

DICO-800

Operation Manual

Main Screen Overview



SETUP

The beginning ID and Password

The beginning ID is set in “Administrator”, Password is set in “Admin”.

Setup Tree

General

- Display Device
- Video Input Signal
- Communication Setup
- PTZ Setup
- Save Image Quality
- Font
- Use Full screen mode
- Check Daily Reboot
- Use Password
- User Add/Delete

Sensor / Alarm Setup

Camera / Motion Detection

- Camera Setup
- Motion Setup
- Overlay Setup

Audio Setup

Schedule Setup

Holiday / Recording Frame

- Holiday Registration
- Motion Save Setup
- On Time Save Setup
- Sensor Save Setup

Storage Space

ETC

- Using Line Monitor
- Using Alert Mode
- Notify E-mail

Display Device

DICO-800 support basically DirectX, but the graphic card of your computer sometimes do not support above DirectX or YUV Overlay. In this case, you must set up “Display Device” to ”RGB Device” (The default value is “RGB Device”).

Video Input Signal

DICO-800 support both NTSC and PAL type. In NTSC, maximum recording speed is 30 fps, in PAL TYPE, maximum recording speed is 25fps.

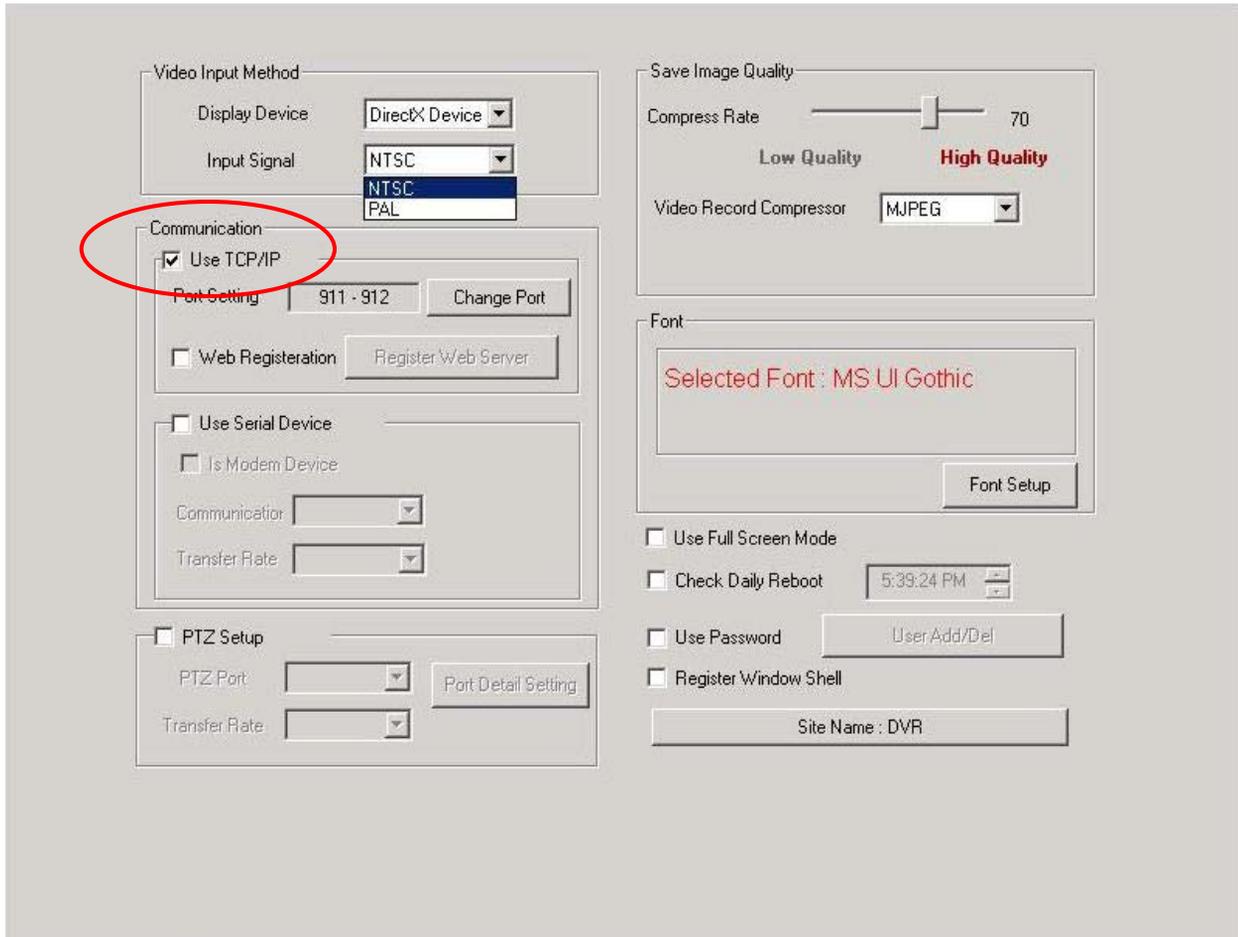
The screenshot displays the configuration interface for the DICO-800 system. The 'Video Input Method' section is highlighted with a red circle, showing 'Display Device' set to 'DirectX Device' and 'Input Signal' set to 'NTSC'. Other visible settings include 'Save Image Quality' with a slider at 70 and 'Video Record Compressor' set to 'MJPEG'. The 'Communication' section has 'Use TCP/IP' checked with port '911 - 912'. The 'Font' section shows 'Selected Font : MS UI Gothic'. The 'PTZ Setup' section is partially visible at the bottom left.

| Section | Parameter | Value |
|--------------------|-------------------------|----------------|
| Video Input Method | Display Device | DirectX Device |
| | Input Signal | NTSC |
| Save Image Quality | Compress Rate | 70 |
| | Video Record Compressor | MJPEG |
| | Quality Level | High Quality |
| Communication | Use TCP/IP | Checked |
| | Port Setting | 911 - 912 |
| | Web Registration | Not Checked |
| | Use Serial Device | Not Checked |
| Font | Selected Font | MS UI Gothic |
| | Font Setup | Button |
| PTZ Setup | PTZ Port | [Dropdown] |
| | Transfer Rate | [Dropdown] |
| | Port Detail Setting | Button |

Setup the communication

1) Using LAN (Static IP)

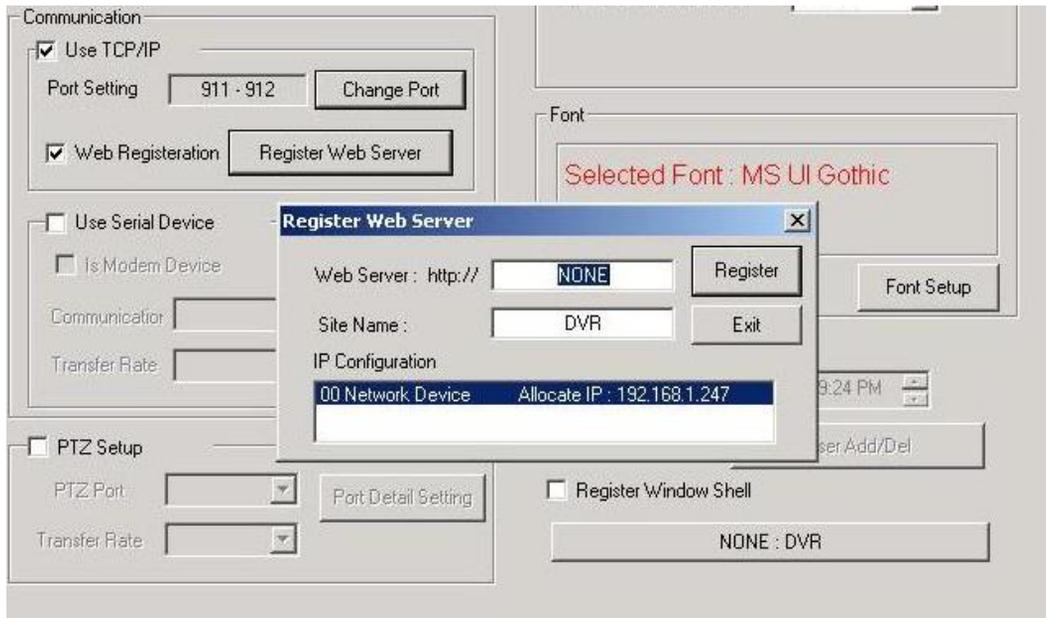
- Check “Use TCP/IP ” in Check box.



2) Using Dynamic IP by DHCP of ADSL, Cable modem.

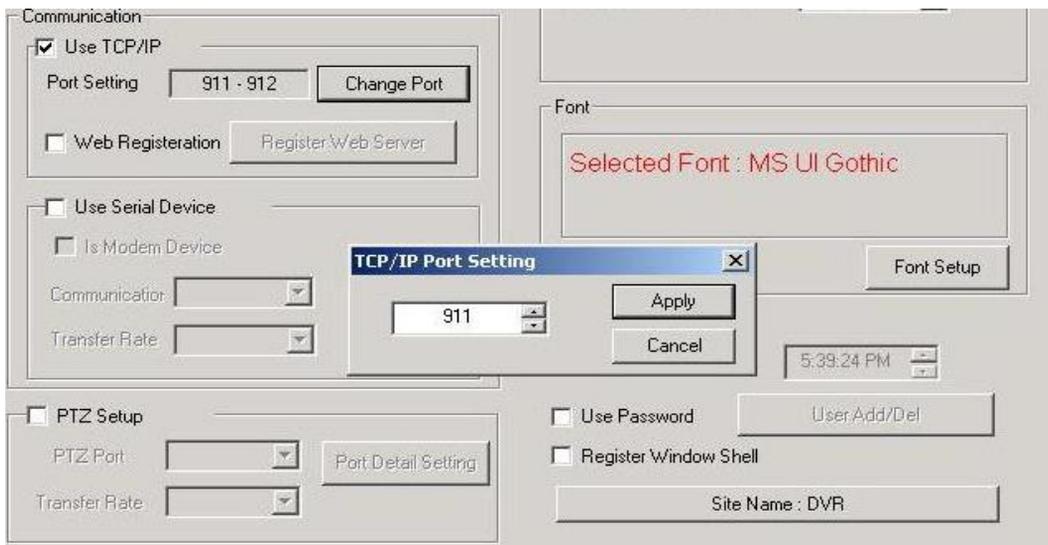
- First of all, check the connection of network in your system and Internet work or not.
- Check “Use TCP/IP ” in Check box.
- Click “Web registration”.
- Click “Register Web server” -> Come out Pop-up window.
- Key in “www.DICO-800.com” in “Web server”
- In “Site Name” key in a characteristics name instead of IP address.

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3) Using in network under Firewall or internal IP.

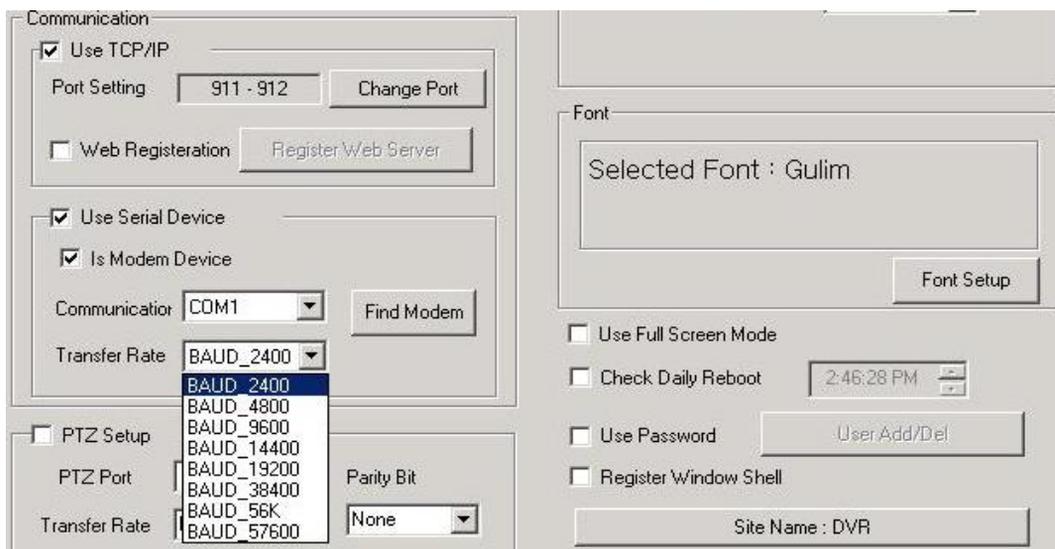
- To use the value in “Port setting” of “Use TCP/IP (default value 911(Video), 912(Audio)) , You must notify it to your network manager. (Please inquiry details to your network manager.)



4) Using Serial line

- Check “Use serial Device” in check box.
- Set up communication port and transfer rate.

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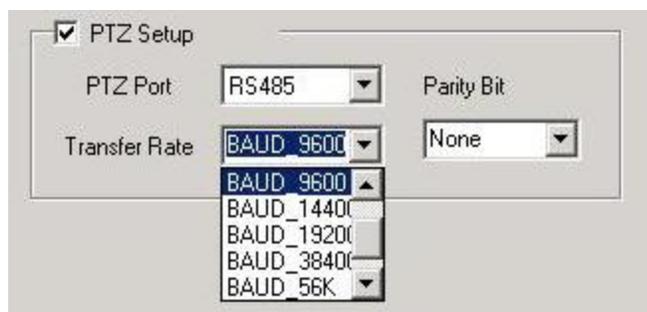


5) Using PSTN(Public Subscriber Telephone Network) Dialup Modem.

- Check **“Use serial device”** in check box.
- Check **“In Modem device”**.
- Click **“Find Modem”** or set up communication port.

PTZ (Pan Tilt Zoom) Setup (Transfer Rate)

Set up communication port for control PTZ, transfer rate, parity, and etc. In general, PTZ Receiver use the method of RS-485 communication, and then you can Use that port in DVR capture board. But not in RS-485 communication type select “COM1” or “COM2”, and must use a converter (RS-232C to current loop) or another converter.



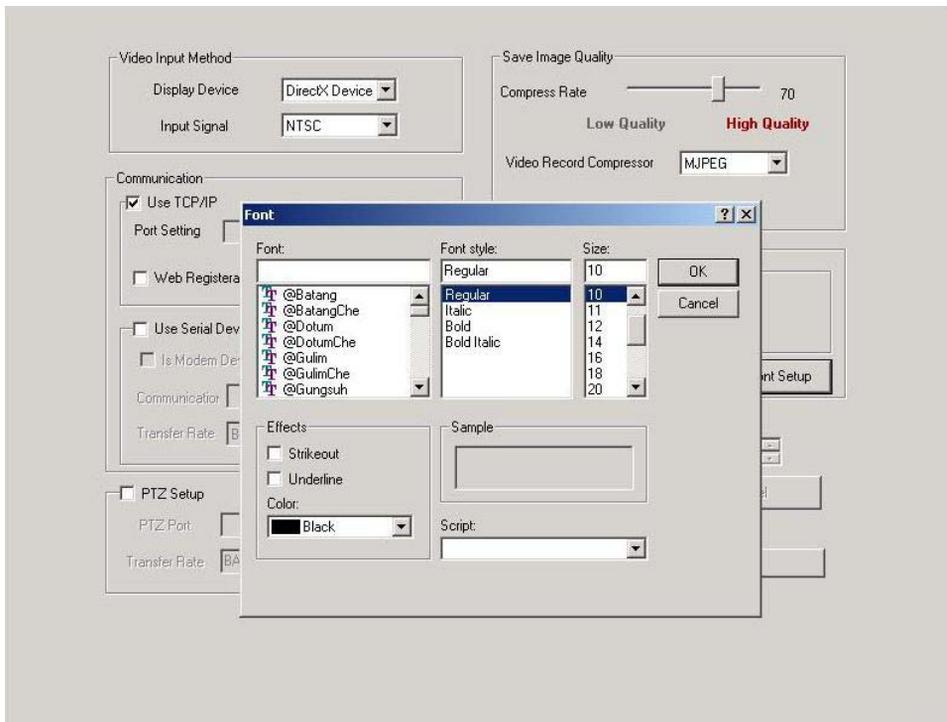
DICO-800 support setting each PTZ Receiver by different value(in tab “Set up Camera”) and then have to set up equally protocol(transfer rate, etc).

Save Image Quality

DICO-800 support MJPEG and MPEG4 algorism. In MJPEG, prefer high image quality In MPEG4 case prefer high compression rate to image quality.

Font Set up

User can change font of camera name.



Use Full Screen Mode

As do not input keyboard or mouse for a moment (60 seconds), automatically change main screen to full screen.(similar to “Screen saver”)

Check Daily Reboot

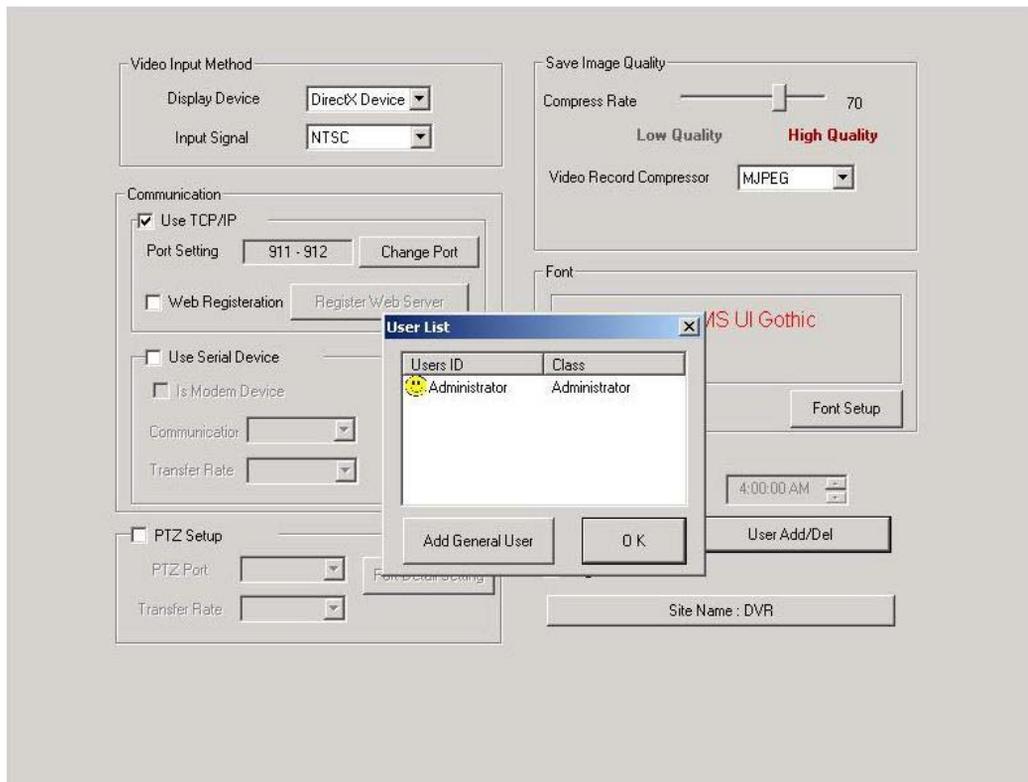
If it checked, automatically DVR System is reboot by decided time daily.

Use Password

Only authorized person can use set-up page to change contents or end of system.

User Add/Del

To register new user, click **“Use Add/Del”** button, and then click **“Add new user”** button and key in new ID and Password, authority of set up. In user authority, **“allow multiple Access”** have the function that multi user can do simultaneous access. However, supervisor is not permitted multiple access (Person that have authority of run/end, set up it.)



DVR Exclusive Mode

In order to prevent using different expenses your computer, set it up. This function prevent reactions according to both DVR and other expenses.

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You can set NC(Normal Close), NO(Normal Open) and Alarm out duration.

The screenshot displays a software interface for configuring sensors. At the top, there are two tabs: 'Sensor' (highlighted in blue) and 'Alarm' (highlighted in green). Below the tabs is a grid with columns numbered 1 through 16 under the 'Sensor' tab, and 1 through 4 under the 'Alarm' tab. The rows are labeled 'Camera #1' through 'Camera #16'. A blue callout bubble points to column 1 with the text 'For setup NC, NO Click Sensor number'. A white callout bubble points to column 17 (the first column under the 'Alarm' tab) with the text 'For setup alarm out duration Click Alarm number'. A 'Digital Out Duration' dialog box is open in the center, featuring a checked checkbox 'Use Digital Output Duration', a slider set to '60 Minute', and 'OK' and 'Cancel' buttons. A 'Cancel All Selected' button is located at the bottom of the interface.

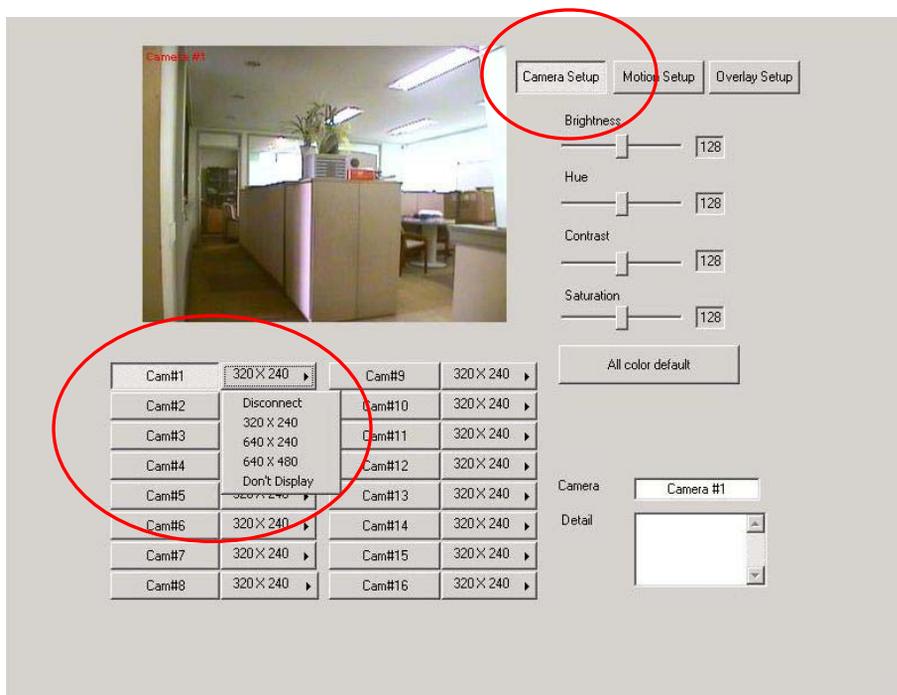
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 1 | 2 | 3 | 4 |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|---|---|---|---|
| Camera #1 | | | | | | | | | | | | | | | | | x | | | |
| Camera #2 | | | | | | | | | | | | | | | | | | x | | |
| Camera #3 | | | | | | | | | | | | | | | | | | | | |
| Camera #4 | | | | | | | | | | | | | | | | | | | | |
| Camera #5 | | | | | | | | | | | | | | | | | | | | |
| Camera #6 | | | | | | | | | | | | | | | | | | | | |
| Camera #7 | | | | | | | | | | | | | | | | | | | | |
| Camera #8 | | | | | | | | | | | | | | | | | | | | |
| Camera #9 | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |
| Camera ... | | | | | | | | | | | | | | | | | | | | |

Cancel All Selected

Set up camera connection and resolution

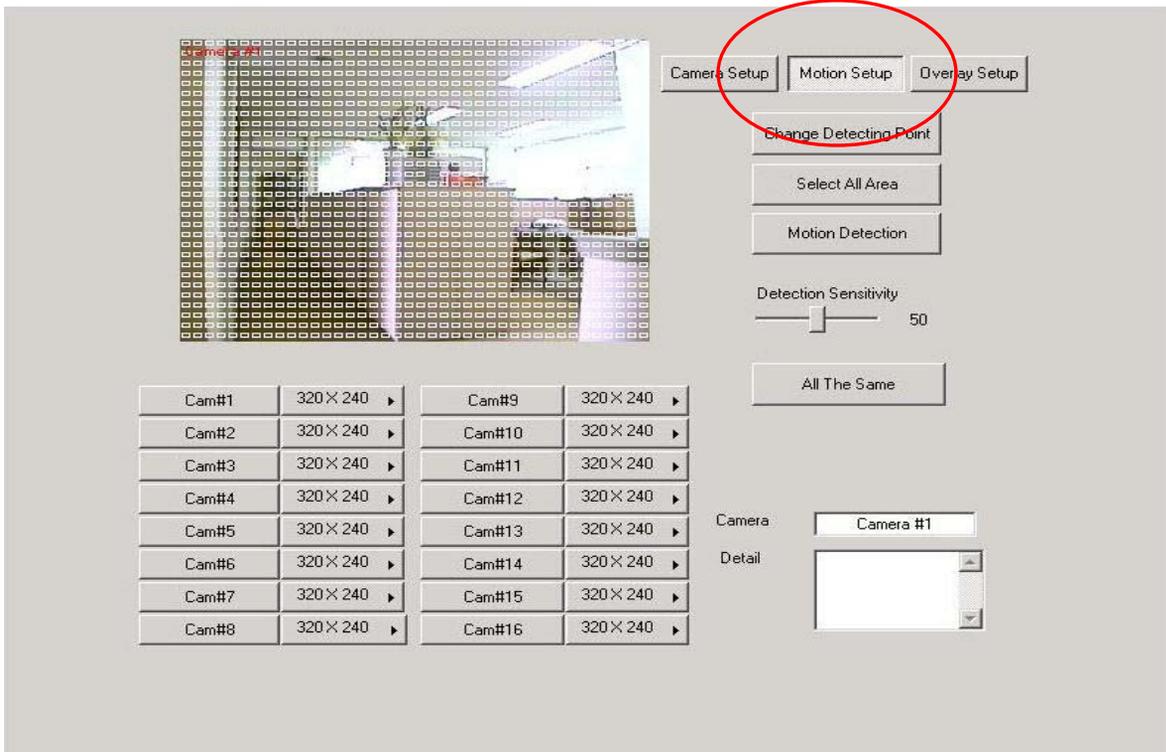
DICO-800 program is identified camera signal automatically.

Though camera connected, when you do not see images(because of camera broken, breaking of a cable), transfer a message "Video loss" at local or remote monitoring center. The resolution is supported 320X240, 640X240,640X480.(MPEG4 support only 320x240). If you set up recording method to MPEG4(resolution is 640x240 or 640x480), automatically record by MJPEG. "Don't display" is a function that do not display, only recording as security situation.



Camera/Motion Detection

To set up Motion detection area, dragging on left mouse button, and you can cancel the area by dragging with right mouse button. Click “**Detection sensitivity**” button, you can control Motion detection sensitivity. You can test motion detection region and detection sensitivity by motion detection Button.



Set up types of PTZ Receiver

You set up particularly camera by PTZ receiver.

Camera Setup Motion Setup Overlay Setup

Brightness: 128
Hue: 128
Contrast: 128
Saturation: 128

All color default

| | | | |
|-------|--------------|--------|--------------|
| Cam#1 | 320 X 240 ▶ | Cam#9 | Disconnect ▶ |
| Cam#2 | Disconnect ▶ | Cam#10 | Disconnect ▶ |
| Cam#3 | Disconnect ▶ | Cam#11 | Disconnect ▶ |
| Cam#4 | Disconnect ▶ | Cam#12 | Disconnect ▶ |
| Cam#5 | Disconnect ▶ | Cam#13 | Disconnect ▶ |
| Cam#6 | Disconnect ▶ | Cam#14 | Disconnect ▶ |
| Cam#7 | Disconnect ▶ | Cam#15 | Disconnect ▶ |
| Cam#8 | Disconnect ▶ | Cam#16 | Disconnect ▶ |

PTZ : Pelco D
Camera
Detail

- Pelco D
- Pelco ASCII
- Pelco "P" Spectra
- SRX_100A
- Philips_RV00.2
- Oriental PTZ
- SungJin_RX
- SSR_110_RX
- DongYang_RX
- LG_RX

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Recording schedule set up

If you want to compound schedule with “Sensor(s)”, “Motion detection(M)”, “ON-time(T), after clicked one of those buttons and drag with push on left mouse button.

| Hours | Sub. | Mon. | Tues. | Wednes. | Thurs. | Fri. | Satur. | Hol. |
|---------|------|------|-------|---------|--------|------|--------|------|
| 00 - 01 | M | M | M | M | M | M | M | M |
| 01 - 02 | M | M | M | M | M | M | M | M |
| 02 - 03 | M | M | M | M | M | M | M | M |
| 03 - 04 | M | M | M | M | M | M | M | M |
| 04 - 05 | M | M | M | M | M | M | M | M |
| 05 - 06 | M | M | M | M | M | M | M | M |
| 06 - 07 | M | M | M | M | M | M | M | M |
| 07 - 08 | M | M | M | M | M | M | M | M |
| 08 - 09 | M | M | M | M | M | M | M | M |
| 09 - 10 | M | M | M | M | M | M | M | M |
| 10 - 11 | M | M | M | M | M | M | M | M |
| 11 - 12 | M | M | M | M | M | M | M | M |
| 12 - 13 | M | M | M | M | M | M | M | M |
| 13 - 14 | M | M | M | M | M | M | M | M |
| 14 - 15 | M | M | M | M | M | M | M | M |
| 15 - 16 | M | M | M | M | M | M | M | M |
| 16 - 17 | M | M | M | M | M | M | M | M |
| 17 - 18 | M | M | M | M | M | M | M | M |
| 18 - 19 | M | M | M | M | M | M | M | M |
| 19 - 20 | M | M | M | M | M | M | M | M |
| 20 - 21 | M | M | M | M | M | M | M | M |
| 21 - 22 | M | M | M | M | M | M | M | M |
| 22 - 23 | M | M | M | M | M | M | M | M |
| 23 - 24 | M | M | M | M | M | M | M | M |

Buttons: Audio Record [A], Sensor [S], Motion Detection [M], On-Time [T], Monitor, All The Same Setup

Holiday Registration

You can register holidays except Sunday not to work DVR on the registered holiday.

Holiday Registration

Holiday Register

Month: 1 Day: 1

Register Holiday

Delete Holiday

Camera #1 to Camera #16

Motion Save Setup

Alarm in Detection

Recording Speed: 1 Fps

Recording Interval Term After Motion Stop: 0 Sec

OnTime Save Setup

Recording Interval Between Frames: 1 Sec

Recording Speed: 1 Fps

Sensor Save Setup

Alarm When Signal Input

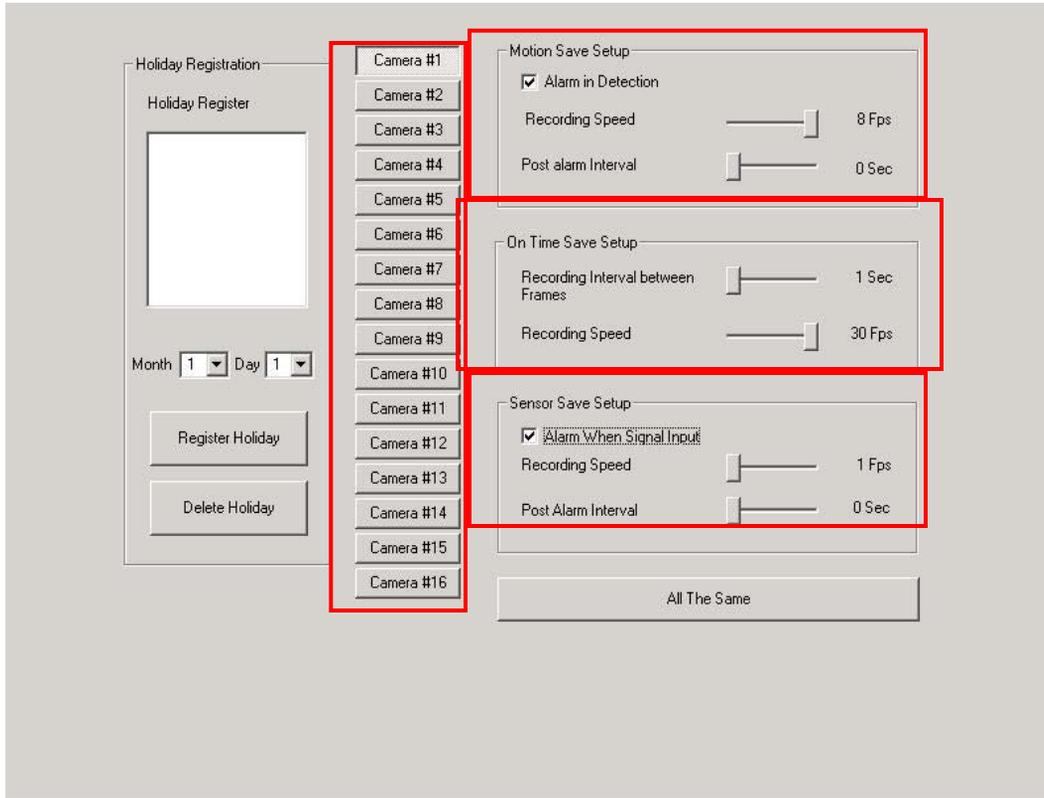
Recording Speed: 1 Fps

Recording Interval After Sensor Stop: 0 Sec

All The Same

Motion Record Set up

“Alarm in Detection” set up alarm output in “Sensor in Detection”, It works as checking in check box. “Recording Interval term after Motion stop” is “Post Alarm”, after stopping motion detecting, it is continue to record for setting time.



On-Time Record set up

When user want to record 1 frame per 30 seconds, setup “30 seconds” and “1fps”
When user want to record 5 frame per a second, setup “1 second” and “5fps”

Sensor Record Set up

“Alarm when signal input” set up alarm output in “Sensor in alarm”, It works as checking in check box. And Set “Post alarm interval”

Set up storage space

To get data stability from occurring a breakdown of electric power, after installing Program, you must do this function at first time.

Storage space divide from 4 types.

Drive space : Space that installed OS, DVR Program and Application program.

Application space : Space that set already to data space of DVR.

Able to create data space : Data space except reserved user free space in empty space of drive.

Reserved user free space : It's necessary to your system work well.(C Drive has to have above minimum 500MB, other Drive have above100MB.)

After setting up data space, check in “**Remark**” box, press “**Make Storage Media**” button.

C Drive Space Status : 0 M

Application Space
Able to create Data Space
Reserved User Free Space

16%

79%

Data Space / Free Space

1500 M / 100 M

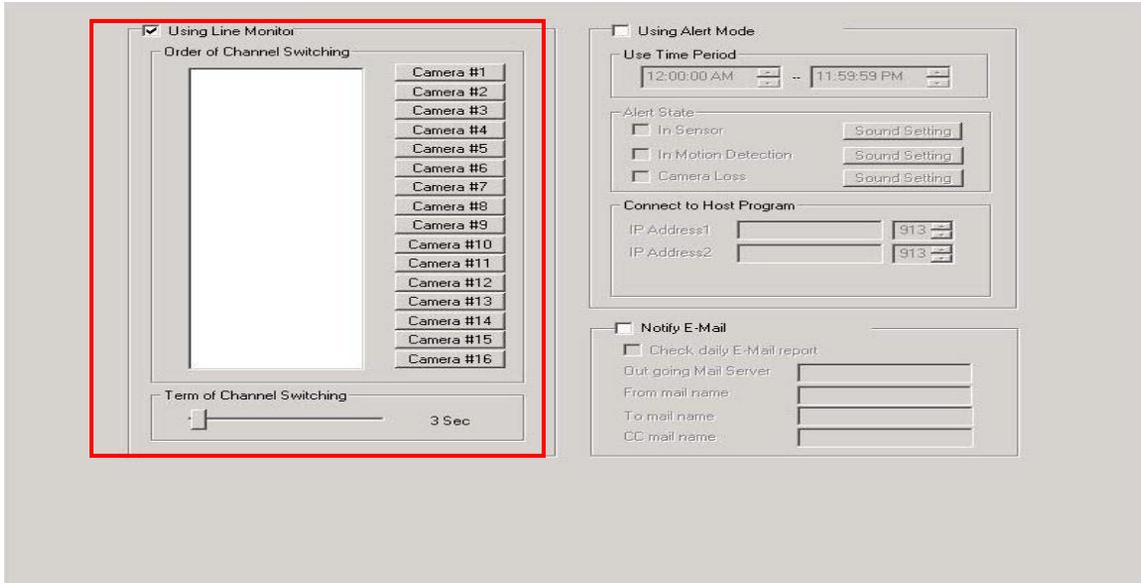
| Drive | Total Drive Space | Free Drive Space | Data Drive Space | Remark |
|---------|-------------------|------------------|------------------|--------|
| C Drive | 1999 MB | 1600 MB | 0 MB | x |
| D Drive | 18072 MB | 3600 MB | 8192 MB | |
| E Drive | 18072 MB | 6400 MB | 10080 MB | |

Default Make Storage Media

Using Line Monitor

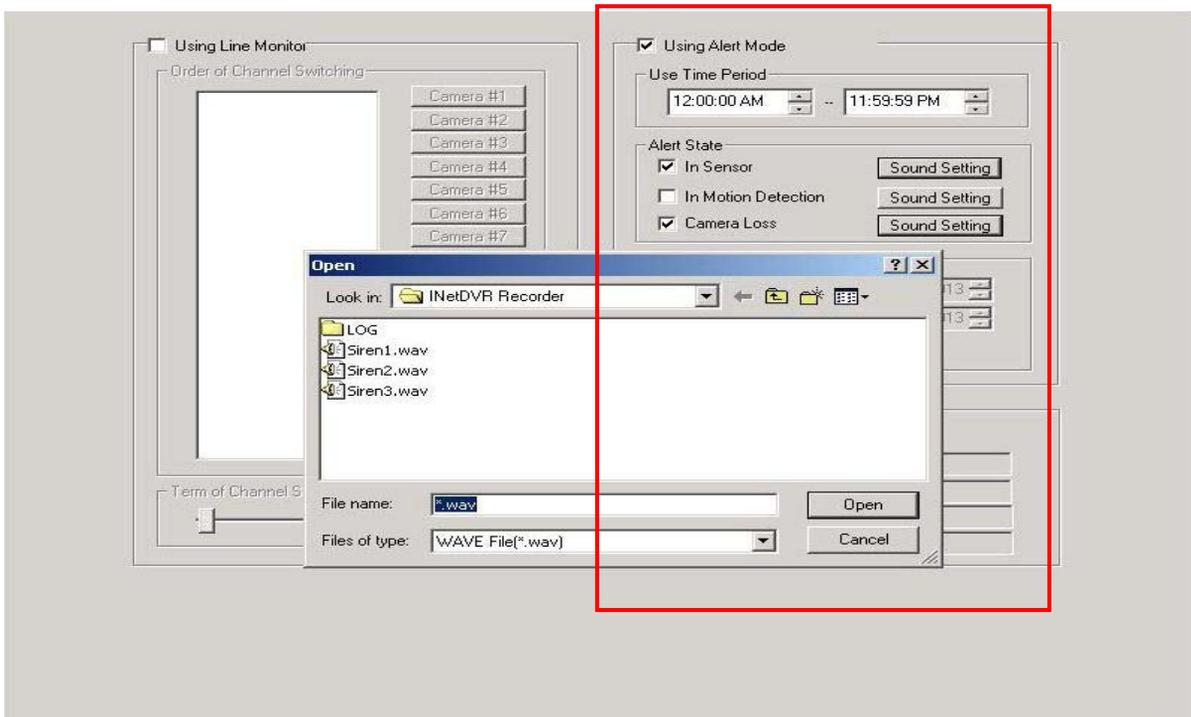
It called TV-OUT. You can see TV OUT RCA connected on DVR board, from this RCA connector, and you can use Line Monitor function. Each camera is displayed by rotations, or full screen image of each camera.

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Using Alert Mode

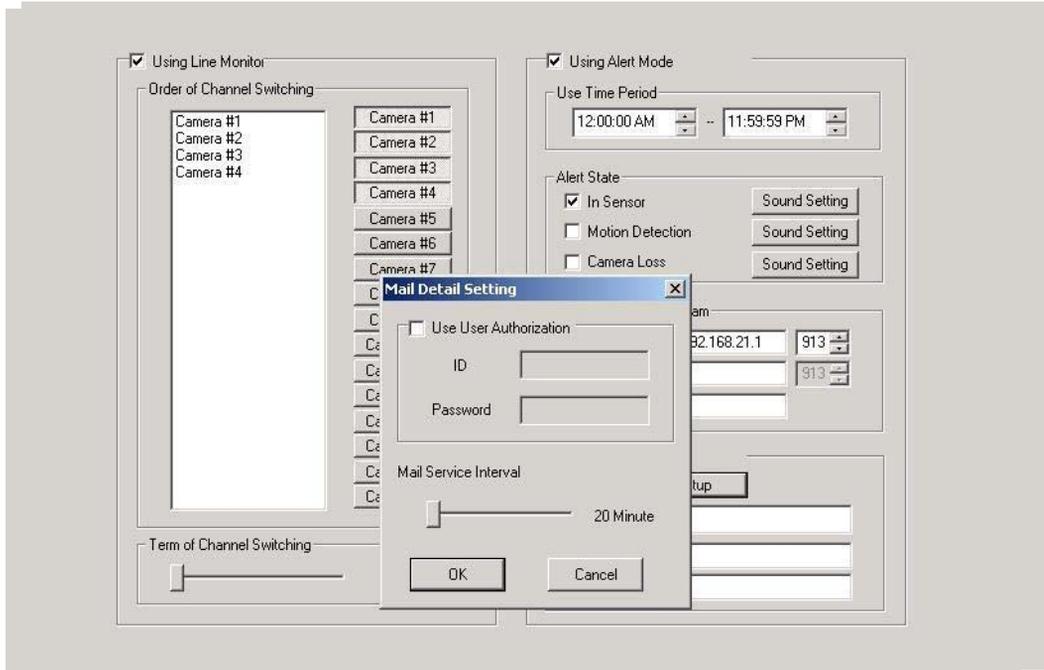
When sensor input works, or detecting motion from server system with registration of pre-designated client communication address, the detected data information is transmitted with alarm to predestinated remote multi viewer in case of connecting with network.



Notify E-mail

As detecting sensor, motion set in alert mode, Final image of camera and log data detected is informed to assigned E-mail address .

(For example: “aaa@hanmail.com;bbb@hotmail.com;ccc@hanmail.net”)



Local Viewer (Search)

Running Search program

From main screen click “Local Viewer(Search)” button.

Choice Date and Time

If it exists recorded data image in calendar displayed, the color of that date is indicated In highlight. Also the color of time is indicated in blue color, click the time to retrieval by Mouse, and the indicated time changes blue, and then display to get the screen.

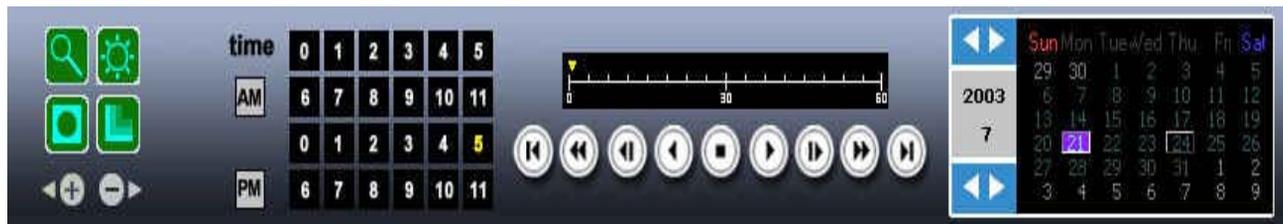


Choice channel

Selecting date and time, be selected all channel at first time. If you want to retrieval only one channel, click mouse on channel you want, and then come out red box, all control work only in selected channel.

Play operation

The slide bar of play panel correspond to one hour.(the selected time)



Fast Backward : Fast backward retrieval. The speed is variable under CPU.

Backward : Backward retrieval. The image recorded by MPEG4 skip a image of key frame unit. Fast backward is same.

Forward : Normal speed retrieval.

Fast Forward : Fast forward retrieval. The speed is variable under CPU.

First End : It display the first image of selected time.

1 Frame Backward : Backward retrieval per a 1 frame unit.

1 Frame Forward : Forward retrieval per a 1 frame unit.

Last End : It display the last image of selected time.

Full screen display

Doing double click the channel that you want to display, come out full screen,

Screen division

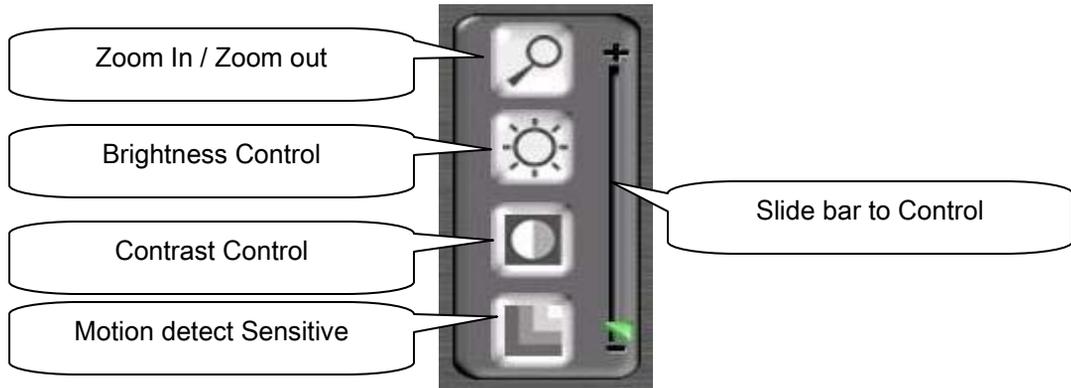
DICO-800's retrieval program support 1, 4, 9, 16 division screen.

Press division button that you want, and display that screen.

Archived imag out e Zoom in / Zoom

It is pressed the button, as selecting only one channel.

You control the right slide-bar on pressing the button, the screen enlarge or reduce. Also be able to do that by an arrow key.



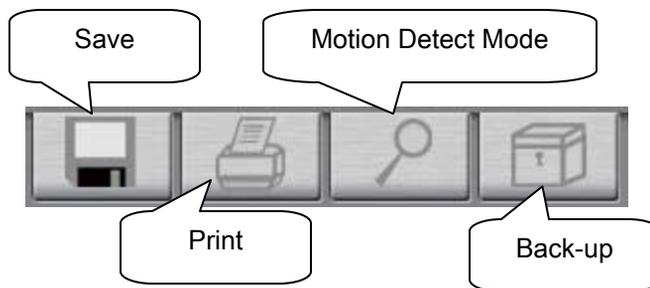
Control the brightness of archived image

It is pressed the button, as selecting only one channel.

You control the right slide-bar on pressing the button, the brightness increase or decrease Image. Also be able to do that by an arrow key.

Save

It is activated the button, as selecting only one channel. Pressing the button, record per a frame unit by the file format of "camera#_data_time,JPG".



Print

It is activated the button, as selecting only one channel.

Pressing the button, come out "Preview" screen, and press the "Print" button.

Motion detect retrieval Mode

It is activated the button, as selecting only on channel.

You have a dragging on pressing both “Ctrl” key and the right button of mouse, the detected motion area be set.

You have a dragging on pressing both “Shift” key and the right button of mouse, the detected motion area be canceled.

Change the color of motion detection area

As the color of motion detection area is difficult to distinguish against the Background color in the image, can change the color of the detection area.

It is activated the button, as selecting only one channel.

You control the right slide-bar on pressing the button

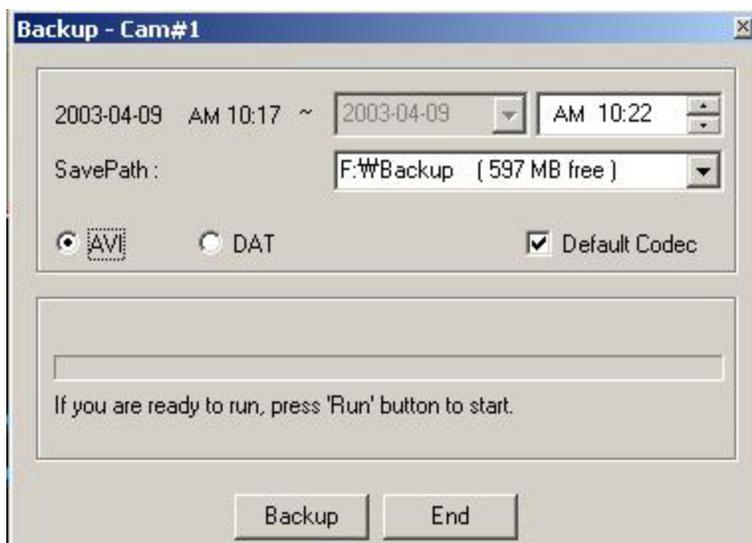
Change the sensitivity of motion detection

It is activated the button, as selecting only one channel.

You control the right slide-bar on pressing the button

Back up

It is activated the button, as selecting only on channel.



1. AVI Back UP

DICO-800 support the file format of AVI to be able to use in the Multimedia of Window OS.

- The start time of Back up perform from the displayed image at present, user select the end time. But the file size do not exceed 600MB.
- Select the drive that you want. If you want to back up in CD, you should have the software such as “Direct CD”, and select the “CD” drive to back up.
- And select CODEC, the basic CODEC is MPEG4. If you do not select “**Default Codec**” in check box, come out the list of installed CODEC, select the CODEC that you want.
- Click the “**Backup**” button, start it.

2. DAT Back up

DAT Back up is the method that back up the raw data of *DICO-800*, record the all channel of deservng time by the peculiar file format of *DICO-800*.

- Check “**DAT**” in Check Box.
- Key in the start time and the end time.
- Select the Drive that you want to back up.
- Click the “**Backup**” button, and start it.

3. Playback of DAT’ data

- Press the “**Badkup View**” button.
- Key control is same as retrieval program.

Retrieval Event List

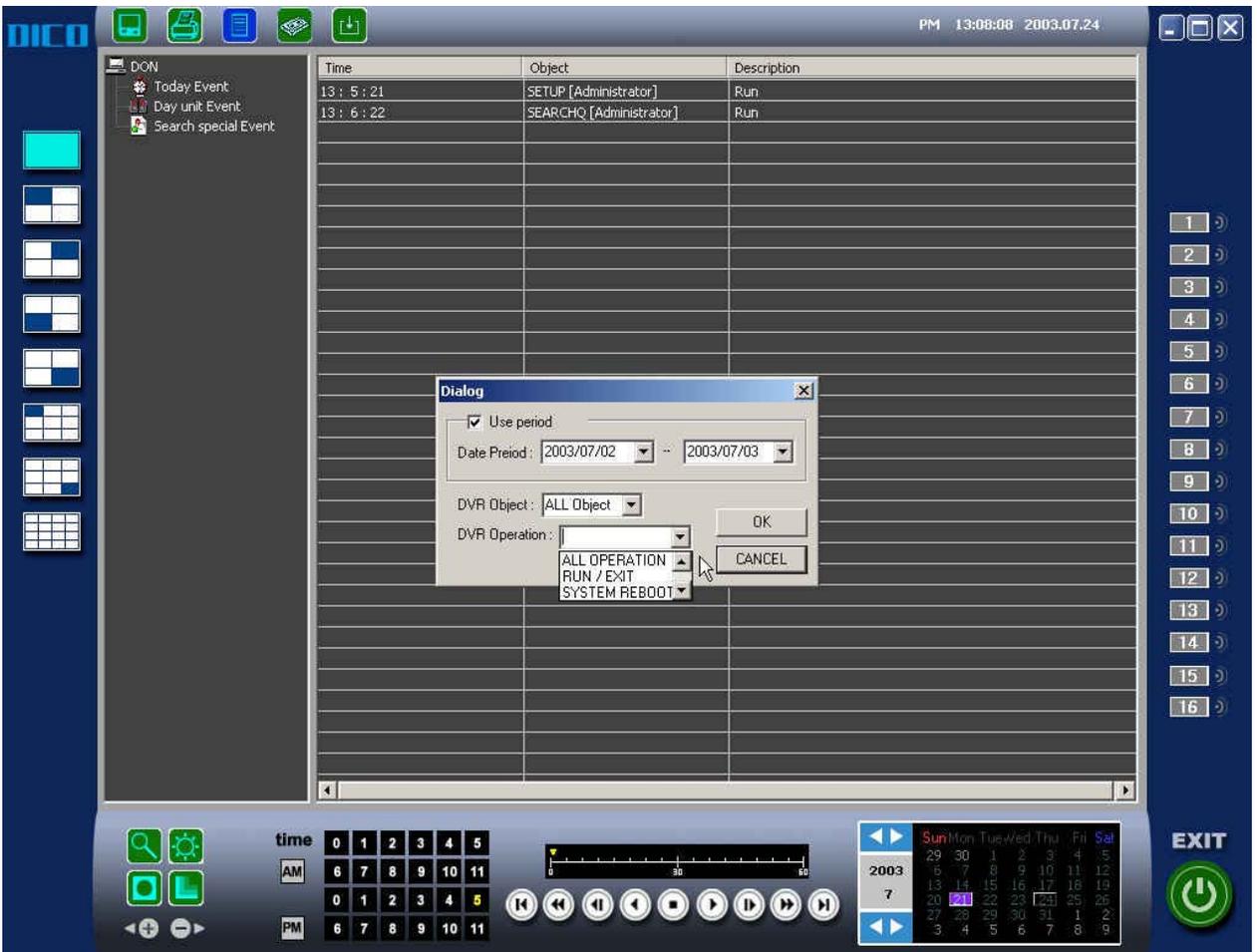
In this function, It is included the running time and end time of DVR system, the controlled contents for running time and the event of sensor in action.

If you want to return another function from “**Event List**”, click again the *DICO-800* button.(Toggle Button). When you want to display the image, double click the event that you want, and then come out the retrieval screen, display the image that event occurred.

(If the image at that time is not recorded, no change the screen.)

“**Search Special Event**” : This function is that you want to see the event in particular.

“Search Special Event” : This function is that you want to see the event in particular. You can see by “Set up period”, “DVR Object”, “DVR Operation”.



Remote Viewer

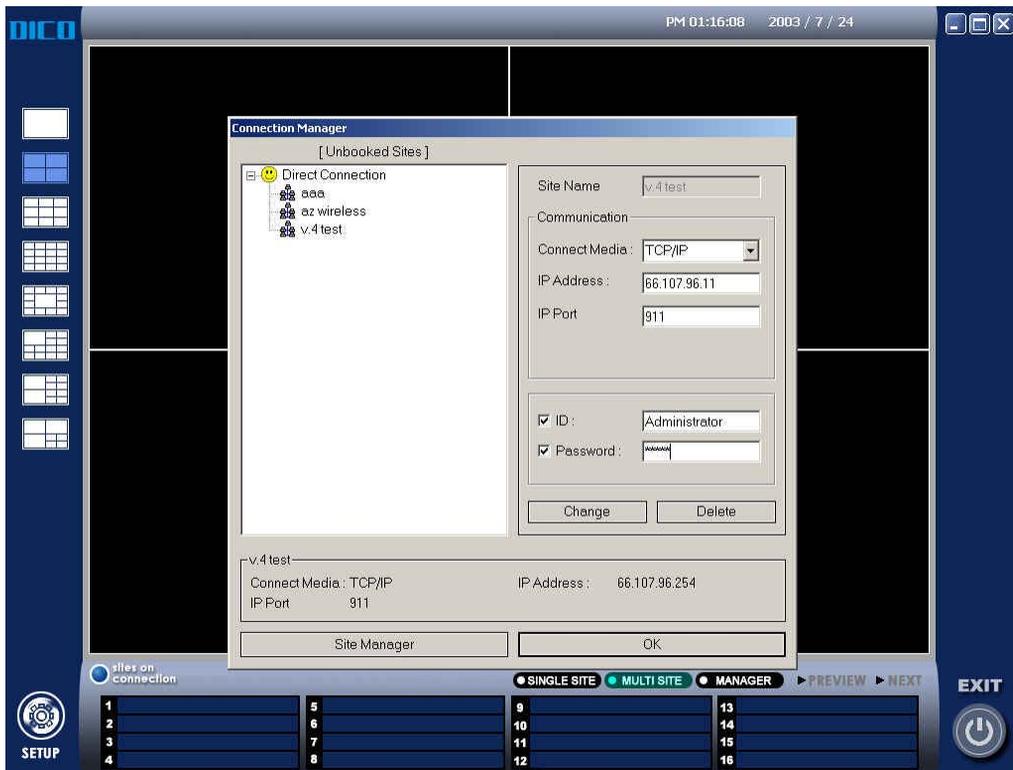
Registration Site information

To see DVR's image of remote site in Client program, must register the site information.

- Press the **"Site Manager"** button.
- Come out the pop-up window **"Site Manager"**
- Key in a site name to manage.
- Select the connect media.
- In case TCP IP : Key in the IP address and IP port(Default 911) number.
- In case Leased Line : Key in communication port and Baud rate.
- In case PSTN : Tel NO, Communication port, Modem speed.
- In case Web Server : In case Dynamic IP Key in Web server (basically www.DICO-800.com) that registered in "Registration Web server". (Also you can register in case Static IP.)
- Key in "ID" and "Password".(registered in "User Add" of set-up program.)

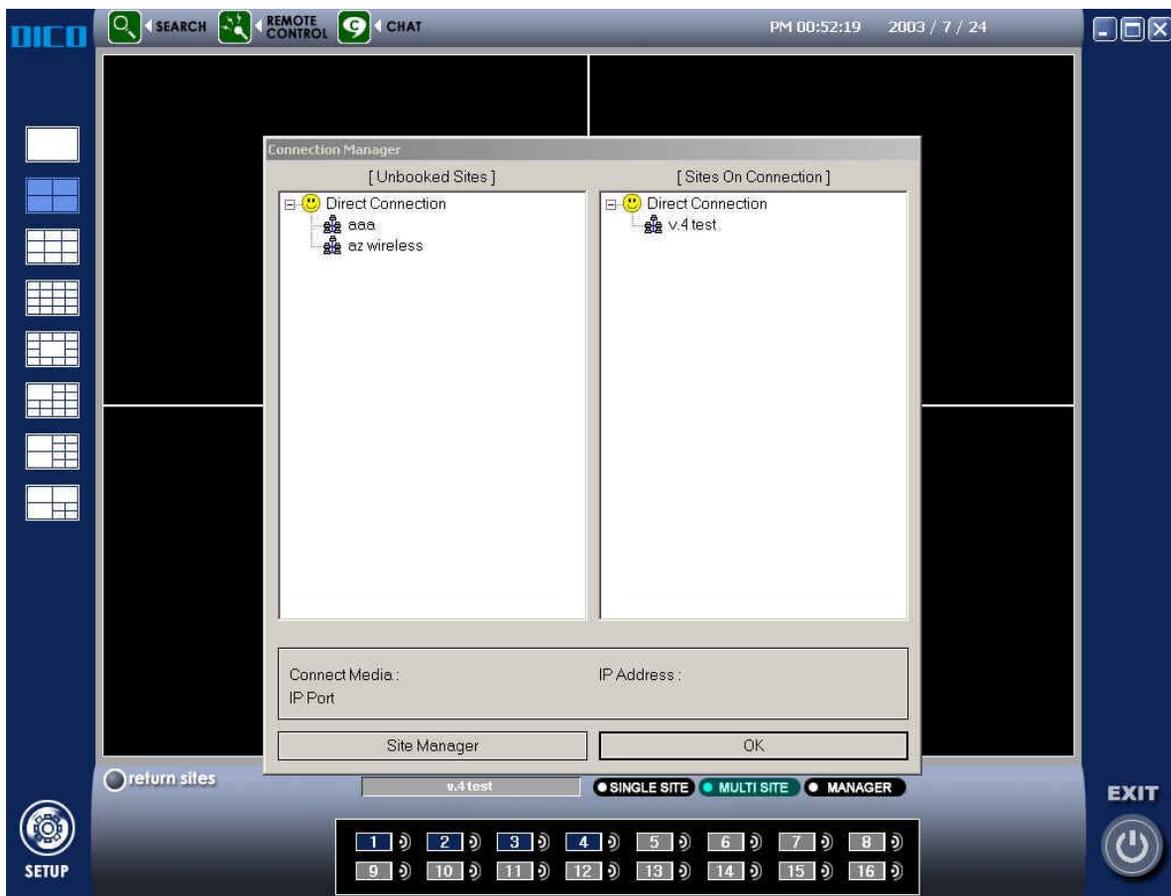
If you want to key in the ID and Password whenever you use as security, cancel to check in check box, and do not need to key in the ID and Password.

But, In case connection method is "Web Server", mean not ID, Password in DVR recorder but ID and Password to connect Web Server(www.DICO-800.com).



Connect Site

The registered sites come out at “Unbooked Sites”, double click the site that you want to connect, and if it’s connected with the site, come out the site name at “Sites on connection”. And press “OK” button, disappear the pop-up window, come out the connected sites at upper right side.



Monitoring Live image

Monitoring Live image support two types. One is the monitoring live image of selected cameras at all sites, the other one is the monitoring live image of all cameras at a site.

Monitoring the selected cameras at all sites : After connecting site, come out the list of site connected in the first screen. Click the site name that you want to see, and then come out the list of cameras connected, click the camera’ button that you want, and display the live image. If you want to see the cameras at another site, click the

“Return” button at the below side. Come out the list of site connected.
Do over again as above. If you want to get the audio data, click the “audio” button
corresponding to camera.

Monitoring all cameras at a site : Click the “Single Site” button, display the images of
Cameras connected. When you want to see the other site, press an arrow key in the
below side.



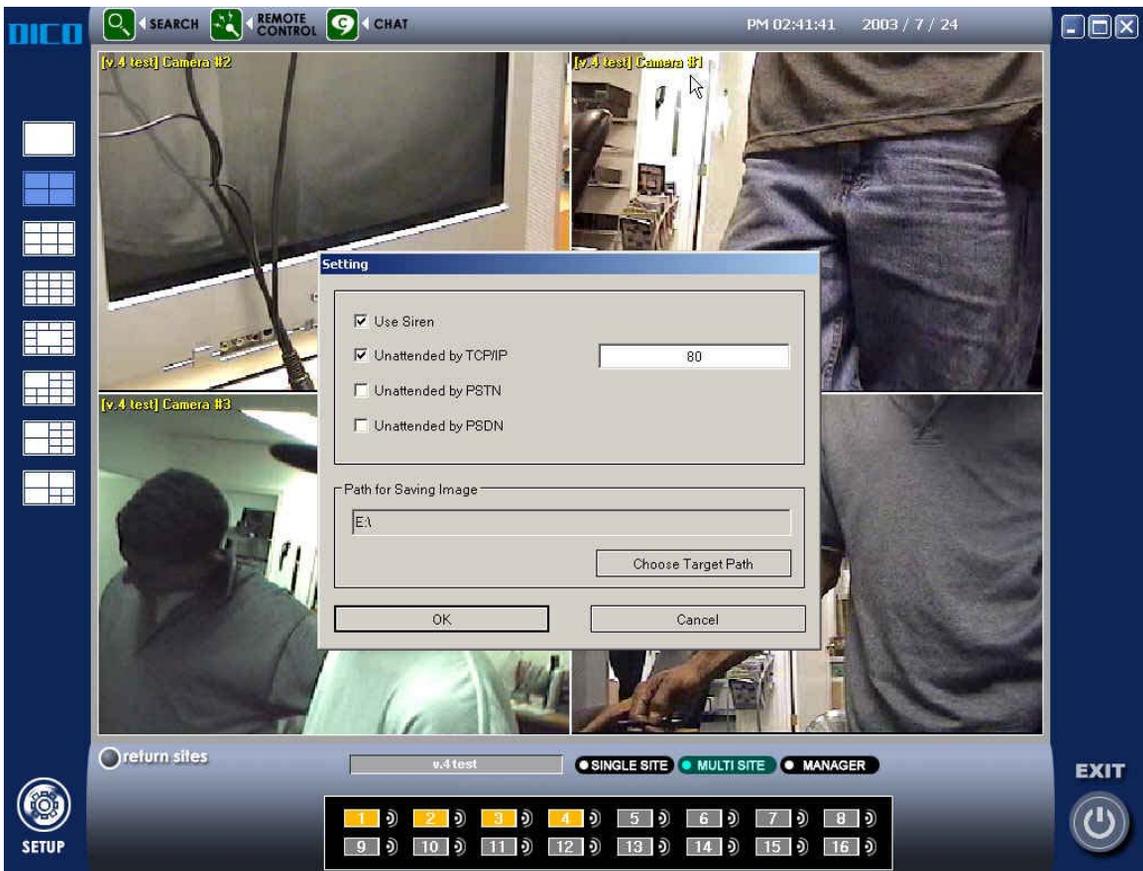
Setting up

Setting up the alarm mode :

As occurring the problem at Local DVR, is the setting up to transfer to Client sites, is about “Use the sound of alarm(Siren)” and “checking a type of network in check box(set up port and baud rate, etc)”.

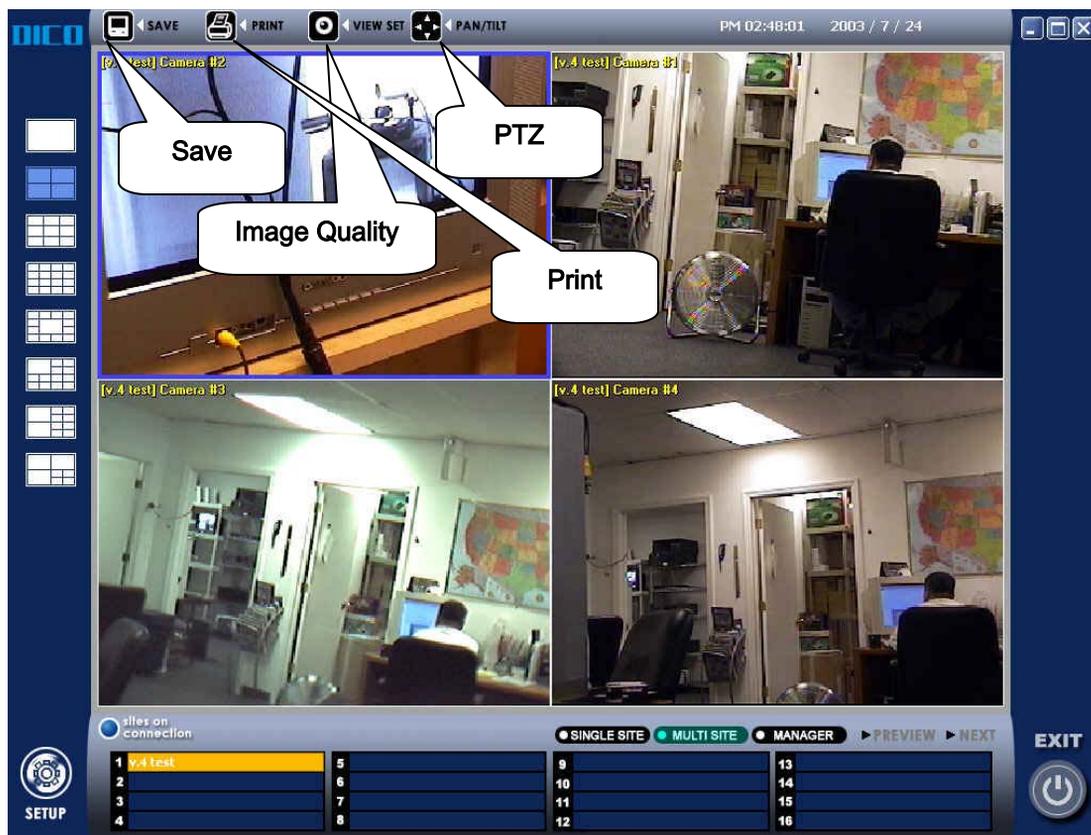
The path for the image to record :

The folder to record the image that is transmitted from DVR.



Selecting the channel and the layout of channel

To select the channel click the image by mouse, and then is activated the functional button (control PTZ, Recording, Print, canceling the image's transmit, control the image quality).



Control PTZ(Pan Tilt Zoom)

Come out buttons for control PTZ at the below side, you can do it. Click the button "+", and can use extended PTZ control(Preset, Aux control, etc)

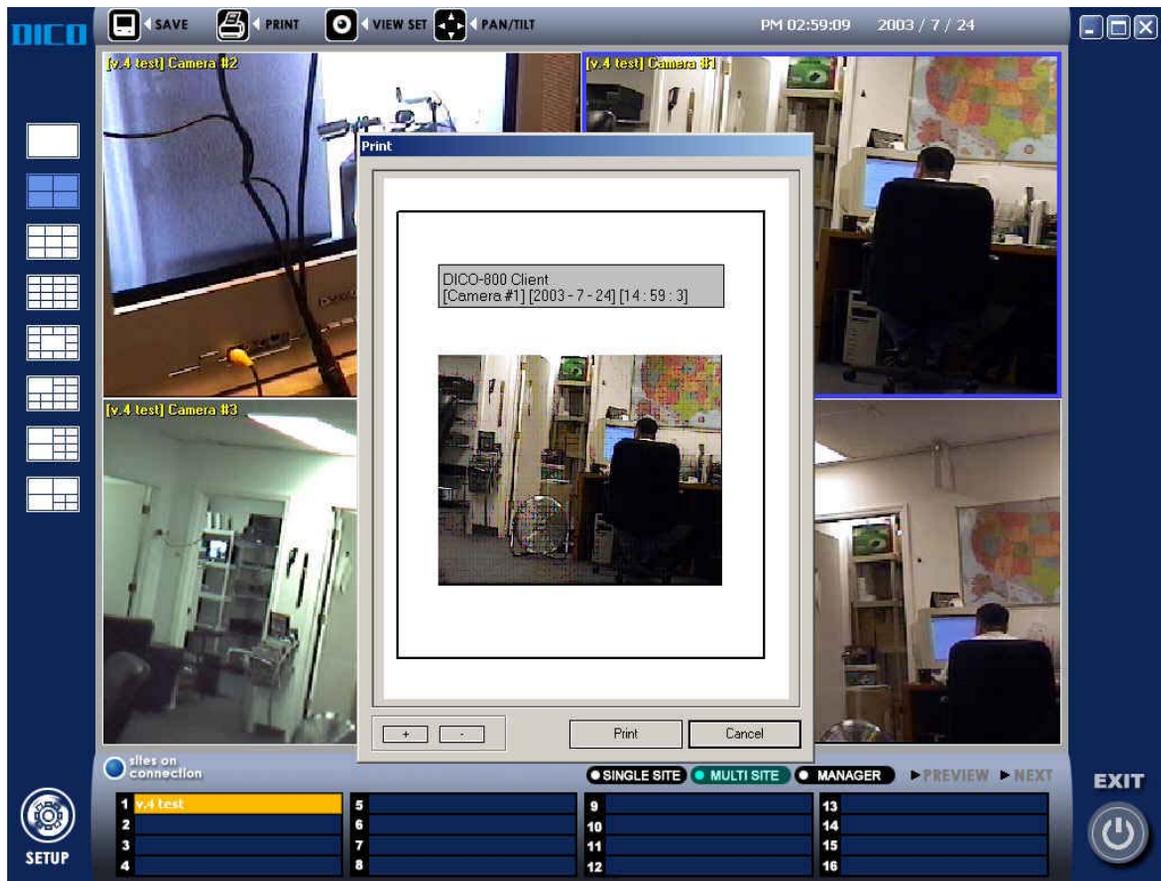


Recording the transmitted image

Click the button “Save”, be recorded continuously the images transmitted that is coming out “S” at the right side, at this time the path to record is recorded by JPEG file format (setup/”the path of image record”/”site name”->”camera name”->”Date”->”Time”->”Minute”). In this case , though you work other operations, be recorded continuously. If the site name or camera name are not supported a language in Client program(For example : Local DVR : Chinese, Client : English), occur a problem, and then you have to change camera name, etc.

Print out the transmitted image

You can print out the transmitted image.



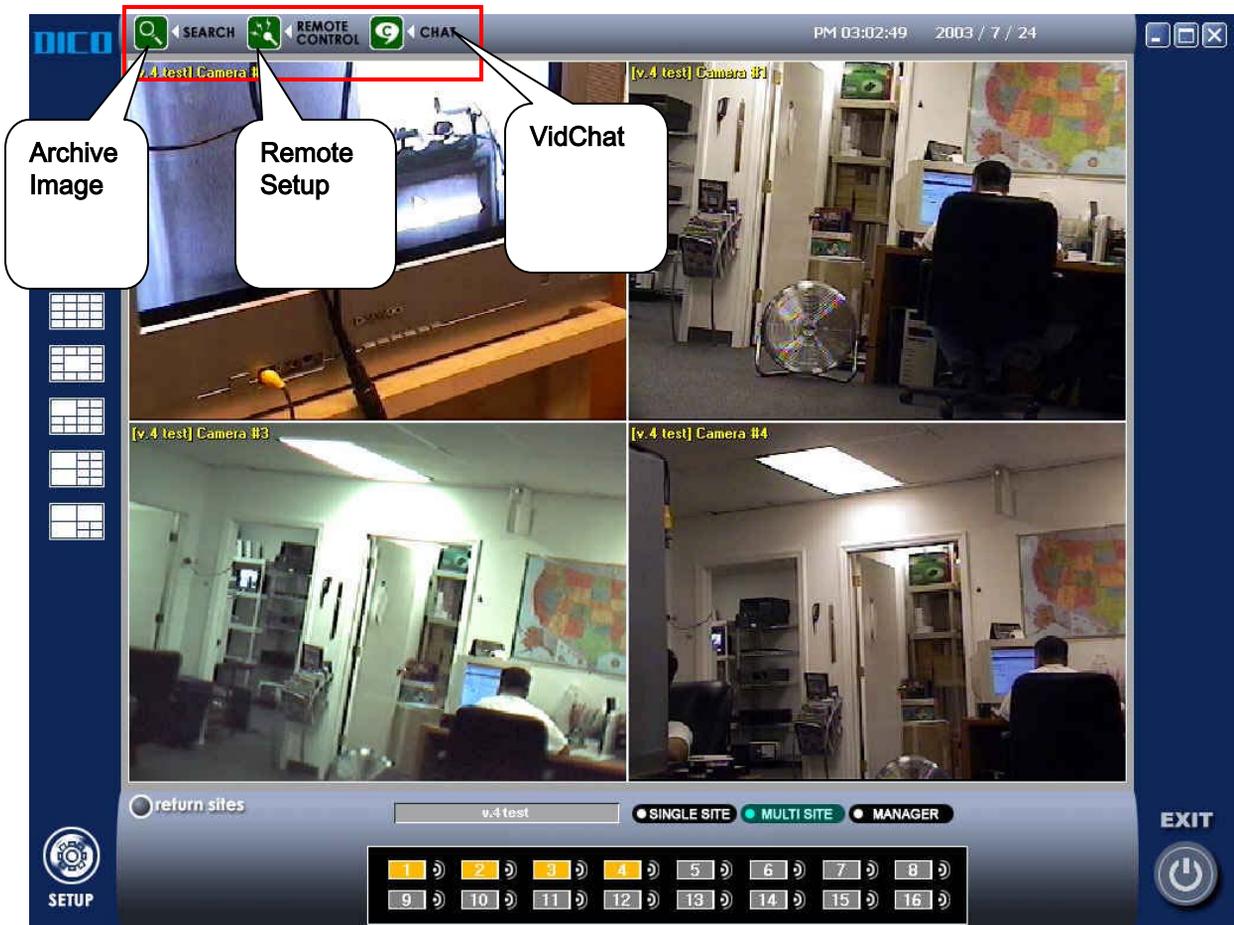
Cancellation to transmit the image(Disconnect)

Cancel the image transmission of the selected channel. Click the button of a site, Come out a button(The color of transmitting channel is different from the color of not transmitting channel), and then click one more the button, cancel that.

Selection the site and the layout of channel

Clicking the button "site" you want in the connected sites, it is activated "Camera button, Audio button" and etc. The activation of button is different according to the authority of ID.

In case connecting ID that have the authority of setting up, it is activated the button "Remote Setup", "Digital I/O", and if not such as, you can not use.



Monitoring the archived image

Selecting the channel that you want, come out the date (the color become change in the calendar that is recorded), and select the date, come out the time interval of that date. Selecting the time, it is activated the slider-bar and the button of retrieval, and can start to retrieval it.

Remote Setup

You can modify the information of setup in remote site. This operation is as same as DVR's. Press the button "OK", The server (DVR) restart, automatically connect. In the setup of motion detection the client's is different from the server's. You have To press the button "Apply the setting of motion detection".

VidChat : Pressing this button, come out the icon "Voice Communication" in tray, if connections success, the icon is blinking. If connection is failure, come out a error message.