# Viewtron Video Surveillance DVRs

**HD-SDI** and Standard Definition CCTV Recorders



# **User Manual Version 1.0**

www.Viewtron.com

# Contents

Contents	2
Overview	
Important Safety Instruction	
Before Starting	
DVR Features	
Part Name and Functions (Front) - Standard Type	
Part Name and Functions (Front) – Compact Type	
Part Name and Functions (Rear) – Standard Type	
Part Name and Functions (Rear) – Compact Type	
System Start/End (Shutdown)	
System Start	12
System Shutdown (End)	12
Live Monitoring	13
LIVE MONITORING SCREEN CONFIGURATION	13
Live Video	13
Context Menu	14
Task Bar	14
Camera Screen Division	16
Screen Division	16
Sequence	16
Freeze	16
Zoom (Digital)	16
Covert	
Olor Control	
Pan/Tilt/Zoom (PTZ Camera Controls)	
Cameo Initialization	
<information> Status Menu</information>	
USB Status	
Backup Status	
Emergency Recording Status	20

Audio Status	20
Alarm/Buzzer Status	20
Event Status	21
B Network Status	22
🔳 Storage Status	23
© Current Time	24
Video Recording Status	24
Search	25
Time Table Search (Calendar)	25
Event Search	26
Video Playback	27
Playback Screen Configuration	27
Playback Video	27
Context Menu	27
Playback Control	28
Playback Mode	28
DVR Setup	30
DVR Quick Setup	30
System Setup (1/3)	30
Time Setup (2/3)	31
Recording Setup (3/3)	31
Advanced Setup	32
System	32
Record	34
Network	37
Device	38
Event	40
Export/Import Configuration	42
User Interface Look & Feel	43
DVR Tools	44
Upgrade (Firmware)	44
USB	44
Network	44

	Storage Manager	. 45
ĺ	External Storage	. 46
	System Log	. 47
Αp	pendix	. 48
ĺ	FAQ (Q&A)	. 48
ĺ	Product Dimensions – Standard Type	. 49
ĺ	Product Dimensions – Compact Type	. 50
,	Warranty	. 51

# Overview

# **Important Safety Instruction**

Instruction and Warnings for Safety

Please read these operating instructions carefully before using the unit. Please follow all the safety instructions listed below. Keep these operating instructions handy for future reference.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.

\*\*\*Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus

# **Before Starting**

This user manual provides Information for using the Viewtron surveillance DVRs. Topics include introduction, part names, functions, connection to other equipment, menu setup, etc. Users have to keep in mind the following notices.

- Manufacturer retains the copyright on this manual.
- This manual cannot be copied without Manufacturer's prior written approval.
- We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of instructions mentioned in this manual.
- Prior to opening the case, please consult a qualified technician first.
- Before installing an additional hard drive or connecting an external storage device (USB memory or USB HDD) to this DVR, check the compatibility. Consult your distributor or installer for the compatibility list.

#### [Warning]

#### ■ Replacement Battery or Hard Disk

It is essential that when changing the battery or HDD in the unit, the replacement must be of the same type or recommended ones, otherwise there may be a possibility of damage or explosion.

#### ■ System Shutdown

Turning off the power while the product is in operation, or undertaking improper actions may cause damage or malfunction to the hard drive or the product. Please turn off the power using the Power button on the front of your DVR. After selecting <OK> in the pop-up menu, you can pull off the power cord. You may want to install a UPS system for safe operation in order to prevent damage caused by an unexpected power stoppage. (Any questions concerning UPS, consult your UPS retailer.)

#### Operation Temperature

The guaranteed operating temperature range of this product is  $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$  (32°F  $\sim 104^{\circ}\text{F}$ ). This product may not work properly if you run right after a long period of storage at a temperature below the guaranteed one. Prior to using a device that has been stored for a long period in low temperatures, allow the product to stand at room temperature for a period. Especially for the built-in HDD in the product, its guaranteed temperature range is  $5^{\circ}\text{C} \sim 55^{\circ}\text{C}$  (41°F  $\sim 131^{\circ}\text{F}$ ). Likewise, the hard drive may not work at a temperature below the guaranteed one.

# **DVR Features**

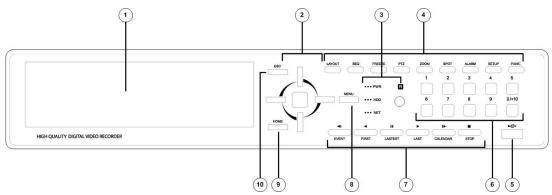
Viewtron DVRs employ H.264 video encoding for 4, 8 or 16 channel inputs and G.723 audio encoding for 4 or 16 channels while simultaneously supporting hard disc recording and playback. Viewtron DVRs also supports network connectivity, providing remote monitoring from Windows and Mac PCs, as well as mobile apps for iPhone, iPad, and Android.

Hybrid model DVRs support both SD Analog cameras (traditional CCTV), and HD-SDI cameras together on one stand-alone DVR.

**DVR Software Main Features** 

- H.264 High Quality Video Compression
- Stand Alone Linux Embedded DVR
- Full Real-Time Live Display & Recording in SD(Standard Definition) (4ch/8ch/16ch)
- 4CH Pure HD-SDI DVR Model (HD 4ch)
- SD (Analog) Camera & HD-SDI Camera in Hybrid Type DVR(HD 1~4ch + SD 4~8ch)
- HDMI & VGA monitor outputs enabling superior picture output quality (1920x1080p)
- Privacy Masking (to protect individual life) and <Covert> feature available
- Perfect synchronized Surveillance Audio Recording and Dual-Audio available too.
- Pentaplex (Live/Recording/Search/Network/Backup) and dual streaming of Network
- Easy to use graphical user interface
- <Look & Feel> Feature can choose your own GUI (like Window desktop theme)
- High-End Digital Zoom (Up to x10) to highlight HD-SDI
- UPnP (universal plug and play) function
- Built in DDNS Support
- Firmware updates over the Internet
- Emergency Recording (Panic recording)
- Java based Windows and Mac DVR Viewer via web browser
- Windows CMS Software
- Free mobile apps for iPhone, iPad, Android, Android tableys
- Various Remote Clients : Remote Live/Search/Setup, CMS, Backup Player
- Support various Brower(Web Client): Firefox, Chrome, Safari and Internet Explorer

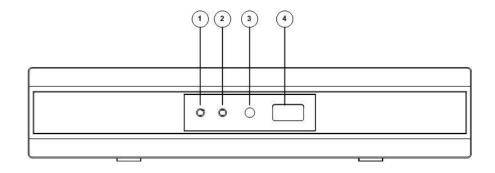
# Part Name and Functions (Front) - Standard Type



No.	Part Name	Functions	
1	ODD(Cover)	DVD & DVD-RW for backup	
2	Direction / Select Button	Used to change a value or move the cursor up/down/left/right. Selects a menu item or executes the selected menu	
3	LED Indicator & IR Sensor	Shows the status of Power, HDD and Network / IR Sensor	
	LAYOUT(Screen Division)	Changes Screen Division	
	SEQ	Each time you press the button in Live mode, the screen mode will be switched in sequence.	
	FREEZE	Freeze the Live Display	
	PTZ	Pop-up Pan/Tilt/Zoom Control Panel	
4	ZOOM	Pop-up Zoom Control Panel	
	SPOT	Pop-up Spot Control Panel.	
	ALARM	Pop-up ALARM Control Panel	
	SETUP	Pop-up SETUP(ADVANCED) Control Panel	
	PANIC	Start/End Emergency Recording Mode	
(5)	USB Port	USB connector port.	
6	Number Key(1~0/+10)	Used to select channel numbers directly in the Live Mode, or numbers in the numeric input mode  (0/+10 : To input Plus 9.)	
EVENT( ◀▮) Used for I		Used for backward frame-by-frame search / Shows Event Search control panel.	
	FIRST( ◀ )	Used for quick backward search / Playback first recorded data	
7	LASTEST(   )	Pause Playback / Playback latest recorded data	
	LAST( )	Playback / Playback last recorded data.	
	CARENDAR(   )	Used for forward frame-by-frame search / Show Calendar Search Control Panel	

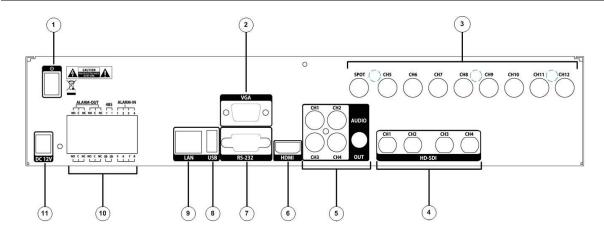
	STOP( )	Stop Playback.	
8	MENU	Show Menu.(the same as right button of mouse)	
9	HOME	Show HOME menu in task bar	
10	ESC	Cancel and Escape previous task	

# Part Name and Functions (Front) – Compact Type



No.	Part Name	Functions	
1)	LED Indicator	Power LED	
2	LED Indicator	HDD LED	
3	IR Sensor	IR Sensor	
4	USB port	USB connector port.	

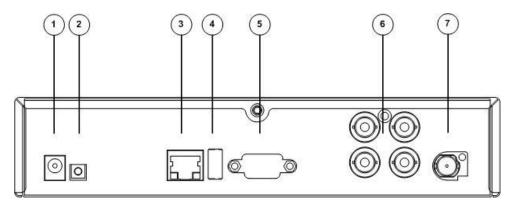
# Part Name and Functions (Rear) – Standard Type



<Ex. 4HD+8SD Model >

No.	Part	Functions	
1)	Power Switch	Used to Power On/Off	
2	VGA	VGA Video Signal Output Port	
3	SPOT	A live screen output port, separate from the VIDEO OUT.	
<u> </u>	CH's	SD Composite Video Signal Input Port (BNC type connector)	
4	HD-SDI	HD-SDI Video Signal Input Port	
5	AUDIO	Audio Signal Output Port (RCA jack)	
6	HDMI	HDMI connector port	
7	RS-232	RS-232 Port (To debug)	
8	USB Port	USB connector port	
9	LAN	NETWORK (LAN) connector port.	
	ALARM IN	ARM IN	
	(1~8 CH and G(ground).)		
10	RS485	Used for RS-485 communication (TX+, TX-, RX+, RX-)	
	ALARM OUT Alarm Output port (NO+C Or NC+C)		
11)	DC 12V	DC 12V Power Input Only	

# Part Name and Functions (Rear) – Compact Type

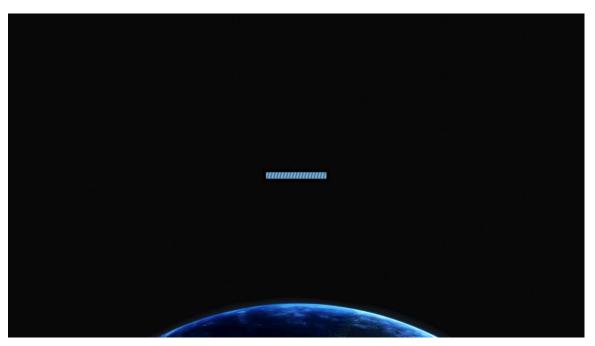


<Ex. 1HD+4SD Model >

No.	Part	Functions	
1)	DC 12V	DC 12V Power Input Only	
2	Recovery	Recovery Button	
3	LAN	NETWORK (LAN) connector port.	
4	USB Port	USB connector port	
5	VGA	VGA Video Signal Output Port	
6	CH's	SD Composite Video Signal Input Port (BNC type connector)	
7	HD-SDI	HD-SDI Video Signal Input Port	

# System Start/End (Shutdown)

# **System Start**



Connect the DVRs power supply and switch on Power button at rear of unit. The booting window above will show and system starts.

- HDMI output does not show the booting window above.
- Normal booting time is within 1minute, but can take more time due to abnormal shutdown and hard drive stability check-up.
- When booting, users may hear the buzzer or beep sound
- Default ID & Password : admin & 1111

# System Shutdown (End)

[Home>System shutdown] Menu, users can shut down or restart system..

- When clicking <Shutdown>, users will see <Power Off> message, then shutdown system.
- When the DVR in shut down by Switch Power Off or Unplug of Power Cable without the normal process above. This can damage DVR and HDD, so please shutdown the system by normal procedure above.

# Live Monitoring

# LIVE MONITORING SCREEN CONFIGURATION



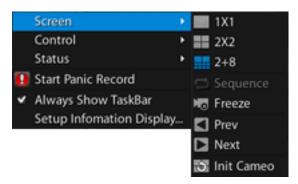
## **Live Video**

#### Video OSD (Icon)

- Camera Name Shows Camera Name(Title)
- Record Mode Shows current Record Mode
  - Ontinuous Record
  - Event Record
  - Emergency Record
- Motion Detection
- PTZ Show PTZ Camera(Connected)
- Audio Record Show Audio Record Status
- HD-SDI Input HD-SDI Camera Status (1080P, 720P Auto Detection)

When clicking right button of mouse and goes to [Context>Information Setup], users can setup all values

#### **Context Menu**



Setup Screen Division and others like above. It is shown by <Right button of Mouse> or Menu Key.

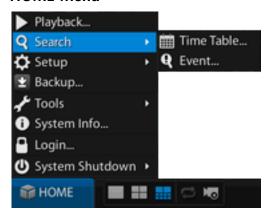
#### Task Bar

In Task Bar like below, users can setup and check the <HOME> menu and all <Information> status menus.

In [Context Menu>Always Show Task Bar], users can setup Task Bar always <Shown> or <Shown> by Mouse Move (like PC Window Task Bar)

When users can't see Task Bar, can setup all <Information> status menus in [Context Menu>Setup Information Display].

#### **HOME Menu**



Show and Setup Playback/Search/Setup, and other major menus like above

#### **Screen Division Tool Bar**



Setup and control Screen Division, Sequence (mode), Freeze and others like above

#### **Information Status Tool Bar**



Setup and Check current DVR's Status

- USB(Storage) Connection
- Backup Status
- Panic Record
- Mute
- Alarm, Buzzer Status
- Event Status
- Network Status
- Storage Status

# **Camera Screen Division**

Setup and Control Screen Mode of Display Screen Division/Sequence/Freeze/Zoom

#### Screen Division

Mode - 1x1, 2x2, 3x3, 4x4, 1+5, 3+4, 1+7, 2+8, 1+12

Setup by [Context Menu>Screen] or Screen Division Tool Bar.

• According to Model (CH), Screen Division will be different.

## Sequence

Shows current Screen Division in sequence

Setup by [Context Menu>Screen] or Screen Division Tool Bar

Setup - Advanced Setup > Device > Display

### **▼** Freeze

Freeze Live Display

Setup by [Context Menu>Screen>Freeze]

This stops by clicking another Screen Model automatically

## Zoom (Digital)

Setup and control Zoom in Display.

Setup by [Context Menu>Control>Zoom]

Zoom-In of HD-SDI CH, Mini View is not displayed.



## Control by Mouse

- Double Click Zoom-In by Click Point .(3rd Grade)
- Drag & Drop Zoom-In wanted Area.(In Full Screen or Mini View Window like above)
- Scroll (Mouse Wheel) Zoom-In or Zoom-Out current Display.(10th Grade)

### Covert

Setup wanted CH (Camera) be covert (hidden).

Setup by [Context Menu>Control>Covert]

- In Covert, Recording continues.
- When Video Loss is occurred during Covert mode, <Covert> and <Video Loss> will be shown together.

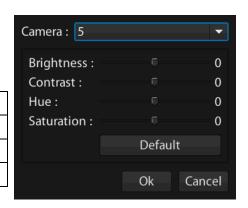
#### Color Control

Setup Display Colors

Setup by [Context Menu>Control>Color]

Can't Setup Color of HD-SDI Camera

Brightness	Set Brightness
Contrast	Set Contrast.
Hue	Set Hue.
Saturation	Set Saturation.



## Pan/Tilt/Zoom (PTZ Camera Controls)

Setup and Control PTZ.

Setup by [Context Menu>Control>PTZ]

- For this, PTZ camera is installed and setup rightly.
- Preset Setup
  - Set Camera position by 4 direction button and Zoom and others like left picture.
  - Set Preset Number.
  - Click Set button.
  - After that, Window to ask <Position> like <Near> will be shown.
  - Set <Position> and click OK button.(It varies according to Camera)



### **Cameo Initialization**

Setup Live Screen Camera Position as user wanted just by Drag & Drop.

Setup by [While clicking right button of mouse (more than 1 second), and just Drag & Drop to wanted position].

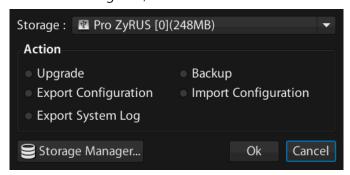
- When clicking the right button of mouse more than 1 second, Camera (like above) will be shown, then just Drag & Drop it to wanted position. In Live Display.
- ▼ This works only after <Log-In>.
- Setup to Initial by [Context Menu>Screen>Cameo Initial].

# <Information> Status Menu

In <Information> Status menus on Task Bar, users can check and control each System Information.

### **USB Status**

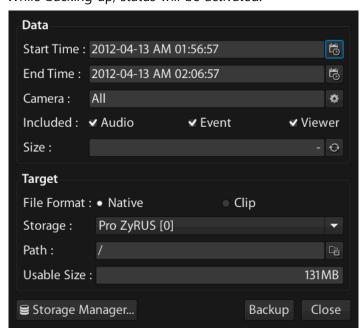
When connecting USB, this will be activated automatically.



By just selecting Device, users can Upgrade, Backup, Export/Import configuration and others like above.

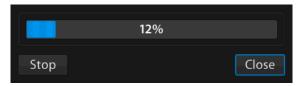
## **Backup Status**

While backing up, status will be activated.

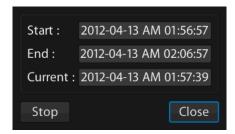


When backing up or starting backup, users can check the status as seen below

#### **Backup Progress Status**



### **Backup Period Status**



## Emergency Recording Status

While "Emergency Recording", this will be activated.

To stop "Emergency Recording", Authorized Users have to <Log-In>. But Starting, any users can start.

### Audio Status

While Audio is working, this will be activated. By this, users can control <Audio On/Off>(Mute)

In Full 1CH Mode, Audio is working.

## Alarm/Buzzer Status

While Alarm/Buzzer(s) are working, this will be activated.



Can check and control Alarm/Buzzer as shown above.

### Event Status

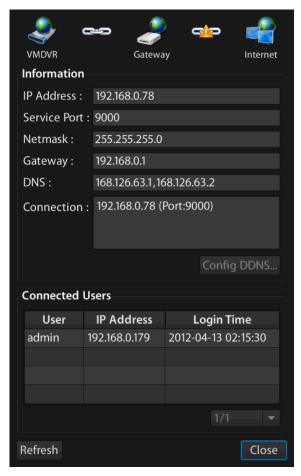
While Events (Motion Detection/Sensor/Video Loss) are working, this will be activated.



Can check and control each CH status at a glance.

### Network Status

While Network is connected, this will be activated.



One can check and control currently connected USERS, and view the Network detail information as shown above.

#### **IP Address**

Check and show connected external IP address and Port (9000: Default

#### **UPnP** (Universal Plug & Play)

When users use a Hub (Router) to access the Internet, UPnP function will set up the Port-Forward automatically in the Hub (Router).

In [Advanced Setup>Network>Port & Bandwidth], users can do this manually as well.

#### **DDNS**

Automatic Setup of DDNS while connected to the Internet

In [Advanced Setup>Network>DDNS setup], users can set this up manually as well.

### **4** Error Status



Router does not support UPnP and Port-forward.



Unknown Gateway.



Gateway is not connected to the Internet

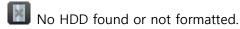


Gateway is not connected to the Internet or connection test failed

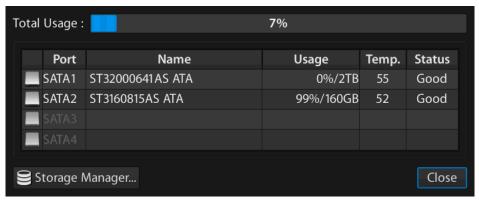
Connection Test – Connection Test Server is running. It automatically tests the connection from DVR to external servers and displays the test results.

## Storage Status

Can check Backup Storage Status like below.



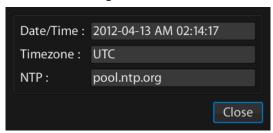




One can check Storage on each Device as shown above,

#### **©** Current Time

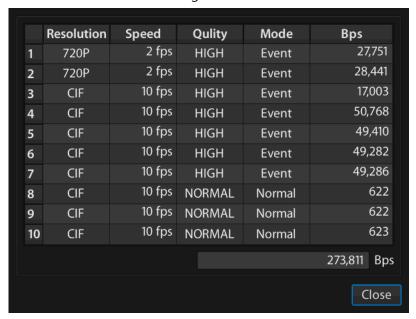
Check and manage current time.



One cCan check current time status as shown above. (Time Zone/ NTP address).

## Video Recording Status

Can check each CH's Recording Status like below.



One check and control each CH detail as shown above (Resolution/Fps/Quality/Mode/Bps)

Bps is automatically checked in every 10 second.

# Search

Easily search and playback recorded data like below.

# Time Table Search (Calendar)



#### Calendar

One can check and search Recorded data by day in Calendar. This is done by selecting the Year/Month by clicking Arrow Bar in Calendar.

#### **Time Table**

One can check and search Recorded data Time Table Bar according to Camera (CH).

#### **Minute Table**

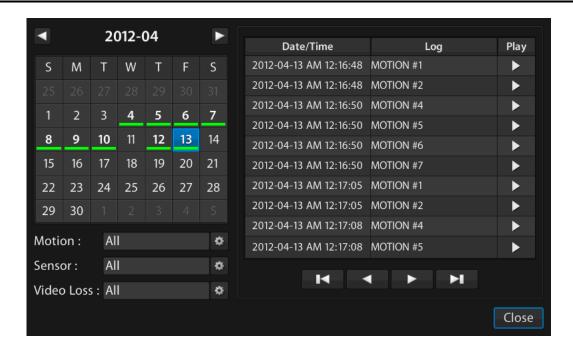
One can check and search Recorded data by Time/Minute, and playback wanted Data just by double-clicking it.

- Events (Emergency) Recording Red

### Overlap(Duplicated) Data

If and when duplicate date is found it will be displayed in < Orange> in the Minute Table

# **Event Search**



#### Calendar

When clicking a Date in Calendar, Event List is shown like above. Users can select Event, Search and playback. . Select Year/Month in clicking Arrow Bar in Calendar.

#### **Events**

Select Event List Motion Detection/Sensor/Video Loss per CH and Search and Playback

#### **Event List**

When selecting Events and search, users can get Event List like above. Select wanted Events and Playback instantly by clicking <Play> button.

- When Clicking <Play> button, each Video is playback.
- Events are showed by Time, all Video Data are playback.

# Video Playback

# Playback Screen Configuration



# **Playback Video**

### Video OSD

- Camera Name Shows Camera Name (Title)
- Playback Mode Shows current Playback

#### **Context Menu**



Setup Screen Division and others like above.

It is shown by <Right button of Mouse> or Menu Key.

## **Playback Control**

While in Playback mode, users can control and search data easily by using the Playback Control Bar as seen below.



- Playback Control Bar is always on top (fixed) or shown only by mouse movement.
- Can change Position in [Context Menu].

#### **HOME Menu**



Setup and Control Search/Backup and other main features

### **Screen Division**

Set Screen Division.



Set Audio Mute



Exit to Live Display



Can check Time of Recorded Data (Playback Time) and Status

## **Playback Mode**

By clicking Icons below, users can easily search and playback data

Icon(Button)	Name	Functions	
	Pause	Pause Playback	
<b>I</b>	Playback	Backward & Forward Playback By clicking these button, it Fast Backward/Forward  * In [Context Menu], users select Slow Backward/Forward.	
	Step Backward/Forward	Moves Backward/Forward by one frame at a time	
KN	Start/End	Goes to Start/End time of Data	

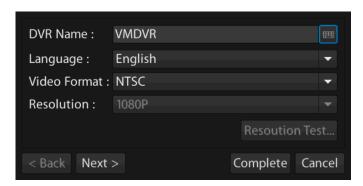
# **DVR** Setup

# **DVR Quick Setup**

Can Set <Setup> Menu quickly..

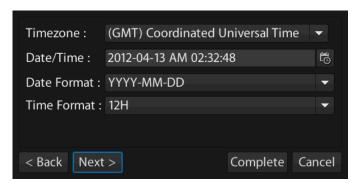
When users don't change, default and previous values continue.

## System Setup (1/3)



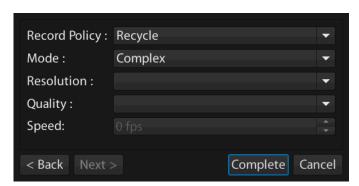
- DVR Name Set DVR Name(Title)
- Language Set OSD Language.
- Video Format Set Video Format.(NTSC/PAL)
  - To save Changed Setup, system must restart.
- Resolution Set Display Resolution according to Monitor and VGA.
  - When changed Resolution is not applied, previous Setup is applied.
  - For best results in using HD-SDI, 1080P (1920x1080), users should match the DVR resolution of 1080P (1920x1080) with their Monitor, found in settings.

## Time Setup (2/3)



- Date/Time: Set Time Zone according to Country.
- Date/Time: Must check your time zone and set this rightly first.
- Date Format: Set Date Format Y/M/D or D/M/Y.
- Time Format: Set Time Format 12H or 24H.

## **Recording Setup (3/3)**

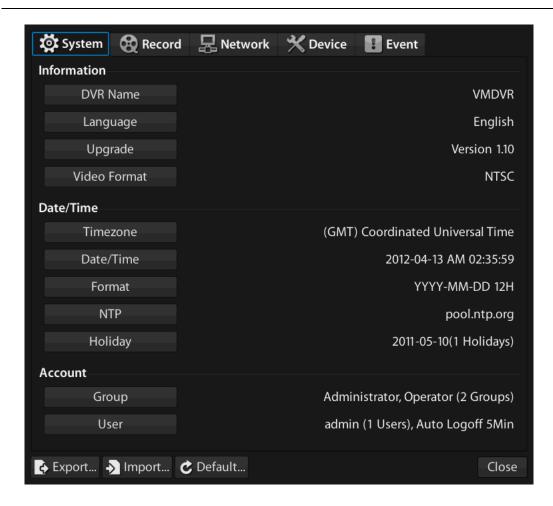


- Record Policy Recycle or other
- Mode Continuous, Event, Complex(Continuous + Event) Mode
- Resolution Set Recording Resolution CIF/D1/HD1 (HD-SDI 720P, 1024P, 1080P)
- Quality Set Video Quality Lowest ~ Highest ,Total 5 Level
- Speed Set FPS (Frame Per Second) for all Cameras (CH) by one click.

# **Advanced Setup**

Setup all detail & advanced values in each Operation Setup Menu

### **System**



#### **Information**

- DVR Name Set DVR Name (Title) to identify.
- Language Set OSD Language.
- Upgrade Check the current firmware version and upgrade to up-to-date versions
   by USB or Network. (Refer to –Upgrade Chapter)
- Video Format Set NTSC/PAL
  - To save Changed Setup, system must restart.
  - For best results in using HD-SDI, 1080P (1920x1080), users should match the DVR resolution of 1080P (1920x1080) with their Monitor, found in settings.

#### Date/Time

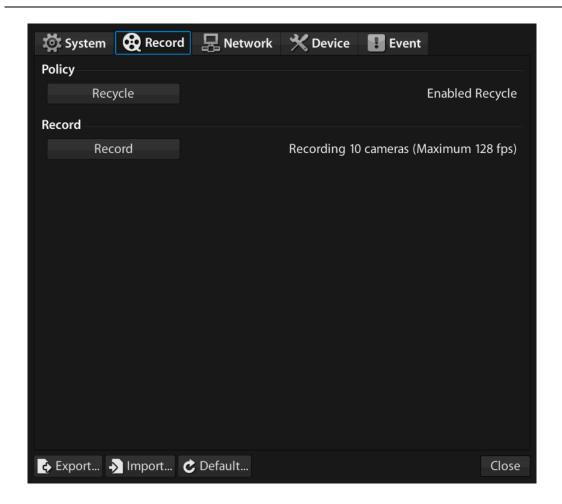
- Time Zone Set GMT Time Zone according to Country.
- Date/Time Set Date/Time according to country
- Date Format Set Date Format Y/M/D or D/M/Y.
- NTP Set NTP using and Time Server address.
- Holidays Set Holidays.
  - When a day is set as Holiday, Recording ode is set as Sunday.

#### **Account**

- Group Set and Manage Group (Admin/Operator).
- User Set and Mange User and Automatic Log-Out.
- Authority to Setup

Search	Can Search in Time Table and Events
Setup	Can set and change Setup
Backup	Can set and change Backup
Alarm	Can set and change Alarm
Buzzer	Can set and change Buzzer.
Color	Can set and change Color
Network	Can access by Remote Client
Upgrade	Can set and change Upgrade.
System shutdown	Can set System Shutdown
Cameo Init	Can set Cameo Init
Covert	Can set Covert.
Emergency	Can set and control Emergency Record
PTZ Control	Can set and manage PTZ control.
PTZ setup	Can set and manage PTZ Preset.
Disk Format	Can set and manage Disk Format.
Dual Audio	Can set and manage Dual-Audio.
Date/Time	Can set and manage Date/Time
Factory Default	Can set DVR to factory default
System Log View	Can check System Log
System Log Delete	Can delete System Log.

# Record



## Policy

• Recycle/One Time.

### Record

Can set: Record Mode/Resolution/Speed/Quality.

Ch	Mode	Normal	Event	Panic
All	Complex	Total 128fps	Total 128fps	Total 128fps
HD 1	Complex	720P, Medium, 2fps	720P,High,2fps	720P,Highest,2fps
HD 2	Complex	720P,Medium,2fps	720P,High,2fps	720P,Highest,2fps
3	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
4	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
5	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
6	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
7	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
8	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
9	Complex	CIF, Medium, 10 fps	CIF, High, 10fps	CIF, Highest, 10 fps
10	Complex	CIF, Medium, 10 fps	CIF, High, 10 fps	CIF, Highest, 10 fps
				Ok Cancel

#### Record Mode

- No Record Not Recording
- Normal Continuous Record.
- Event Events (Motion, Sensor, Video Loss) Recording.
- Complex Continuous Record(in Normal)+ Events Recording
- Schedule –Record to Schedule.

#### Schedule

Set Schedule for Recording.

#### Normal

Set Resolution/Speed/Quality in Continuous Record.

#### Event

Set Resolution/Speed/Quality in Event Record.

#### Emergency

- Set Resolution/Speed/Quality in Emergency Record.
  - Emergency Record starts by Panic button in Task Bar or Panic Key in front Panel.

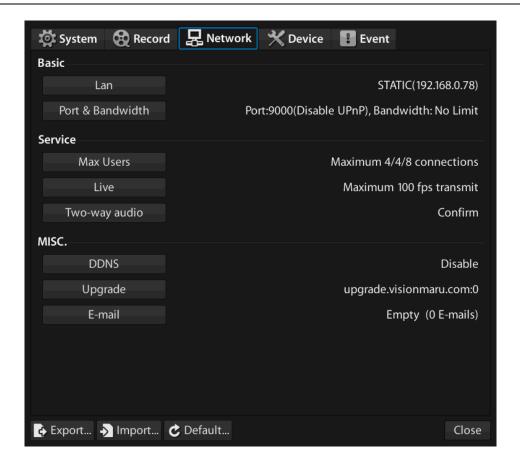
# Record Speed (FPS)

• According to Model/Resolution, Max Record Speed is automatically totaled.

					Max per CH						
			Max	In CIF	1008	1016	1108	1208	1404	1408	1400
N T	SD	CIF	480	X1	30						
		HD1	240	X2							
		D1	120	X4							
S C	HD	720P	40	X12			20	15	7	7	15
		1024P	30	X16			20	15	7	7	15
		1080P	20	X24			20	15	7	Х	15
P A L	SD	CIF	400	X1	25						
		HD1	200	X2							
		D1	100	X4							
	HD	720P	40	X10			20	12	6	6	12
		1024P	30	X13			20	12	6	6	12
		1080P	20	X20	·		20	12	6	Х	12

<sup>•</sup> When Total Record frame rate is set above supported rate, you will be prompted (with a red exclamation point) to reduced it to a support rate.

## **Network**



#### **Basic**

- LAN Set IP and DNS.
- Port & Bandwidth Set access port & bandwidth and Auto Port-Forward.
  - Setup Values can be checked in Network Status Information Icon.

    (Refer to Network Status)

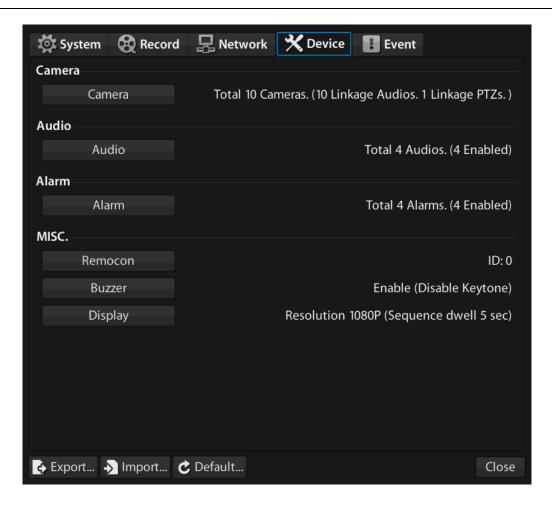
#### Service

- Max User Set Max User at the same time.
- Live Set Network Transmission Resolution/Quality/Speed (FPS) for each CH when remote access.
  - Set each Network and DVR Streaming separately.
- Dual Audio Set Dual-Audio access mode.

### **ETC**

- DDNS Set DDNS use or unused.
  - Set DDNS address in Network Status Information Icon (Refer to - ■ Network Status)
- E-mail Send e-mail address in the event set.

# **Device**



## Camera

- Camera Set Camera Name and others.
- Privacy Mask Set Privacy Mask Areas.
  - It is applied to Record Data.

## Areas (Max 4 Areas like below.)



Just by clicking Block or Drag & Drop, users can set or delete Areas. Save and Exit to [Context Menu].

- Audio Set and Check Audio for Record.
- PTZ Set and Check PTZ.

# **Audio**

• Set Audio.

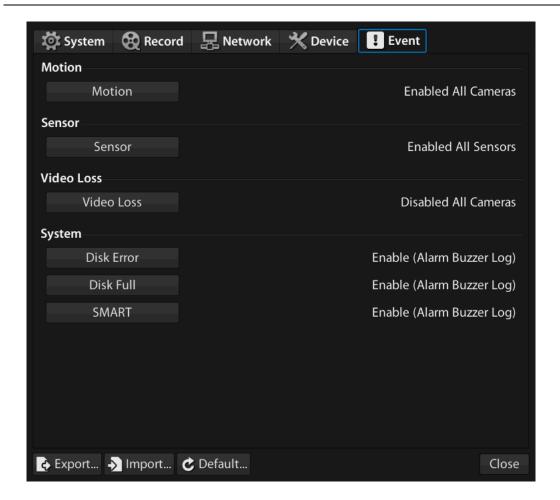
# **Alarm**

• Set Alarm Name and others.

## **ETC**

- Buzzer Set Buzzer & Sound.
- Display Set and manage Main (DVR)/Spot monitor's resolution and duration time for sequence model.

# **Event**

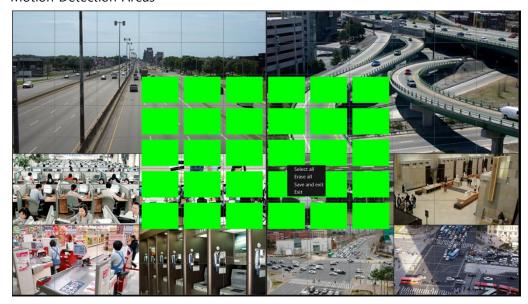


# Motion (Detection)

- Set Motion Detection Areas and Sensitivity.
- Set Event Synchronization (Integrated Action) with Alarm/Buzzer and others.

  (Refer to 4 Event Sync )

#### Motion Detection Areas



Just by clicking Block or Drag & Drop, users can set or delete Areas. Save and Exit to [Context Menu].

#### Sensor

- Set Sensor detection.
- Set Event Synchronization (Integrated Action). (Refer to 4 Event Sync )

# **Video Loss**

- Set Video Loss.
- Set Event Synchronization (Integrated Action). (Refer to 4 Event Sync )

# **System**

- Disk Error Set Use or Unused and Synchronization.
- Disk Full Set Use or Unused and Synchronization.
- SMART Set Use or Unused and Synchronization. (Refer to 🕡 Event Sync )

# **Event Sync (Synchronization)**

While Events, users can link (Synchronize) that to actions(1:N) like below

- Record Record in multiple cameras (CH).
  - Setup in [Record>Event Setup]
- Alarm– Activate Alarm in multiple cameras (CH)...

- Buzzer Activate Alarm in multiple cameras (CH).
- Popup Activate Pop-Up in Main or Spot Monitor.
- Email Send email with images in Events.
  - Setup email address in [Network>Email setup].
- Log Save Events Log and search them in Event Search.
  - System Events are saved in System Log [Home>Tools>System Log]

# **Export/Import Configuration**

# **Export**

Save current DVR's Configuration in USB.

## **Import**

Import DVR's Configuration in USB, and apply this to current DVR

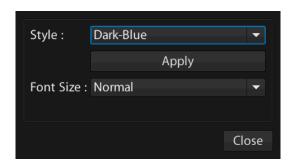
System Reboots.

### **Default**

Apply Factory Default.

System Reboots.

# User Interface Look & Feel



# Style

# Can Set and Mange UI Style just like desktop wallpaper theme.

Look and set ... from Dark Gray to Dark Orange.

### **Font**

Set: Font and Size.

Set: Big/Normal/Small.

# **DVR Tools**

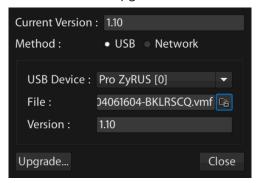
# **Upgrade** (Firmware)

In [HOME>Tools>Upgrade] or [Advanced Setup>System>Upgrade], users can upgrade firmware. Upgrade starts after download from Network or file Copy from USB, and after full upgrade DVR reboots again.

So restarting twice is required for full upgrade.

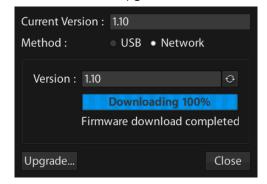
## **USB**

Choose USB and upgrade.



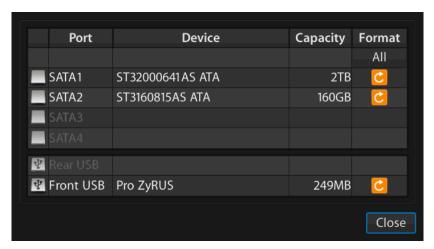
# **Network**

Choose Network upgrade and download latest firmware and upgrade.



Please use USB when Network is slow or not reliable.

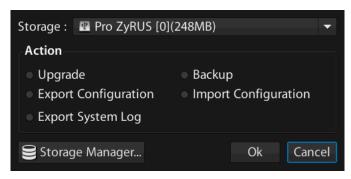
# **Storage Manager**



From here you can format both internal Storage (SATA HDD) and USB external Storage.

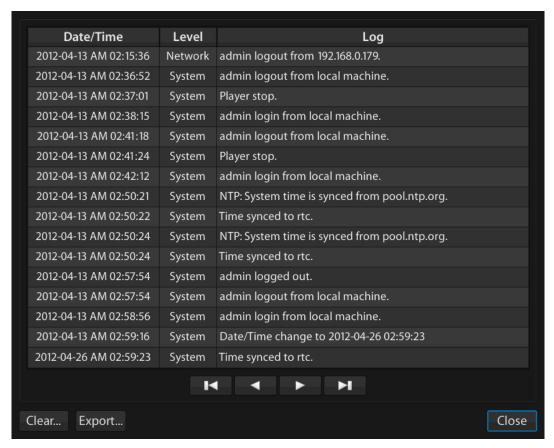
- "All formats" is available only for Internal (SATA).
- When **installing** an unformatted **new HDD**, "New" HDD Icon is shown.
- When **formatting** new HDD, it is added to new HDD for recording.
- **DVD backup** will require about 5G of HDD of storage.

# **External Storage**



Select **Storage** and do Upgrade/Backup/Export/Import Configuration and others like above.

# **System Log**



Can check and manage/playback System Log and save to external Storage or delete.

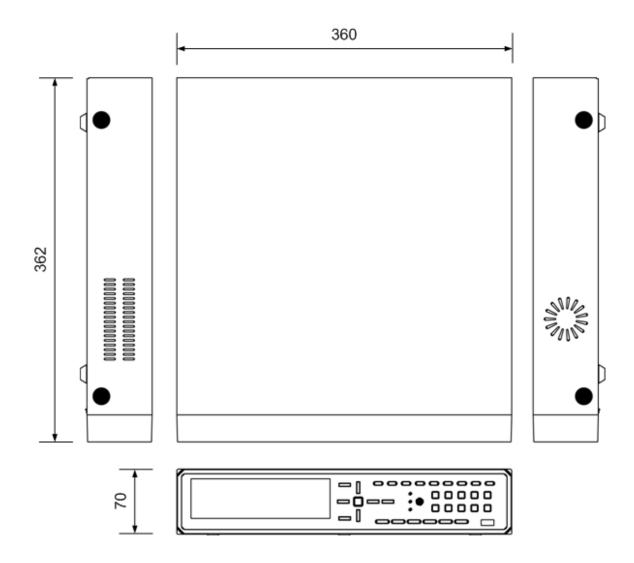
# <u>Appendix</u>

# FAQ (Q&A)

Symptom		Check Point
The system does not turn on and the indicator on the front panel does not work at all.	•	Check if the <b>power supply</b> system is properly connected. Check the system for the <b>input voltage</b> from the power source.  If the problem persists even after you have taken the above actions, <b>check the power suppl</b> y and replace it with a new one if necessary.
Some channels display just a black screen even if they receive video sources.	•	Check if the camera is <b>properly connected</b> to the system and displays the image. Sometimes, this problem may occur on a camera that is not properly connected to the video source.  Check if the camera is properly has <b>power</b> .  Sometimes, this problem may occur on a channel with a <b>weak video signal</b> from a video distributor that is connected to multiple systems. In this case, input the video source of the camera directly into the DVR. This may find the cause and solve the problem.  Check <b>Monitor 1080p available</b> when using HD-SDI camera.
HD-SDI camera does not work	•	Check whether using exclusive <b>HD-SDI Cable</b> .
properly	•	Check whether using exclusive <b>HD-SDI BNC</b> .
Record does not work properly	•	Check <b>Record Mode</b> .  When Event Record, check Event Setup and Event Sync.  Check <b>OSD</b> Record ICON  Check whether <b>HDD</b> is working properly.

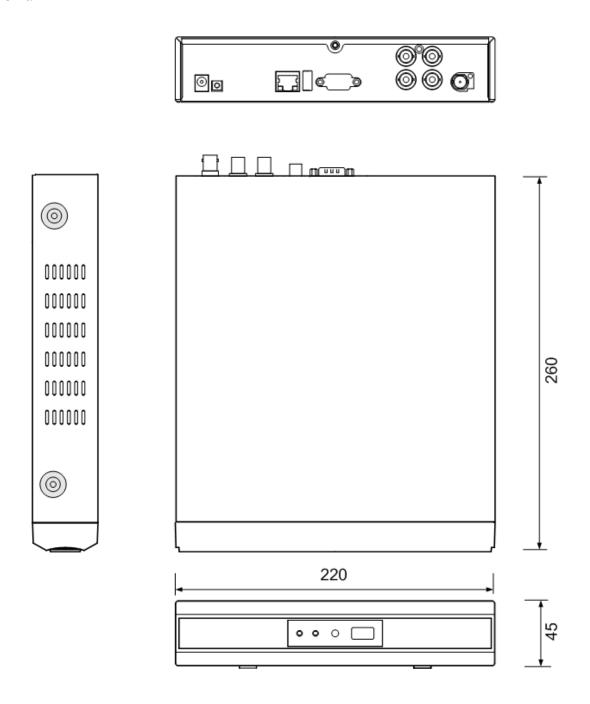
# **Product Dimensions – Standard Type**

# Unit: mm



# **Product Dimensions – Compact Type**

# Unit: mm



# Warranty

According to Rule & Laws, we confirm the product warranty like below. But this detail can be changed and varies according to countries and agreement between Manufacture and Dealers.

When damaged goods or malfunction, please check FAQ first and contact dealer for details.

### [Product Information]

Product	DVR (Digital Video Recorder)
Model	
Serial No.	
Purchase Date	D M Y
Where was it Purchased	

#### [Detail]

This product is manufactured through strict quality control and process inspection.

#### **One-Year Warranty**

This product carries a one year warranty from the date of purchase against defects from any cause except acts of abusive use. During this warranty period, the manufacturer will repair or exchange the product free of charge, except HDD and ODD and Adaptor

#### **Paid Service**

The manufacturer provides service outside of the warranty period for damage caused by the user. Please contact customer service for more information and prices.