	9J											~
	NCE DWELL	TIME											SECOND	SI											
													1			2			3						
													5			6			7						
SPOT CH	ANNEL																								
													9			10			11						
													13			14			15				16		
MOTION SITE													:H1												~
MOTION	ZONE												ULL ZONE												×
	SENSITIMITY											5													~
KEY TONE														FF						_				_	
	ONTROLLER	D										0													~
SENSOR												1													< <
TYPE												0)FF		_	_		_	_	_		_			~
																								RELOA	AD APPL

- ALARM OUT: Set the alarm out duration.
- **DIGITAL DETERRENT:** Set the schedule of digital deterrent function and upload the sound file to DVR.
- CONTROLLER: Set the controller baud rate and ID.
- **PTZ:** Set the PTZ baud rate, protocol, and ID.
- **SPOT:** Enable/Disable the SPOT OUT and SEQUENCE.
- MOTION: Setup the motion detection area and the sensitivity.
 - SITE: Select the channel
 - MOTION ZONE: FULL Zone or PARTIAL Zone
 - **MOTION SENSITIVITY:** 1~9 (High sensitivity level)
- **KEYTONE**: Sets On or Off of Key Tone.
- **REMOTE CONTROLLER ID**: Sets an ID number on the supplied remote control for its identification.
- **SENSOR:** Select the type of each sensor.

7-7-4. Display

Select the **DISPLAY** tab to set the DISPLAY conditions.

SYSTEM	RECORD	DEVICE	DISPLAY	NETWORK	USER MANAGEMENT	STORAGE	UPGRADE	INFORMATION		
OSD										
CHANNEL	L NAME					ON COF				
VIDEO LO	oss					ON COF				
STATUS	BAR / ICON					ON COF				
OSD CONTR	RAST					100				-
MAIN MONT	TOR SEQUENCE					ON COF				
SEQUENC	CE-DWELL TIME					3 SECOND(S)			*
SITE						CH1				-
NAME						CH1				
COVERT						OFF				•
BRIGHTN	ESS					45				*
CONTRA	ST					40				*
HUE						50				•
SATURA	TION					50				•

These settings apply to all channels.

- **OSD**: Sets whether to display or not, the date and time as well as channel number on the screen.
- OSD CONTRAST: Adjust the character contrast on the screen.
- MAIN MONITOR SEQUENCE: Setting for automatically switching the displayed video. SEQUENCE DWELL TIME: Sets the interval for automatically switching the screens.
- SITE: Name, Covert, Brightness, Contrast, Hue, Saturation

These settings apply to the specified channel only.

7-7-5. Network

SYSTEM	RECORD	DEVICE	DISPLAY	NETWORK	USER MANAGEMENT	STORAGE UPGRADE INFORMATION
NETWORK T	∩∕ PE					DHCP
						172.16.2.33
SUBNET I	MASK					255.255.0.0
GATEWA						172.16.1.254
DNS (PRI	MARY)					168.126.63.1
DNS (SEC	CONDARY)					168.126.63.2
DDNS						
ENABLE (DDNS					ON 🗸
HOST N	VAME					hostname
SUBMIT	T/UPDATE					ON ~
ezDDN	S					ON 🗸
NETWORK P	PORT					5445
NETWORK A	AUDIO PORT					5446
WEB PORT						80
NETWORK S	STREAM					CH1 -
RESOLUT	ION					CIF 🗸
FRAME R	ATE					15 FPS 👻
QUALITY						LEVEL 5(H)
USE MOB	ILE					OFF 🗸

- NETWORK TYPE
 - o STATIC: The address setting mode is manual. Input IP, Gateway, Subnet Mask, and DNS IP.
 - **DHCP**: The address setting mode is automatic.
- **DDNS**: Set whether to use DDNS service or not.
 - HOST NAME: Allows the user to setup a domain name manually
 - o SUMBIT/UPDATE: Select ON to submit the settings
 - ezDDNS: Enable/disable ezDDNS to register the host name automatically
- **NETWORK PORT:** When connecting multiple DVRs to the network, set a unique port number.
- NETWORK AUDIO PORT: Display the network audio port (NETWORK PORT + 1).
- WEB PORT: Set a web server port number.
- **NETWORK STREAM:** Set the Resolution, Frame Rate, and the Quality and enable/disable USE MOBILE.

7-7-6. User Management

Select the **USER MANAGEMENT** tab to set the DISPLAY conditions.

SYSTEM	RECORD	DEVICE	DISPLAY	NETWORK	U SER MAN	GEMENT	ST	ORAGE	UPGR	ADE	INFORM	TION									
AUTHORIT	Y SETUP																				
					10 A		PASS	WORD	SETU	JP	PB		PT.	z	REC	OFF	NETW	ORK			
						SWORD HECK]]					
					A	DMIN	-							1		3					
					U	SER1								1		3		2			
					U	SER2	1							1		3		È.			
					U	SER3	-							1		1		16 C			
USER NAM	E SETUP											ER1						21			
PASSWOR												MIN									
CHANGE											K	EP									
	SSWORD																				
	M PASSWORD																				
FLATURON					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				ADMI	N 🗹					2				2							
				USER	1 🗹			Z	Z			Z									
				USER	2 🗹													Ø			
				USER	3 🗹			V		7		7									

7-7-7. Storage

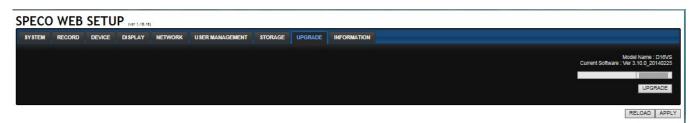
Select **Storage** to configure continued recording settings by overwriting the hard disk and the storage period for the recording data.



RELOAD APPLY

- **OVERWRITE**: Continues recording by writing over previous recordings when HDD is full.
- DISK INFO: Shows the information of HDD installed in DVR
- **RECORDING LIMIT**: Sets whether to limit or not, the recording data storage period.

7-7-8. Remote Upgrade



Shows the current Firmware version installed on DVR.

- **Browse:** Select BROWSE to locate the firmware file.
- **Upgrade:** Select UPGRADE to upgrade the firmware of the DVR.

7-8. Operation

7-8-1. Addition, Delete, and Modify of DVR Sites

7-8-1-1. Addition of Sites

1. Click SITE ADDITION button. And then the following window will be displayed as below.

Site Addition			X
Site Info			
Site name :	D16VN		
Site address :	172.16.2.57		
Port number :	5445		
ID :	admin		
Password :	••••		
ENS			
		ОК	Cancel

- Site Name: Input a name that properly describes a site.
- IP Address: Input IP address (Public IP address of a router that DVR is connected.) or Domain name
- Port Number: Default Port Number is "5445".
- ID: Input ID of DVR. Default ID is "admin".
- **Password:** Input network password of DVR that is same with DVR setup password.
- 2. Click OK button. And then the registered site is added on the directory window.

7-8-1-2. Deleting a Site

1. Select the site/sites to delete from the directory window.



2. Click SITE DELETE button. And then the selected site/sites is/are deleted.

7-8-1-3. Modify of Sites

1. Select the site/sites to modify from the directory window.



2. Click NET FINDER button. And then the following window will be displayed as below.

Net Finder					X
Name	Address	Address	Port No.	Мас	Model
D16VN	172.16.200.239				
الم الم	Madifi Dalata	End	D Change		Class
Add	Modify Delete	Find I	P Change		Close

3. Click Modify button. And then the modified information is displayed as below.

Site Modif	fy					X
Site Info						
Site name	:	D16VN				
Site addres	ss:	172.16.2	00.239			
Port numb	er:	5445				
ID :		admin				
Password	:					
ENS	[
Channels Channels	y Device	Channel	name			~
Ch No.	Name					^
1	CH 1					
2	CH 2					
3	CH 3					
4	CH 4					
5	CH 5					~
				0	к	Cancel

7-8-2. Connect and Disconnect

7-8-2-1. Connect

1. Select site/sites to connect from the directory window.



2. Click

CONNECT button, and then site/sites displays/display as connected.

elli 352 x 240		CH2 NO VIDEO	CH3 NO VIDEO	CH4 NO VIDEO	D16V5 P : 172, 16, 2, 5
	Disconnect High Quality Normal Quality IFrame Only	k k			Connected
CH5 NO VIDEO	Setup Remote Setup Lock Site Information	:0	CH7 NO VIDEO	CH8 NO VIDEO	
	Full Screen Aspect Ratio				
CH9 NO VIDEO	Exit	CH1U NO VIDEO	CH11 NO VIDEO	CH12 NO VIDEO	
CH13 NO VIDEO		CH14 NO VIDEO	CH15 NO VIDEO	CH16 NO VIDEO	

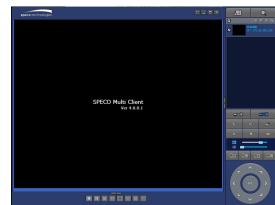
7-8-2-2. Disconnect

1. Select site/sites to disconnect from the directory window.



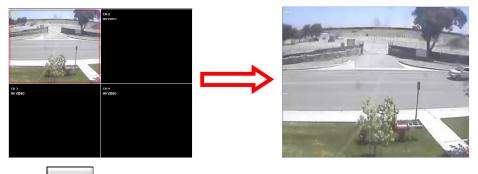
2. Click

DISCONNECT button, and then selected site/sites disconnected.



7-8-3. Still-image Capture During Live

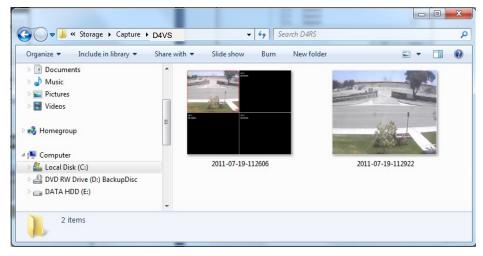
1. Double-click a channel to capture from the display screen. (Otherwise all channels will be captured.).



2. Click CAPTURE button. And then a Capture window will be displayed as below.

Capture		X
Save Path :	s\martin\Documents\Speco\Capture\D16VS	Browse
File name :	2014-03-10-163522	
File Format :	BITMAP(*.BMP)	•
	ОК	Cancel

- 3. Set Save Path, File Name, and File Format. And then click OK button.
- 4. Still image is saved as set in Capture window.



7-8-4. Recording Video on Local PC During Live

- 1. Click SETUP button. And then a setup window will be displayed as below.
- 2. Select Record and set the values.

General Event	Record Co	ndition © Event	Au	ito record	
Event search Record Disk	Event Motion	Alarm	Duration :	5	Sec
] Display ' About	Channel Site :	Site 1	▼ ■ All site		
	NO.	СН			*
	1	Channel 1			E
	2	Channel 2			
	3	Channel 3			
	4	Channel 4			
	5	Channel 5			
	6	Channel 6			*

3. Select Disk and set the values.

≝ General ▲ Event	Disk Space : C:\	4	GB
Event search		4	60
Record	Disk Info Total space : 465 GB		
Display ? About	Free space : 398 GB		
	Diskfull		
	Replace oldest files.		
	Stop recording.		
		ОК	Cancel

4. Click

RECORD ON button. And the color of button is changed.

5. Live video data is recorded as set in Record and Disk setup. These video data can be searched and play-backed with Local Playback.

File Edit View Favorites	Tools Help			4
🕞 Back 🝷 🕥 🕤 🏂	🔎 Search 🛛 🍋 F	olders	≥ 🗙 🗳 💷-	
ddress 🛅 C:₩Storage₩NCO	L.	,		💌 🔁 G
Name 🔺	Size	Туре	Date Modified	
20090608		File Folder	6/8/2009 4:00 PM	
20090610		File Folder	6/10/2009 3:16 PM	
🗟 20090317.ndl	4,275 KB	NDL File	3/17/2009 6:24 PM	
🗟 20090317_0.ndb	102,402 KB	NDB File	3/17/2009 5:35 PM	
a 20090317_1.ndb	102,403 KB	NDB File	3/17/2009 5:44 PM	
a 20090317_2.ndb	102,402 KB	NDB File	3/17/2009 5:52 PM	
🖬 20090317 3.ndb	73,845 KB	NDB File	3/17/2009 6:23 PM	

7-8-5. Local Playback and Remote Playback

7-8-5-1. Playback of Recorded Video on a Local PC

1. Click LOCAL PLAYBACK. And then Playback Window will be displayed over the Live

Window.



- 2. Select site/sites to connect from the directory window.
- 3. Click CONNECT button. And then Green bar displays on Search calendar and timeline scale window.



6. Move the marker on the timeline scale to where there is video data and press the PLAY button.



7. Video data that is recorded on local PC will be play-backed.



8. Use the mouse scroll to digitally zoom in and out from a single channel display.

7-8-5-2. Playback of Recorded Video on Remote DVR

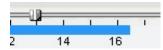
1. Click REMOTE PLAYBACK. And then Playback Window will be displayed.



- 2. Select the site to connect from the directory window.
- 3. Click CONNECT. And then Green bar displays on Search calendar and timeline scale.

		S	М	Τ	w	Т	F	S	1		0-60					6		R	1	6)(20	++					1		-	
								2																								
20	44	3	4	5	6	7	8	9			15-11																					
0 20	"0	10	11	12	13	14	15	16		_		 	_								_				_				_			_
- AI	pr –	17	18	19	20	21	22	23	1		_		- 1	1	1	1	1		1	1	1		1	1	1		1	1	1	1	<u>_</u>	1
		24	25	26	27	28	29	30	1 0)	2	4		6		8		10		12		14		16		18		20		22		24
			8				6																									

4. Move the marker on the timeline scale to where there is video data and press the PLAY button.



5. Video data that is recorded on the remote DVR is play-backed.



7-8-6. AVI Backup during Playback

You can back up the recorded videos in AVI format during playback.

- 1. Double-click the target channel to backup.
- 2. Select the beginning time by using the search calendar and timeline scale bar.

ľ		S	М	Т	w	T		S 2	H)-60						(K	•)(••					1		•	
	2011 -	3	4	5	6	7	8	9	777	2																					_	
C	Apr O	10	11	12 19	13	14	15	16 23	1	-	1	1	1	10	1	1	1	1	1	ा	1	1	1	1.5	1	E	1	1	1	1	1	1
		24	18 25	26				30	0	2		4		6		8		10		12		14		16		18		20		22		24

3. Click

EZCOPY START button on the timeline scale to select the beginning point of the backup.

1 1	1			1 1	1 1	1
o	10	20	30	40	50	60

4. Click EZCOPY END button on the timeline scale to select the ending point of the backup. Then, the selected starting point and the ending point on the timeline scale bar will be marked in green.

	1 1	1 1		1 1	1 1	
)	10	20	30	40	50	60

5. Click BACKUP. And then the BACKUP window will be displayed as below.

Select Char		CH-3 🔽 CH-4			
II AII					
Setting					
	Start Time :	01 : 17 : 18			
	End Time :	01 : 19 : <mark>43</mark>	T		
File Path :	C:\Storage\	Backup\			
File format :	AVI	*			
		0.0	1%		
				ОК	Cancel

6. You can also set the beginning time and ending time on this window. After selecting a channel for backup, click the OK button. The backup will begin.

				X
Select Chan]CH-3		
II AII				
Setting				
	Start Time :	01 : 17 : 18	A V	
	End Time :	01:19:43		
File Path :	C:\Storage\E	Backup\		
File format :	AVI	-		

7. AVI video data is recorded as selected in AVI Backup window. AVI format video can be played back by using Window Media Player™ or other media player that is compatible with AVI format video.



8. Network Access Using the Web-Browser Viewer

The DVR provides a live remote monitoring feature by web-browser viewer. (NOTE: Web-Brower is only available for Internet Explorer)

- 1. Check the IP address of the DVR from SETUP>SYSTEM>DESCRIPTION>IP ADDRESS or
- 2. Input the IP address or Domain name address that you pre-registered.

Address http://172.16.1.52	
----------------------------	--

3. Click this bar. Then the dialog box is displayed.

4.

Show details

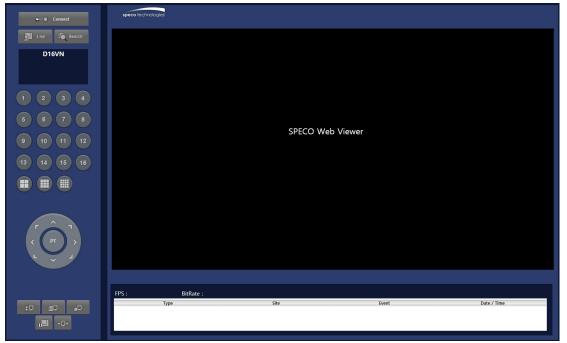
🧑 This site i	might require the following ActiveX control: 'WebViewer' from	Click here to install
Click "Instal	ll" to download and install the ActiveX control.	
😗 User Accou	nt Control	
	ou want to allow the following program to make nges to this computer?	
	Program name: SpecoTech-WebViewer(ver1.4.8.7) Verified publisher: Speco Technologies File origin: Downloaded from the Internet	

No

5. The Web Browser Viewer will be displayed as below after the ActiveX installation

Yes

Change when these notifications appear



6. Click the CONNECT button on the Left upper corner of web-viewer. Then "Connect" dialog is displayed.

ð	Connect Webpa	ige Dialog		x
6	🗿 http:// 192.168.1.1	2 /login.html		
	Connect to ren	note system		
	Address	192.168.1.12		
	Port	5445		
	ID	admin		
	Password	••••		
			Connect	Cancel

- Site Name: Input a name that properly describes a site.
- **IP Address:** Input IP address (Public IP address of a router that DVR is connected.) or Domain name
- Port Number: Default Port Number is "5445".
- ID: Input ID of DVR. Default ID is "admin".
- 7. **Password:** Input network password of DVR that is same with DVR setup password.
- 8. Then the cameras connected to the DVR are displayed on the screen.
- 9. Use mouse scroll to digitally zoom in and out from a single channel display.

■**■ Disconnect	speco technologies			
2021-07-12 16:36:38 D16VN	CH1 ()) () () () () () () () ()		CH3	CH4
1 2 3 4 6 6 7 8 9 10 11 12	Video Loss	Video Loss	Video Loss	Video Loss
	Video Loss	Video Loss	Video Loss	Video Loss
	Video Loss	Video Loss	Video Loss	Video Loss
	FPS : 60 BitRate : 211	4.48Kbps		
	Type Info Info Info Info	Site 172.16.200.239 172.16.200.239 172.16.200.239 172.16.200.239	Event Password is incorrect Connection Failed!!! Password is incorrect Connection Failed!!!	Date / Time 2021-07-12 15:30.46 ▲ 2021-07-12 15:36.46 2021-07-12 15:37.25 2021-07-12 15:37.26 ▼

9. Network Access Using the Smart Phone Viewer



Notice

Data Usage applied without Wi-Fi connection. Please check with your Phone Carrier.

9-1. App Viewer for iPhone

1. Enter the Apple App Store.



2. Search "Speco Player" in the App Store.



Notice

SPECO Player is for the VN, VX2, VX, VT, HT, HS, ZS, NS, DS, RS and HD series DVRs. SPECO VIEWER is not compatible with the T Series DVR's (TH, TN or TL) or the PC Series DVR's.

9-1-1. Live

1. Open the installed "Speco Player" App and click



button to add a remote device.

2. Enter the site name, IP or DDNS address, Network Port number (default 5445), ID(default admin) and Password that is same with DVR setup password. Then, click "Save" button.

•••• T-Mobile	4G 2:01 PM	43% 🔳
About	Device List	+
Demo DS		>
Demo HS		>
Demo NSF	0	>

- * Note: Network Port and Web Port must be forwarded before adding a new site.
- 3. Select a registered device and select "Live". Then click "Connect" button.

•••• T-Mobile 4	G 2:01 PM	43% 💶 -
	Demo HS	Edit
-	🔶 Conne	ct
Playback	Live	Remote Log
SITE INFORMAT	ION	
Site:	Demo HS	
IP/DNS:	demohs.ddns.s	pecoddns.net
Port:	5800	
ID:	user	
Password:	****	

4. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4, 8, 10, 16 channels split display depending on the DVR.



5. To select the display mode(1, 4, 9, 10 or 16 split display), tap the arrow menus button



6. Drag and drop channels

Touch and drag one channel to the other channel to swap the channel location. To swap the channel, drag a channel to another channel.

7. Digital Zoom In-Out

Double tap on the desired channel to view in 1channel mode. Then use the iPhone zoom feature using two fingers to pinch the screen to zoom in or out on the video image. User can also move the zoomed image around by touching the desired spot and dragging the zoom image.

9-1-2.PTZ Control

To control the PTZ functions of the camera, tap the menu button. Then PTZ menu icons will display. Using the PTZ icon on the screen, can control PTZF functions.



9-1-3. Playback

1. Select mode as 'Playback' and click 'Connect' button. Then select Date & Time and click 'Connect' button.

••••• T-Mobile 4G 2:01 PM	43% 💶)	●●●●○ T-Mobile 4G	2:05 PM		42% 🔳
Cevice List Demo HS	Edit	Contract	mo NSI	2	Edit
Connect			Conne	ect	
Playback Live Remote	Log	Playback	Live	Remot	e Log
		Mon Jun 6 Tue Jun 7	11 12	01 02	
SITE INFORMATION		Wed Jun 8	1	03	AM
		Today	2	04	PM
Site: Demo HS		Fri Jun 10	3	05	
IP/DNS: demohs.ddns.specoddns	s.net	Sat Jun 11 Sun Jun 12	5	06	
Port: 5800					
ID: user		SITE INFORMATION			
Password: ****		Site: Dem	NSP		

2. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4, 8, 10, 16 channels split display depending on the DVR.



3. Tap the menu button. Then Playback menu icons will display.



9-2. App Viewer for Android Phone

1. Enter the Android Play Store.



2. Search "Speco Player" in the Android Market and install the "Speco Player" app.

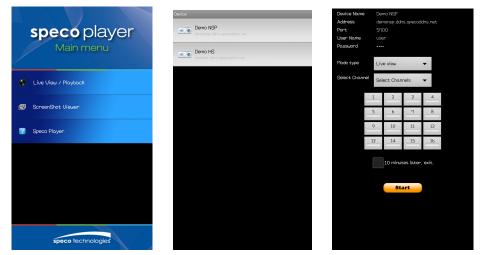


Notice

SPECO Player is for the VN, VX2, VX, VT, HU, HT, NU, NS, HS, DS, RS and HD series DVRs. SPECO VIEWER is not compatible with the T Series DVR's (TH, TN or TL) or the PC Series DVR's.

9-2-1. Live

- 1. Open the installed "Speco Player" App and select the "Live view / Playback". Then click the menu button of the phone to add a remote device.
- 2. Select the registered device and select 'Live view' and select up to 4 channels to monitor. Then click 'Start' button.

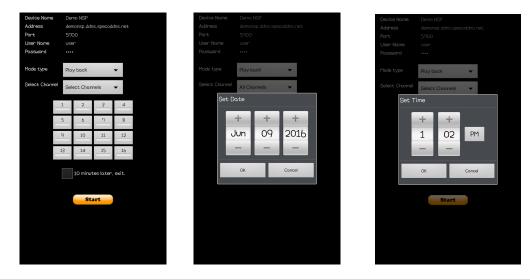


3. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 channels split display.



9-2-2. Playback

1. Select the registered device and select 'Play back' and select up to 4 channels to search. Then click 'Start' button. As soon as setting the date and time to search, the app will start the playback.



2. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 channels split display.

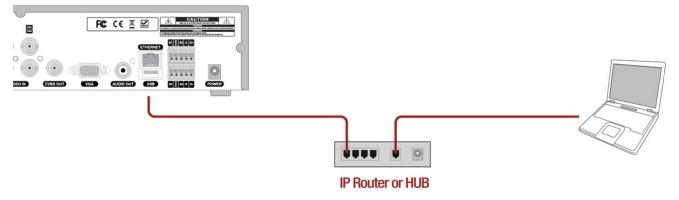


9-2-3.PTZ Control

To control the PTZ function of the camera, tap the channel screen, and then the channel name will be highlighted in Light Green. Using the PTZ menu icons on the screen, control PTZF.



APPENDIX: Network Connection - LAN



- 1. Install the network client software from the supplied CD.
- 2. Check the IP address from SETUP > SYSTEM > DESCRIPTION or SETUP>NETWORK of DVR.

Model Name	D16VN	
Software Version	Ver 8.2.0_20210610	
Storage Size	388 GB	
IP Address	172.16.200.239	
MAC Address	00:02:69:0e:33:b0	
DDNS Status	Ready - d16vn_0e33b0	
		ok

3. Run the network client software.

speco technologies						
		D16VS	Site Addition			X
			Site Info			
			Site name :	D16VN		
			Site address :	172.16.2.57		
SPECO Multi Client Ver 3.1.3.8	8		Port number :	5445		
			ID :	admin		
			Password :	••••		
	C		ENS			
		K PT X				
		L V J			ОК	Cancel

- 4. Input Site Name, Site Address (IP address), Port Number, and Password on the connect window.
 - Site Name: Input a name that properly describes a site.
 - IP Address: Input IP address
 - Port Number: Default Port Number is "5445".
 - ID: Input ID of DVR. Default ID is "admin".
 - **Password:** Input network password of DVR that is same with DVR setup password
- 5. Select a site by checking the box, and Press

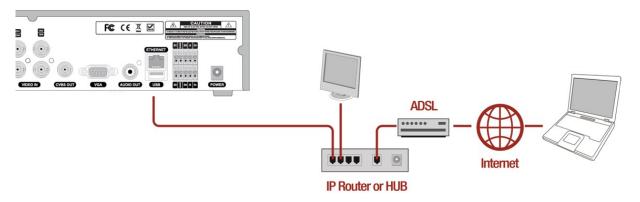
buttor

button to connect to the site.

speco technologies				
CH 1 1920 X 1080 00000 R	CH 2 1080	CH 3 1920 > 1990	CH 4	Image: Construction Image: Construction
CH 5 NO VIDEO	CH 6 NO VIDEO	CH 7 NO VIDEO	CH 8 NO VIDEO	
CH 9	CH 10	CH 11	CH 12	
NO VIDEO	NO VIDEO	NO VIDEO	NO VIDEO	
CH 13 NO VIDEO	CH 14 NO VIDEO	CH 15 NO VIDEO	CH 16 NO VIDEO	
	2021-07-1	2 16 42:34		
				· ·

APPENDIX: Network Connection – Internet and DDNS

Dynamic Domain Name System (DDNS) allows a domain name to be constantly synchronized with a dynamic IP address. A current dynamic IP address is being associated with a static domain name.



1. Go to SETUP>NETWORK>DDNS and set the DDNS SERVER to ON.

Enable DDNS	on	*				
Host Name	d16vn_0e33b0					
Submit/Update	on	-				
ezDDNS	off					

If you set **ezDDNS** to ON, the host name is automatically generated and registered.

2. Go to SETUP>NETWORK>DDNS>HOST NAME. Manually enter a domain name using the virtual keyboard and click ENTER button.

Host	Na	am	e									d1	.6v	n_	0e	33b	0						
	1		2	2	(1)	3	4		5	(6	7		8		9		0			=		Ţ
		q		w	,	е		r		t	у	'	u	Ι	i		0	p	,	[]		
Ca	os	Ι	a	Ι	S	Ι	d	Ι	f	g	:	h	Ι	j	Ι	k	1		;	Ι		I	Enter
S	hif	t		z		x		С		v	b		n		m		7			/		S	hift
	Cle	ear				Space						0	Clo	se									

3. When a manual host name is completed, Go to SETUP>NETWORK>DDNS>SUBMIT/UPDATE and select ON to submit the settings on the SPECO DDNS.

Once the setting is completed, the DDNS address will be: <u>http://hostname.ddns.specoddns.net</u> For example, if you enter the host name as "D16VN", then the address will be: <u>http://d16vn.ddns.specoddns.net</u>

4. When DDNS setting is done, click the APPLY button. Otherwise DDNS setting will not be applied.

5. When you exit SETUP menu, DDNS NOTIFIY window will pop up.

DDNS HO:	1	: d16vn_0e33b0
ST/	ATUS : SI	JCCESS
		7

6. DDNS registration status can be checked from SYSTEM INFORMATION or SETUP>SYSTEM>DESCRIPTION>DDNS STATUS

Model Name	D16VN	
Software Version	Ver 8.2.0_20210610	
Storage Size	388 GB	
IP Address	172.16.200.239	
MAC Address	00:02:69:0e:33:b0	
DDNS Status	Ready - d16vn_0e33b0	
		ok

7. Check the NETWORK PORT (Default: 5445), WEB PORT (Default: 80), and the IP Address of the DVR from SETUP>NETWORK.

°°	Network					
0	Network Type	dhcp	-			
•6	IP Address	172.16.2	00.239			
×	Subnet Mask 255.255.0.0					
	Gateway	172.16.1.254				
	DNS (Primary)	203.248.252.2				
	DNS (Secondary)	164.124.101.2				
•••	DDNS	select				
	Network Video Port	5445				
	Network Audio Port	544	16			
	Web Port	80	443			
	Network Stream	sele	ect			
		Apply	Cancel			

8. Port forward the NETWORK PORT (Default: 5445) and WEB PORT (Default: 80) of the private IP Address of the DVR on the network router.



Please refer to the user manual and guide for the detailed steps for port forwarding for specific router model.

9. Run the network client software.

speco technologies					
		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■			
				Addition	X
SPECO Multi Client Ver 3.1.3.8				e Info name :	D16VS
			Site	address :	172.16.2.57
			Port	t number :	5445
			ID :		admin
			Pas	sword :	••••
					OK Cancel

10. Input Site Name, Site Address (IP address), Port No., and Password on the connect window.

- Site Name: Input a name that properly describes a site.
- IP Address: Domain name or Public IP address of a router that DVR is connected.
- Port Number: Default Port Number is "5445".
- ID: Input ID of DVR. Default ID is "admin".
- **Password:** Input network password of DVR that is same with DVR setup password.

11. And select the OK button. Then, press

button after checking the left check box.

speco technologies				
CH1 1920 X 1000 00000 R	CH 2 1080	CH3 1920 × 1980	CH 4	Connected
CH 5 NO VIDEO	CH 6 NO VIDEO	CH 7 NO VIDEO	CH 8 NO VIDEO	
CH 9	CH 10	сн 11	сн 12	P
NO VIDEO	NO VIDEO	NO VIDEO	NO VIDEO	Image: Constraint of the second sec
-				
CH 13 NO VIDEO	CH 14 NO VIDEO	CH 15 NO VIDEO	CH 16 NO VIDEO	
	2021-07-1			