Combo DVR

User's Guide

Safety Precautions

CAUTION
RISK OF ELECTRICAL SHOCK. DO NOT OPEN !
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER SERVICEABLE PARTS REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insulated dangerous Voltage within the product's enclosure that may be sufficient magnitude to constitute risk of electrical shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR

Attention: installation should be performed by qualified service Personnel only in accordance with the National Electrical Code or applicable local codes.

Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is the ON position. The power cord is the main power disconnect for all unites.

Warranty and Service

There are no serviceable parts for this unit, call for your agent for details.

About this document

Before installing stand alone DVR, be sure to thoroughly review and follow the instructions in this Users Manual. Pay particular attention to the parts that are marked **NOTICE**.

Also, when connecting with external application, first turn the power OFF and follow manual instruction for appropriate installation.

Before reading this document

1. This document is intended for both the administrator and users of stand alone DVR Model.

2. This manual contains information for configuring, managing and using stand alone DVR Model.

3. To prevent fire or electrical shock, do not expose the product to heat or moisture

4. Be sure to read this manual before using stand alone DVR Model.

5. For questions and technical assistance of this product, contact your local dealer.

   ►Strong recommendation on installation of the DVR unit

1. Check electricity at the place you want to install the DVR unit is stable and meets our electricity requirements. Unstable electricity will cause malfunction of the unit or give critical damage to the unit.

2. Several chips on the main board of the DVR unit and hard disk drive inside the unit generate heat, and it must be properly discharged. Do not put any objects just beside exhaust port(fan) on the left side of the unit and do not close up an opening (fresh air in-take) on the right side of the unit..

FCC Statement:

WARNING

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received including interference that may cause undesired operation."

*** Federal Communications Commission (FCC) Statement**

WARNING

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from
  that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

* You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FRONT PANEL
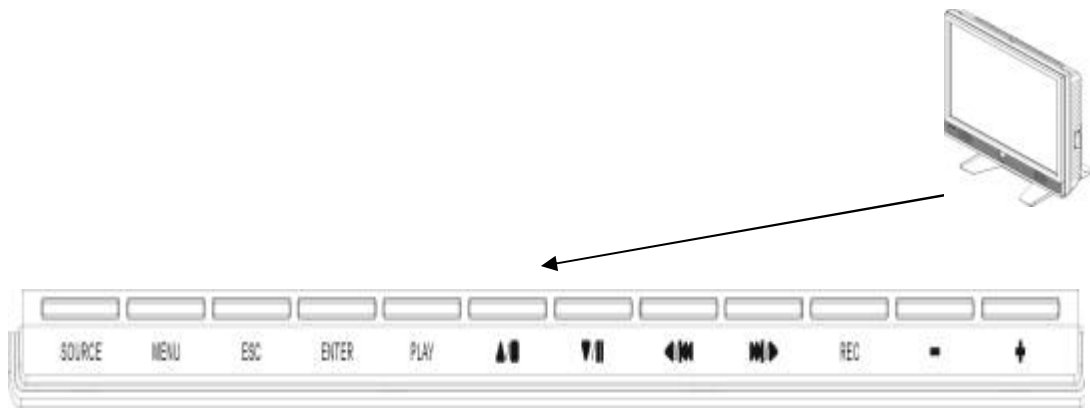
1. **SOURCE** : DVR and AV mode select
2. **MENU** : OSD setup
3. **ESC** : OSD exit
4. **ENTER** : Menu enter / Channel select
5. **PLAY** : Playback mode
6. **UP / STOP** : Direction button UP / Playback stop button ▲ / ■
7. **DOWN / PAUSE** : Direction button down / Playback pause ▼ / ▌▌ (Step play)
8. **REW** : Reverse playback choose button / play speed ◀ / ◀◀
9. **FF** : Forward playback choose button / play speed ▶ / ▶▶
10. **REC** : Record mode button
11. **–** : Reduce - values change
12. **+** : Increase + values change
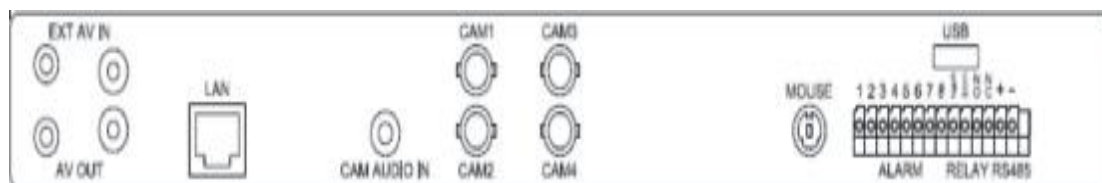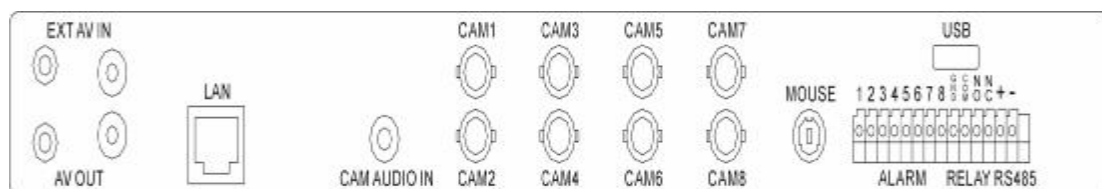
(1 ~ 4 Channel)

(1 ~ 8 Channel)

Connector	Define	
EXT AV IN	External video in	RCA type
AV OUT	External video out	RCA type
LAN	Network connection	RJ-45 type
CAM AUDIO IN	Audio input	RCA and Earphone type
CAM 1 ~ CAM 4(8)	Camera connection	BNC type
MOUSE	Mouse connector	PS2 type
USB	USB device connector	USB 2.0 type
	Alarm / Relay RS 485 +/- connector	

DVR
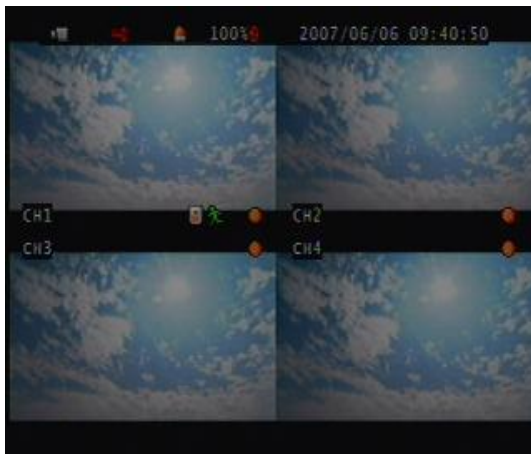
Live mode	**Playback mode**

Indicator:

Live:

	Live mode		Video loss		Recording
	Overwrite		Motion		Alarm
	Relay (Motion / Alarm)		Channel sequence		
	Keypad lock * 111111 is the default password				
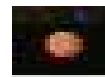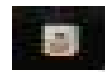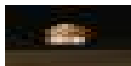
Playback:

	Forward		Reverse		Pause

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Mouse Control

① Screen display	1. Double-click of the left button on desired camera to full channel
	2. Double-click of the left button on desired camera to quad screen
③ Menu display	1. One-click of the right button to menu OSD
	2. Back to last OSD page
② None	No function
① Select	1. One-click on the item of OSD
	2. One-click on the value of item
	3. One-click on the Exit to quit and save menu
	4. From right-up to left-below and the set motion detect area

Remote controller:

The key on the remote controller function control is same as the front keypad of the unit.

User please operate according to the DVR model that you purchased

Notice:

1. Each channel has own frame rate adjustment of each recording mode.

2. In 24 hours, user can adjust each channel frame rate of different record mode. Such as schedule, motion detection, and alarm record more.

3. Press ⊞ button to change different of record modes.

Record Time Table: 80GB HD

Record Quality: Low. Average: 5 KB;

REC FPS	60	30	15	10
REC Hour	72	148	296	444

Record Quality: Normal. Average 10 KB;

REC FPS	60	30	15	10
REC Hour	36	74	148	222

Record Quality: High. Average 20 KB;

REC FPS	60	30	15	10
REC Hour	18	37	74	111

Actual recording time is base on live environment. This table is only for reference.

20 K x 30 (frame rate) x 60 (mins) x 60 (secs) = 2160000 K = 2160 M / hr

2160 M / hr x 24 = 51840000 K = 51840 M = 51.84 G / (1 Day)

Please format hard disk before starting recording after all the HDD installation

IDE	Seagate	Hitachi	WD(AAJB)		
Status	80 ~ 750 GB OK	80 ~ 750 GB OK	80 ~ 750 GB OK		

Network Settings – Local IP – STATIC

Select static IP address / Gateway / Net Mask

Network Settings – Local IP – DHCP

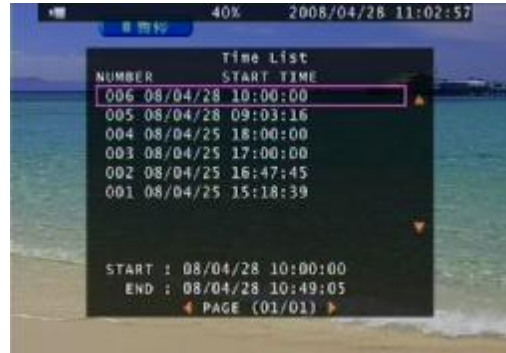Auto IP detected under IP sharing or router

1. **Select STATIC / PPPOE / DHCP connection type**
2. **DNS only works under DDNS mode.**

If the DVR is under a network system, suggest enable MENU – SYSTEM – TIME SETUP- NTP server to get a network request automatically.
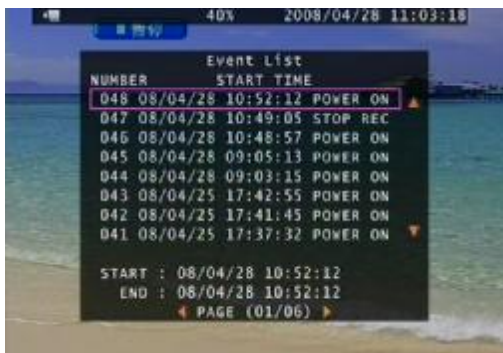
Main Menu – Search

Main Menu – Search – TIME LIST

Main Menu – Search – Event List

Main Menu – Search – Time Search

Press ENTER to select data and time. Direction left and right button to move value item.

ENTER or + / - button to change value.

Forward speed: x 2 / x 3 / x 4   (Direction right button)

Reverse speed: x 8 / x 16 / x 32 (Direction left button)

Press STOP to search list, press ESC to live mode.

Backup mode:

Before backup, USB pan driver is required. Backup data is only readable with the client viewer.

Back up file size can not exceed 1GB, when system reads USB (thumb driver only) device, the

system will stop recording about 2 seconds

On live mode, press backup button to file backup page.
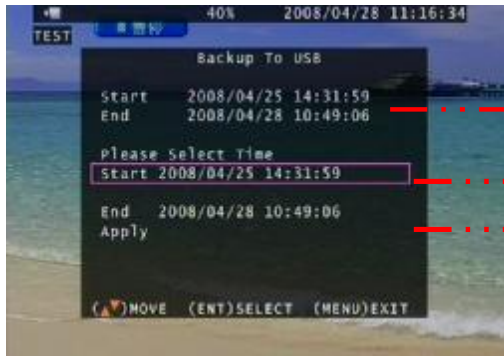
Total hard disk data time range

Select start and end time of backup

After select backup time, apply to count
data size. After size appears, press backup
button to USB page.

DVR is reading pan driver

After a while, all backup information display on screen, user now can press backup button to start file backup.

Data is writing to USB pan drive, users please wait until backup complete. Press menu button to quit USB page.

USB compatible(Max. 4G)

ADATA / Transcend / San Disk / Kingston

Main Menu – System Set – RS-485


Main Menu – System Set – Pan/Tilt Device

Control: Keypad, mouse

* Mouse control: press ESC to PTZ mode, press AUTO button, and then once-click left button of mouse to control PTZ movement.

Press quad button + number 1 ~ 4 (1 ~ 8) button to set presets, press AUDIO + 1 ~ 4 (1~ 8) to call preset. Press AUTO to start auto presets, AUTO again to cancel.

The AUTO command is 76 + Preset. The command would be different if connect to others PTZ dome. It is normal if no any action after press AUTO.

Net viewer

① ②

(1 ~ 8 Channel viewer)

③ ④ ⑤ ⑥

(1 ~ 4 Channel viewer)
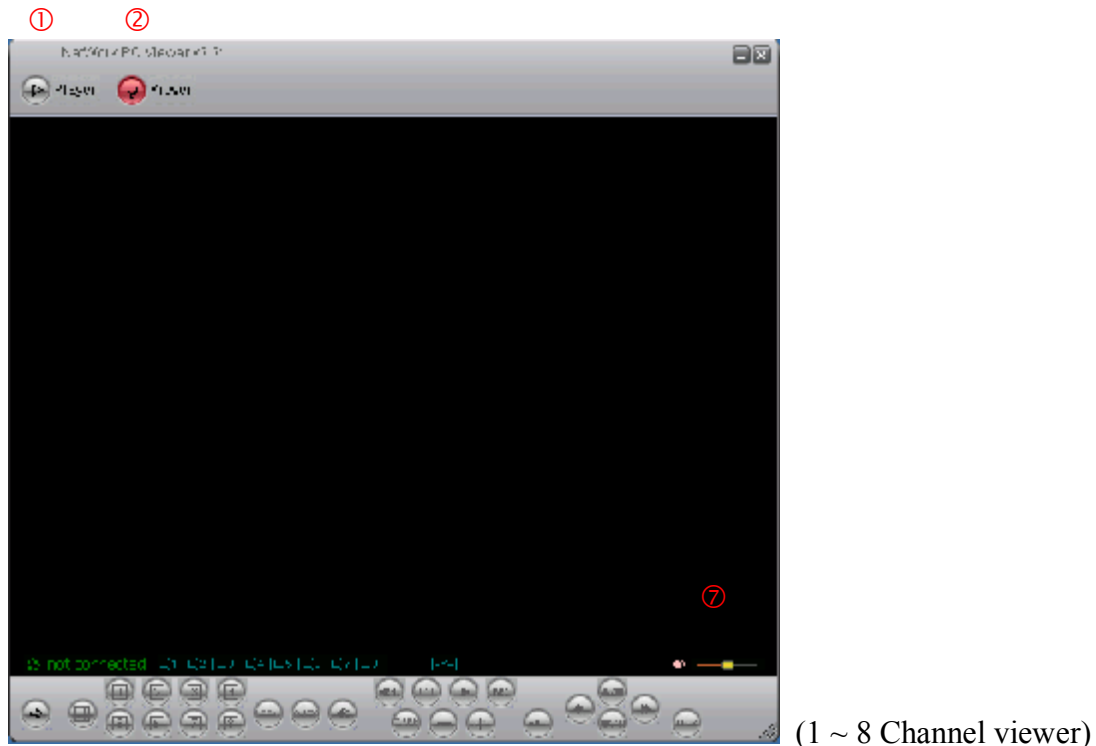
Viewer function:

1. Backup file player

2. Network viewer

3. Connection

DVR control via viewer:*

4. DVR screen: Quad, Camera 1 ~ 4 (Camera 1~8) full screen / Key lock / Channel auto
   sequence. Audio ON : stream speed – not good. OFF : stream speed – good

5. DVR function: MENU / ESC / Play / REC / T-SRH / - values change / + values change

6. DVR direction button: Up (Item select, Play Stop) / Down (Item select, Play Pause)

   Left (Item select, Play Reverse) / Right (Item select, Play Forward)

   SEL (ENTER): Item confirm/select, values change)

7. Audio volume (PC site)

*Viewer control panel button is same as DVR keypad.

*Viewer and DVR display is synchronously.

*PTZ control is supported on viewer and control way is same as DVR keypad.

*PTZ control and movement speed depends on network streaming.

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Net Viewer configures:

Player	Switch to backup file play mode
NetViewer	Switch to DVR network viewer
Disconnect	Network log out and connect canceled
Audio	Audio volume adjust (PC site)
Local Recording	Viewing image record
Always On Top	Player or viewer always on top even other data folders open
Full Screen	Viewer change to full screen
Maximize	Full screen display
Aspect Ratio	Resolution 640 x 448 / 640 x 544 adjust
Options	Viewer function setup
	Always on Top: Player or viewer always on top even other data folders open
	Auto Reconnection: Reconnection if non artificial network disconnect.
	Path for local recording: Please select a path of your PC.
Exit	Close viewer

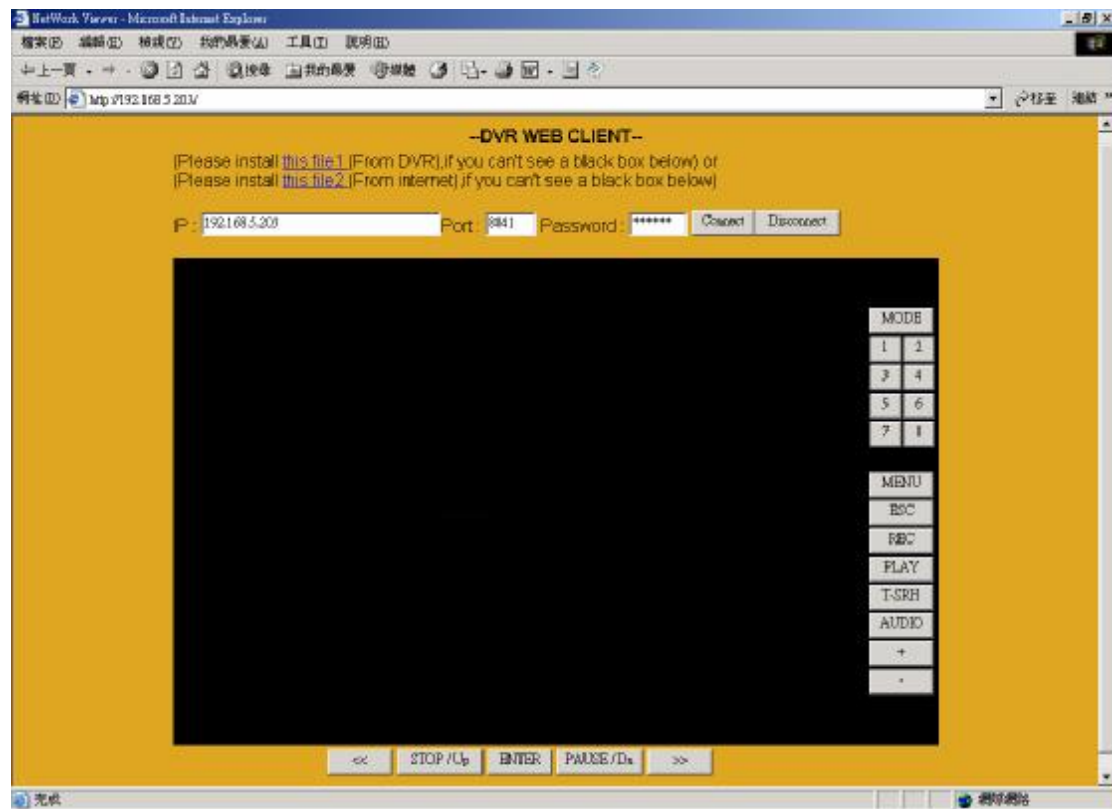**File Player:**
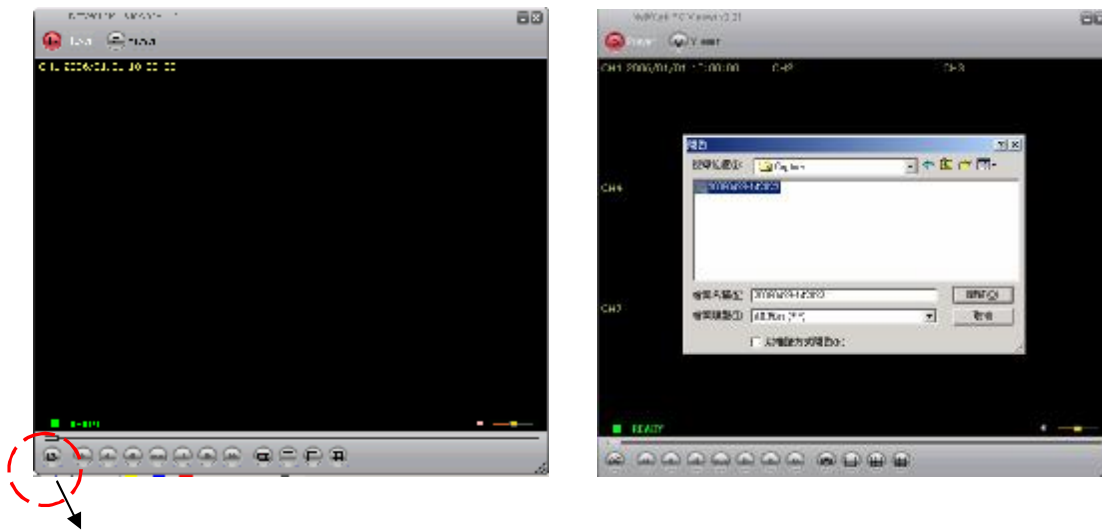
Click browser to open file which you saved

Player button

Open \ Fast Backward \ Play Reverse \ Previous Frame \ Pause \ Next Frame \ Play\
Fast Forward \ Still Capture\ Split1 \ Split 4 \ Split 9

1. DVR USB or net viewer backup file (*.VVF)only read in player
2. Local recording file only read in player, except transfer to AVI.
3. Backup file includes video and audio

IE browser:

IE control button is same as DVR keypad.

1. Before DVR IE connection, please download the ActiveX to DVR hard disk from CD-ROM, and then you can view DVR image via internet any PC.

   Steps: CD disk → ActiveX →USB pan drive → DVR (with hard disk) USB →

   Menu - System Set – Load Active-X Control → ENTER button

1. Also install ActiveX to your personal computer. Net viewer is packaged with ActiveX.exe.