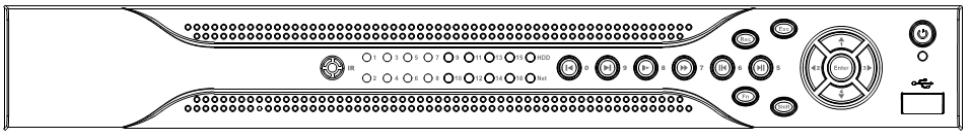

Bronze Class IntelliPix DVR Quick Start Guide

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1 Welcome

Thank you for purchasing the Bronze Class IntelliPix DVR! This quick start guide will help you to become familiar with our DVR in a very short time. Topics include hardware installation, cable connections, web operations and general operation information such as system setup, record, search, backup, alarm setup and PTZ operation. Before installation and operation, please read the following safeguards and warnings carefully.

1.1 Important Safeguards and Warnings

1.1.1 Electrical safety

All installations and operations should conform to your local electrical safety codes. We assume no liability or responsibility for fires or electrical shock caused by improper handling or installation.

1.1.2 Shipping instructions

When shipping, please use the original packaging and padding, this will protect the DVR under most circumstances.

1.1.3 Installation

Always handle electronic devices with care. Do not apply power to the DVR before completing the installation. Do not place objects on the DVR

1.1.4 DVR Repairs

Examination and repair work should be done by qualified service engineers. Unauthorized modifications or repairs may void any warranty agreements. We are not liable for any problems caused by unauthorized modifications or repairs.

1.1.5 Environment

The DVR should be installed in a cool, dry area away from direct sunlight. Please ensure that the DVR has sufficient ventilation.

1.1.6 Accessories

Be sure to use accessories recommended by the manufacturer. Before installation, open the accessory kit and check that all of the components are included. Contact your vendor ASAP if any components are missing.

2 Hardware Installation

2.1 Inspect the DVR Packaging and Check Contents

Upon receiving your DVR please check for any visible damage to the external packaging. If the external packaging is damaged, please document the damage and report to the shipping agent. The protective materials used in packaging of the DVR can protect against most accidental damage during shipping and should be saved. Immediately after opening the box, please check the items included in the accessory kit against the packing list. Finally, remove the DVR from the packaging materials.

2.2 HDD Installation

If your DVR was ordered with a hard disk drive (HDD) preinstalled, please skip this step. The Bronze CLass IntelliPix DVR may contain only one SATA HDD. If installing or upgrading, please use a HDD of 7200rpm or higher. Please refer to the *User's Manual* for recommended HDD brands and models.

Please follow the instructions below to install/upgrade the HDD.

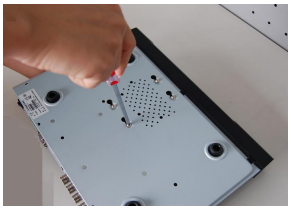
1. Remove the screws connecting the cover.

2. Remove cover.

3. Loosely connect four screws to the bottom of the HDD.

4. Mount the HDD using the four holes in the chassis.

5. Turn the DVR over.



6. Tighten the screws attaching the HDD to the chassis.

7. Connect the SATA cable and power cable.

8. Replace the cover.

2.3 Front Panel

The front panel is shown as in Figure 1-1.

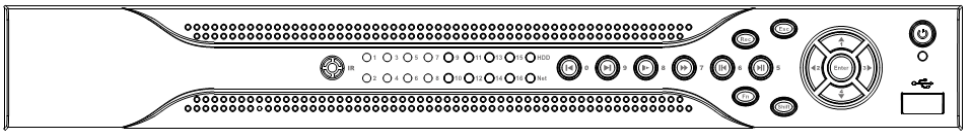


Figure 2-1

Please refer to the following table for front panel information.

Name	Icon	Function
Power button		Press and hold for three to five seconds to boot up or shut down DVR.
Shift	Shift	When entering data, press to switch between numeric, upper case, lower case and special characters.
Up (1) Down (4)	▲ ▼	Activate current control, modify setup, and then move up and down
		Increase or decrease number.
		Assist function such as PTZ menu.
		In text mode, input number 1 or 4.
		Shift currently activated control.
Left (2) Right (3)	◄ ►	In playback mode, click these buttons to control the playback bar.
		In text mode, input number 2 or 3.
ESC	ESC	Return to previous menu, or cancel current operation.
		When in playback mode, click to restore real-time monitor mode.
Enter	ENTER	Select current operation
		Go to default button
		Go to menu
Record	REC	Manually start or stop recording. Use with direction keys or numeric keys to select the recording channel.
Slow play (8)		In playback mode cycle through slow play speeds
		In text mode, input number 8
Function	Fn	One-window monitor mode, click this button to display assistant function: PTZ control and image color. In PTZ menu, shift PTZ control menu.
		In numeric or text entry, delete the previous character

		In motion detection setup, work with Fn and direction keys to realize setup
		In text mode, click to switch between numeric, upper case, lower case and special characters
Fast forward (7)	⏩	In playback mode, cycle through playback speeds
		In text mode, input number 7
Play previous (0)	⏮	In playback mode, skip to previous file
		In text mode, input number 0
Reverse/ Pause (6)	⏸◀	In playback or pause mode, click for reverse playback
		In reverse playback, click to pause playback
		In text mode, input number 6
Play Next (9)	⏭	In playback mode, skip to next file
		In menu or setup mode, go to the next field
		In text mode, input number 9
Play/Pause (5)	▶⏸	In playback mode, click to pause
		In pause mode, click to resume playback
		In text mode, input number 5
USB port		Used for connection of USB storage device or USB mouse.
Network abnormal indication	Net	Lit when network error occurs or if there is no network connection.
HDD abnormal indication	HDD	Lit when HDD error occurs or HDD capacity is below specified threshold value.
Record light	Alarm	Lit when system is recording.
IR Receiver	IR	Receives signal from the remote control.

2.4 Rear Panel

The 4-ch rear panel is shown as below. See Figure 2-2.

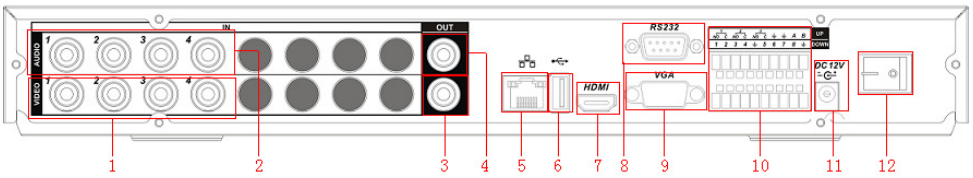


Figure 2-2

The 8-ch rear panel is shown as below. See Figure 2-3.

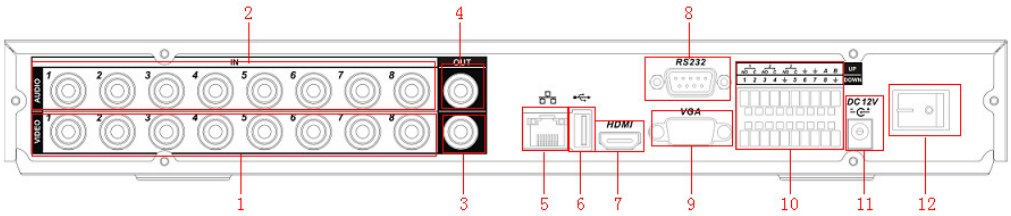


Figure 2-3

The 16-ch real panel is shown as below. See Figure 2-4.

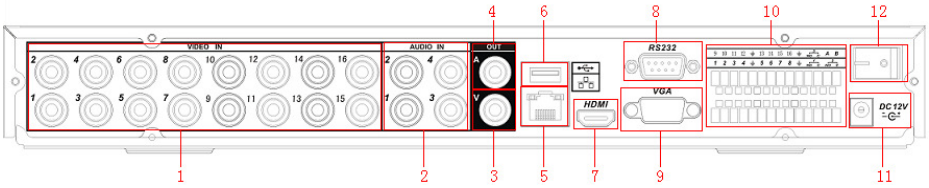


Figure 2-4

Please refer to the following table for detail information.

1	Analog video input
2	Audio input
3	Composite (BNC) video output
4	Audio output
5	Ethernet port
6	USB port
7	HDMI video port
8	RS-232 port
9	VGA video output
10	Alarm input, alarm output, RS-485 port
11	Power input port
12	Power switch

When connecting to the Ethernet port, use a straight through cable to connect to a switch or router or use a crossover cable to connect directly to a PC.

2.5 Connection Samples

Please refer to Figure 2-5 for connection samples.

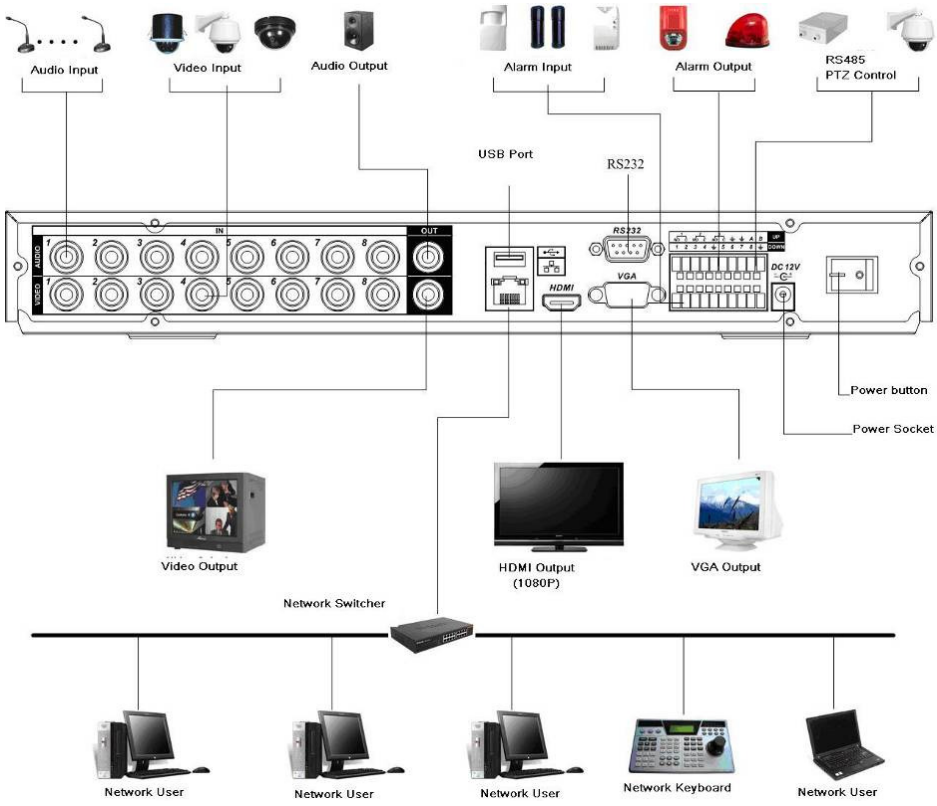


Figure 2-5

2.5 Alarm Input and Output Connection

There are two alarm input types for you to select: normal open (NO) and normal close (NC).

2.5.1 Alarm Input and Output Details

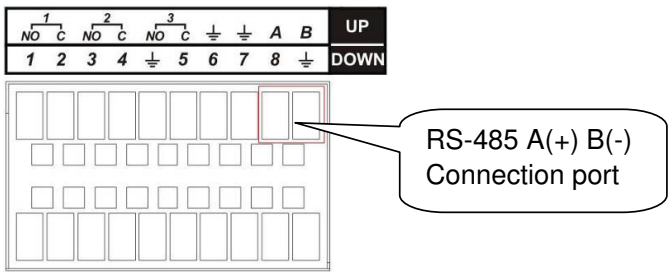


Figure 2-6

Refer to the following table and Figure 2-7 for alarm input and output information.

Parameter	Grounding Alarm
⏚	Ground line
Alarm Input	1, 2, …, 8. It becomes valid in low voltage.
1 - NO C 2 - NO C 3 - NO C	Three NO (Normally Open) outputs.
Relay Output	1,2,3,4: NO and C (Normally Open and Com) 5: NO, C and NC (Normally Open, Com, Normally Closed) 6: Ctrl 12V (This is used to reset the sensor)
485 A/B	RS-485 communication port. Used to control devices such as PTZ. Please parallel connect 120Ω between A/B cables if there are too many PTZ decoders.

2.5.2 Alarm Input Port

Please refer to the following for more information.

- 4/8/16-ch grounding alarm inputs. (Normal open or Normal close type)
- Please parallel connect COM end and GND end of the alarm detector (Provide external power to the alarm detector).
- Please parallel connect the Ground of the DVR and the ground of the alarm detector.
- Please connect the NC port of the alarm sensor to the DVR alarm input(ALARM)
- Use the same ground with that of DVR if you use external power to the alarm device.

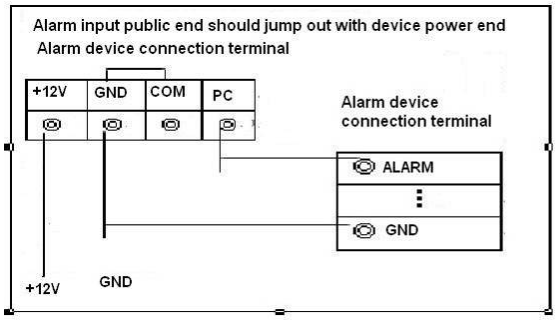


Figure 2-7

2.5.3 Alarm Output Port

- 3 ways relay alarm output (NO contact). Provides external power to external alarm device.
- To avoid overloading, please read relay parameters sheet in the *User's Manual* carefully.
- RS-485 A/B are for the positive (A) and negative (B) leads for PTZ control.

3 Overview of Navigation and Controls

Before operation, please make sure you have properly installed the HDDs and all cable connections.

3.1 Login, Logout & Main Menu

3.1.1 Login

After the DVR has booted up, the default video display is in multiple-window mode. Press Enter or left click the mouse to bring up the login interface. See Figure 3-1.

By default, the DVR has four accounts:

- **Username:** admin **Password:** admin (administrator, local and network)
- **Username:** 888888 **Password:** 888888 (administrator, local only)
- **Username:** 666666 **Passwords:** 666666 (Unprivileged user who can only monitor, playback, backup and etc.)
- **Username:** default **Password:** default (hidden user)

You can use a USB mouse, front panel or remote control to input. When using the mouse input method left click the button to switch between numeric, upper case, lower case and special characters.

Note: For security reason, please modify password after you first login.

Three account login failures within 30 minutes will result in a system alarm and five account login failures within 30 minutes will result in an account lock. Unlocking an account requires a system reboot.

Figure 3-1

3.1.2 Main Menu

After logging in, the system main menu is shown as below. See Figure 3-2. There are a total of six icons: Search, Info, Setting, Backup, Advanced and Shutdown. You can move the cursor to highlight the icon and press Enter or left click the mouse to enter the sub-menu.

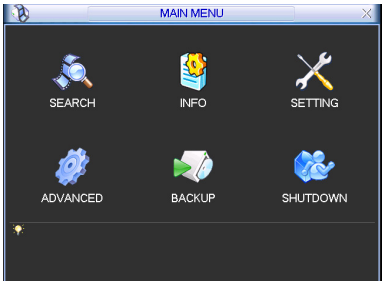


Figure 3-2

3.1.3 Logout

There are two ways for you to log out. The first one is from the Shutdown menu option. In the main menu, click the shutdown icon. The Shutdown interface will be shown as below. See Figure 3-3.

Figure 3-3

There are several options to choose from. See Figure 3-4.

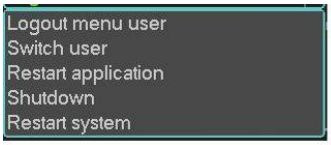


Figure 3-4

The other way to log out is to press and hold the power button on the front panel for at least 3 seconds, this will stop all system operations. You may then click the power button on the front panel to turn off the DVR. Please note, before replacing the HDD, shut down the DVR and unplug the power cable.

3.1.4 Auto Resume after Power Failure

By default, the DVR will automatically write video files to disk and resume previous working status after a power failure.

3.2 Recording Operation

3.2.1 Live Viewing

After powering the DVR on, the system will be in live viewing mode by default. The system date, time and channel names will be displayed by default. If you want to change system date and time, you can refer to general settings (Main Menu -> Setting -> General). If you want to modify the channel names, please refer to the display settings (Main Menu -> Setting -> Display)

3.2.2 Status Icons

The live preview screen may display the following icons for each channel.

	Recording	This channel is being recorded
	Channel locked	Viewing of this channel has been disabled for the default user
	Motion detection	Motion has been detected on this channel
	Video loss	No video input detected for this channel

3.3 Recording Setup (Schedule)

Note: You need to have proper rights to implement the following operations. Please make sure the HDDs have been properly installed.

When the DVR is first booted up, it is in the default 24-hour continuous record mode. You can set the recording types and periods in the Schedule menu.

3.3.1 Schedule Menu

From the main menu highlight the Schedule icon and press Enter or left click the mouse to go to the Schedule menu. See Figure 3-5. The following is a list of configurable values:

- Channel: Each input channel may be configured individually. Please select the channel number to configure or select "ALL" if you want to configure all channels identically. This field will display channel 1 by default.
- Week day: Each day of the week may be configured individually. There are eight options: Sunday through Saturday and "ALL". This field will display the current day of the week by default.

- Pre-record: This value sets the amount of time to pre-record before a motion-detection or alarm event. Valid values are from 1 to 30 seconds depending on the bit stream. The default value is 4.
- Redundancy: This option is unsupported on the Bronze Class IntelliPix DVR.
- Snapshot: This option is unsupported on the Bronze Class IntelliPix DVR.
- Period 1 – Period 6: Up to 6 recording periods may be defined for each day. The sum of the defined periods should equal 24 hours and periods should not overlap. The default is one defined period of 24 hours (00:00 – 24:00).
- Record types: There are three recording types: regular (continuous), motion detection (MD) and Alarm. The default is regular (continuous) recording for Period 1 (00:00 – 24:00).

Highlight the icon to select the corresponding function. After completing the setup click the save button and the system will return to the previous menu. At the bottom of the Schedule menu, a color bar is shown for your reference. A green bar represents regular (continuous) recording, yellow represents motion detection recording and red represents alarm recording.

You may copy your defined parameters to another channel or weekday by pressing the Copy button, selecting the destination channel or weekday and then pressing the Paste button. Any modifications made on the Schedule menu will be abandoned unless the Save button is pressed.

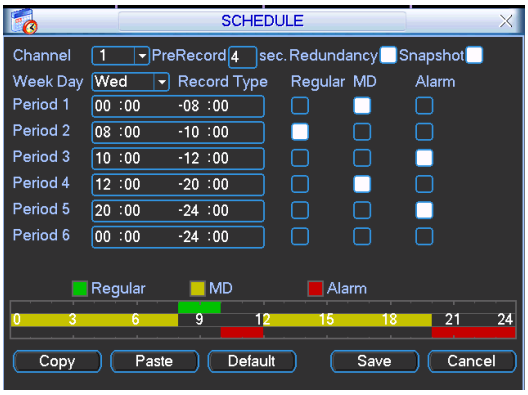


Figure 3-5

3.3.2 Manual Record Menu

Right click the mouse and select Record or select Advanced -> Manual Record to go to the Manual Record menu. The selections from this menu are the highest priority for recording.

There are three status options: Schedule, Manual and Stop. Highlight the icon to select the option for the corresponding channel. See
Figure 3-6. The following is a description of the configurable options:

- Manual: The selected channels will begin regular (continuous) recording after the OK button is pressed.
- Schedule: The selected channels will begin recording according to the configuration defined in the scheduled recording setup (Main Menu -> Setting -> Schedule).
- Stop: The selected channels will stop recording until this is changed to Schedule or Manual.

Figure 3-6

3.3.3 Encode

The Encode menu interface is shown in Figure 3-7. The following is a list of configurable values:

- Channel: Select the channel you want to configure, the default is channel 1.
- Compression: Non-configurable, the default is H.264.
- ~~Resolution~~: The Bronze Class IntelliPix DVR supports various resolutions that you can select from the dropdown list. Supported resolutions are D1/CIF/QCIF. Please note that the resolution options may vary based upon channel number.
- ~~Frame Rate(FPS)~~: You may select the value for Frames Per Second. Frames per second values may vary based upon channel number and resolution.
- ~~Bit Rate Type~~: The Bronze Class IntelliPix DVR supports two bit-rate types: CBR and VBR. CBR stands for Constant Bit Rate which means the DVR will always use this bit rate without regard to the video image. VBR stands for Variable Bit Rate which means that the DVR will adjust the bit rate according to the video image, e.g. more motion or a more complex image will utilize a higher bit rate. If VBR mode is selected, you can set the video quality.
- ~~Quality~~: There are six levels ranging from 1 to 6. The sixth level has the highest image quality. This option will only be displayed if VBR is chosen for Bit Rate Type.
- ~~Bit Rate(Kb/S)~~: The bit rate is defined as the maximum amount of information or detail, which is stored per unit of time of a recording. A higher bit rate will allow a better image to be produced but will use more resources such as HDD storage and network bandwidth.
- ~~Audio/Video~~: You can enable audio for the main stream or video/audio for the extra (sub) stream. Video for the main stream is always enabled by default and is not configurable. For extra stream, enable the video first and then enable audio.
- ~~Overlay~~: The overlay menu will allow you to create masks to block out portions of the image for privacy and also to define the location of the time and date and channel name labels on recorded video.

- Snapshot: The Snapshot menu contains four items: Mode, Image Size, Image Quality and Snapshot Frequency. Please refer to section 3.3.4 for more information.

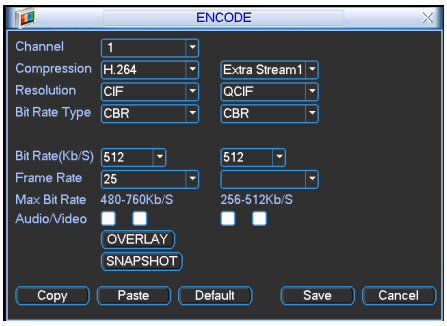


Figure 3-7

3.3.4 Snapshot

Snapshots are only used in conjunction with the FTP or Email functions and are not stored on the DVR. In the Encode menu click the Snapshot button to configure the snapshot mode, image size, image quality and frequency.

3.3.4.1 Timing Mode: Timing mode will create a snapshot at a configurable interval. In the General menu configure the upload interval to define how often snapshots are uploaded to the FTP server. In the Schedule menu, enable the snapshot function. Please refer to the following figure for examples. See Figure 3-8.

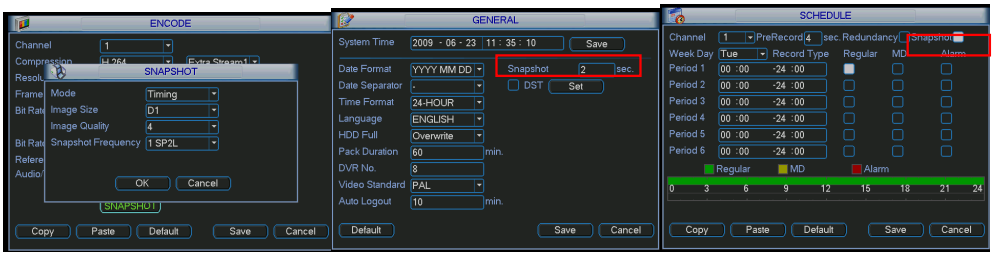


Figure 3-8

3.3.4.2 Activation Mode: Activation mode will create snapshots based upon motion detection or alarm events. In the General interface configure the upload interval to define how often snapshots are uploaded to the FTP server. In the Detect menu enable the snapshot function for specified channels. In the Alarm menu enable the snapshot function for specified channels. Please refer to the following figure for examples. See Figure 2-9.

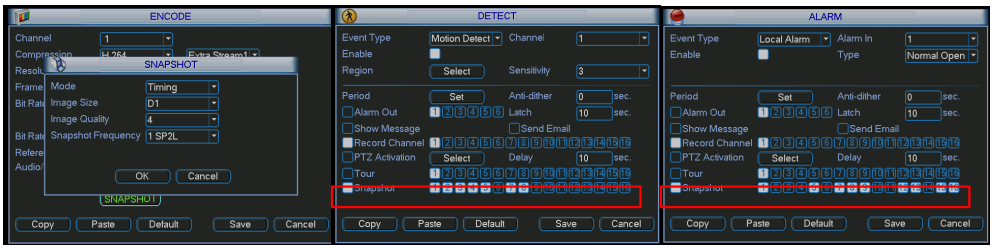


Figure 3-9

3.3.4.3 Priority: Activation snapshots have a higher priority than scheduled snapshots. If you have enabled both types, the DVR will perform the activation snapshot when an alarm or motion detection event occurs, otherwise the system will perform the scheduled snapshots.

3.3.5 Snapshot Image Storage

In the Network menu, you must configure FTP server information in order to store snapshots. You must enable the FTP function and then click the save button after entering the configuration information. See Figure 3-10. Please refer to the *User's Manual* included on the resource CD for detailed information. After enabling the scheduled snapshot or activation snapshot (Chapter 3.3.4) the system can upload image files to the FTP server.

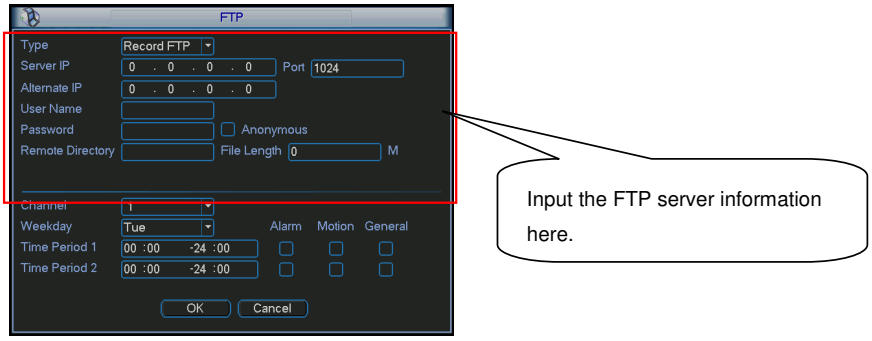


Figure 3-10

3.3.6 Search and Playback

To open the playback window click the search button from the main menu. The playback interface is shown below. See Figure 3-11. There are three file types to search for:

* R: regular (continuous) recording file
* A: external alarm triggered recording file.
* M: motion detection triggered recording file

Formatted: Bullets and Numbering

The Bronze Class IntelliPix DVR supports up to 4 concurrent playback windows.

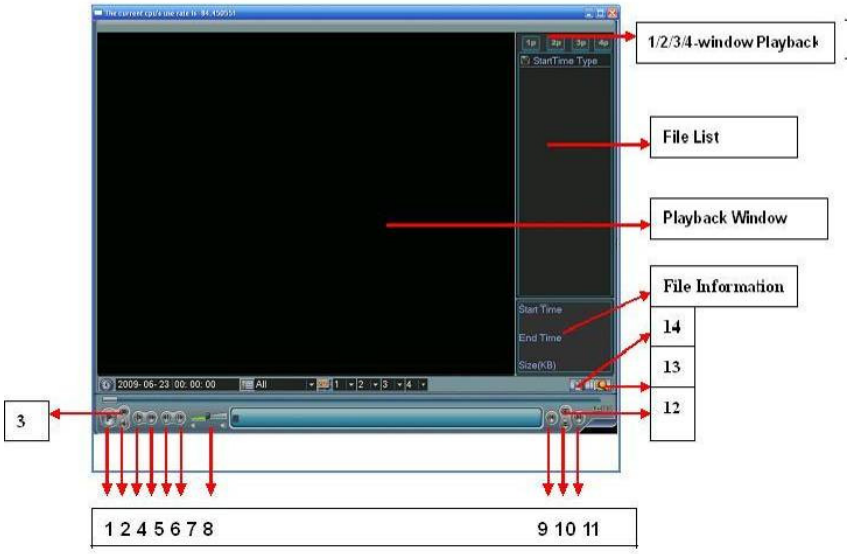


Figure 3-11

Please refer to the following table for more information.

Number	Function
1	Play
2	Reverse
3	Stop
4	Slow play
5	Fast play
6	Previous frame
7	Next frame
8	Volume
9	Previous file
10	Next channel
11	Next file
12	Previous channel
13	Search
14	Backup

3.3.7 Basic Operation

There are multiple search parameters: video type, channel number and time. The DVR can display a maximum of 128 results for one search. Use the page up/down button if there is more than one page.

3.3.7.1 Normal Playback

Select the file name from the search results in the file list portion of the screen and press the enter button or double click on the file name to view file content.

3.3.7.2 Playback Starting from Exact Time

To begin playback from an exact time, Input the time (h/m/s) in the search parameters column and then click the play button.

3.3.7.3 Synchronized playback function when playback

During the playback process click on one of the numeral keys above the search results list, the system will switch to the corresponding channel video of the same time.

3.3.7.4 Digital zoom

When the system is in full-screen playback mode, use your mouse on the screen to select a section and then left click mouse for digital zoom. You can right click mouse to exit.

3.3.7.5 File backup

The DVR supports backup operations from the search results screen. Place a check mark (√) in the box to the left of the file name(s) in the search results list. Next, click backup button (Button 14 in Figure 3-11) to proceed to the backup menu.

3.3.7.6 Slow playback and fast playback

Refer to the following table for slow and fast playback functions.

Button	**Illustration**	**Remarks**
Fast play button ⏩	In playback mode, click this button to switch between the 4 available fast playback speeds such and normal playback mode.	Frame rate may vary due to different versions.
Slow play button ►	In playback mode, click this button to switch between the 4 available slow playback speeds and normal playback mode.	
Play/Pause ►II	In slow playback mode, click this button to switch between play/pause modes.	
Previous/Next	In playback mode, you can click ◄ and ► to view the previous or next video in current channel.	

3.3.7.7 Reverse playback and frame by frame playback

Button	**Illustration**	**Remarks**
Reverse play: II◄ button in playback interface.	In normal playback mode, left click reverse play button◄, the system will begin reverse playback. Click the reverse play button again to go to pause mode.	When system is in reverse play or frame by frame playback mode, you can click play button ► to go to normal

Manual playback frame by frame.	Click pause button in normal playback mode, you can use ◄| and |► to view frame by frame.	playback.

Note: All of the operations here such as playback speed, channel, time and progress are related to the DVR hardware version. Some series DVRs do not support some all listed functions or playback speeds.

3.4 Network Setup

To configure network information, select Network from Main Menu -> Settings. The following information can be configured: See Figure 3-12.

- IP address: Enter the IP address for the DVR.
- DHCP: Used to acquire IP address information automatically. Use of DHCP to acquire a dynamic IP address is not recommended.
- TCP port: Default TCP communications port value is 37777.
- UDP port: Default UDP communications port value is 37778.
- HTTP port: Default HTTP (TCP) communications port value is 80.
- Max connection: The DVR can support a maximum of 10 concurrent user connections. 0 means there is no connection limit.
- Transfer mode: Select the priority between fluency/video qualities.
- Network download: The DVR will process network uploaded data first if you enable this function.
- Advanced setting: Please refer to the *User's Manual* included in the resource CD for detailed information on these items.

After entering network information click the save button. You will be returned to the previous menu.

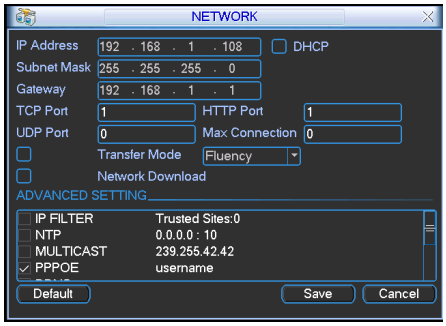


Figure 3-12

3.5 Pan/Tilt/Zoom

Please note the following regarding pan/tilt/zoom (PTZ) setup and operation:

- Slight differences may be found in the user interface, due to various protocols.
- RS-485 cables must be connected to the “A” (positive) and “B” (negative) ports of the alarm block in order to have PTZ control.
- Configuration information should be configured on the PTZ prior to configuring your DVR.
- In order to control a PTZ with the DVR, switch the camera monitor channel to full screen mode for the appropriate window.

3.5.1 PTZ setup

The PTZ setup includes the following items. Please select channel first. See Figure 3-13.

- Protocol: Select corresponding PTZ protocol such as PELCOD.
- Address: Input corresponding PTZ address.
- Baud rate: Select the baud rate.
- Data bit: Select the number of data bits. Default value is 8.
- Stop bit: Select the number of stop bits. Default value is 1.
- Parity: Select the parity. There are three choices: none/odd/even. Default value is none.

Figure 3-13

After configuring all items click the Save button. You will be returned to the previous menu.

3.5.2 PTZ operation

In single window display mode right click the mouse, click the “Fn” Button on the front panel or click the “Fn” key on the remote control to open the menu. The interface is shown as in Figure 3-14.

Figure 3-14

Click Pan/Tilt/Zoom, the interface is shown as below. See Figure 3-15. Here you can set the following items:

- Speed: value ranges from 1 to 8.
- Zoom
- Focus
- Iris

Click the and icons to adjust zoom, focus and iris.

Figure 3-15

In Figure 3-15, click the directional arrows (See

Figure 3-16) to control PTZ position. There are a total of 8 directional arrows. If you use remote control, you can only use four directions, up, down, left and right.

Figure 3-16

Figure 3-17

You can click the Set button in Figure 3-15 (or click REC button in the front panel) to set preset, tour, and pattern for the PTZ.

You can click the Page Switch button in Figure 3-15 (or click Fn button in the front panel) to change PTZ function interfaces.

4 Web Client Operation

- Slight difference may be found in the interface due to different model DVRs or different firmware versions.

4.1 Network Connection

Before attempting to connect to the DVR with the web client, check the following items:

- The DVR and PC are connected to the network and can see traffic. The light on the network interface port should be flashing.
- The DVR and PC are configured with the correct IP information. Refer to network setup (Main Menu -> Setting -> Network).
- Use the ping utility from a command window (from the PC, press the Start button then select Run and enter cmd and press Enter) to confirm network connectivity. The syntax is ping ***.***.***.*** (* = DVR IP address). Usually the return time to live (TTL) value should be less than 255.
- If you want to uninstall the ActiveX web control, please run uninstall webrec.bat.

4.2 Login

Open Internet Explorer and enter the DVR IP address in the address column. For example, if your DVR IP address is 10.10.3.16, enter http://10.10.3.16 in the address column. The system will display warning information to confirm that you wish to install the webrec.cab control. Please click yes button. If you can't install the ActiveX file, please modify your IE security setup (see *User's Manual* for more information on this). After installation, the interface is shown as below. See Figure 4-1. Input your user name and password (the default username is admin and password is admin) and press the Login button.

Note: For security reasons, please modify your password after you first login.

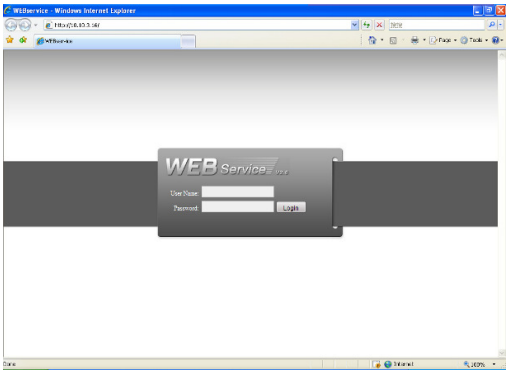


Figure 4-1

4.3 Main Window

After logging in, you should see the main window. See Figure 4-2. If the four video windows are not displayed in the center of the screen and you are using Internet Explorer 8, you need to view the page using Compatibility View (Tools -> Compatibility View from the IE top line menu). To open a channel, highlight one of the video windows by clicking on it and click the channel name on the left side. For detailed operation information, please refer to the *User's Manual*.

Figure 4-2