

Disk Calculator Software

User Manual

UD.6L0202D1295A01

Thank you for purchasing our product. This manual applies to Disk Calculator software, please read it carefully for the better use of this software. The contents in this manual are subject to change without notice.

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Chapter 1 Introduction

1.1 Overview

The Disk Calculator software can calculate the recording time value when given the disk space value and vice versa. Using the software, you are also allowed to configure the device parameters including device type, video standard and camera number, and the camera parameters including image quality, resolution, frame rate and bitrate. The software displays the recommended bitrate after resolution and frame rate are selected for the configuration.

1.2 System Requirements

Operating System: Microsoft Windows 7 / Windows 2008 32 / 64-bit
Windows XP / Windows 2003 32-bit

CPU: Intel Pentium IV @ 3.0 GHz or above

RAM: 1G or above

Video Card: RADEON X700 Series


Display: 1024*768 resolution or above

1.3 Conventions

In order to simplify the description, we define the “Disk Calculator software” as “software” in the following chapters.

1.4 Version Information



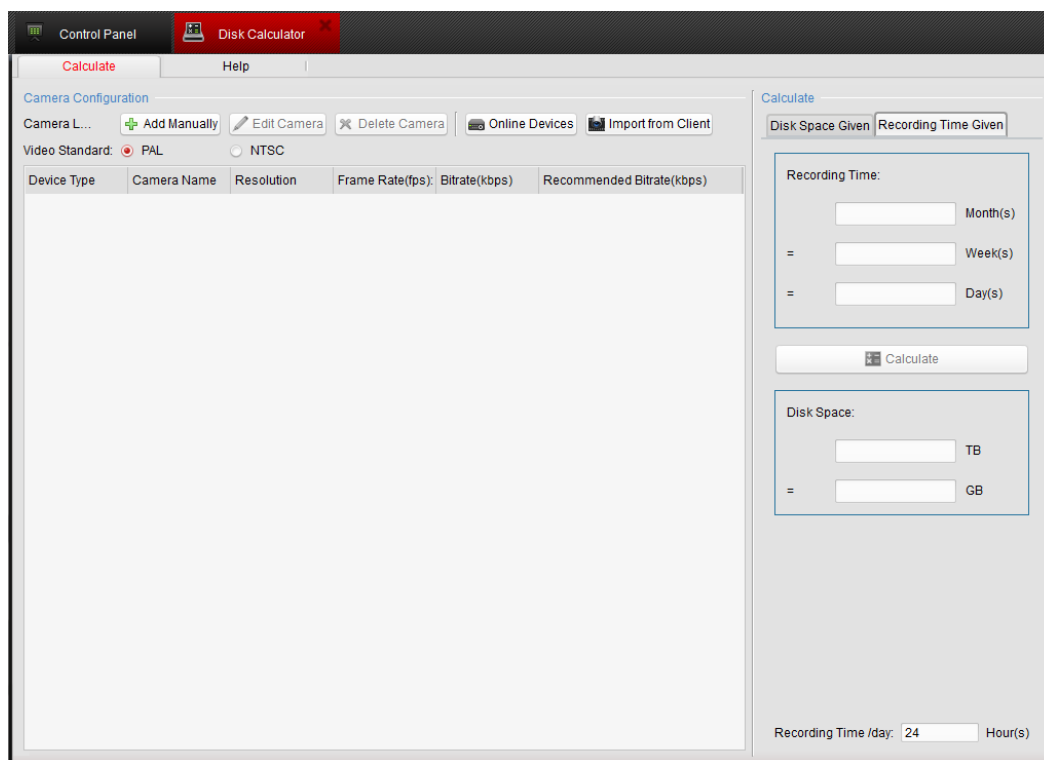
After installing the software, run the software and click  on the control panel to enter the Disk Calculator interface.

Click the **Help > About** tab at the top to view the version information or click **Help > User Manual** to get the User Manual of the software.

Chapter 2 Adding the Device

Purpose:

Before any operation, you need to add the device to the camera list. The software provides three ways for adding the device: adding manually, adding online devices and importing from client. The main interface of the software is shown below:




Notes:

1. The software supports only DVRs and IPCs.
2. Up to 1024 cameras can be added to the camera list.
3. The client refers to iVMS-4200 client software.

2.1 Adding Manually

Perform the following steps to add the device manually.

Steps:

1. Click  Add Manually button, and the Add Camera dialog box pops up.

2. Input the camera number and you can also set the prefix as desired by checking the ☒ checkbox.
3. Configure device parameters including the device type, resolution, frame rate and bitrate. The recommended bitrate will be displayed after the resolution and bitrate are set.
4. Click button to add the device.
5. Click button to exit the dialog box. And the added device will be displayed on the camera list.

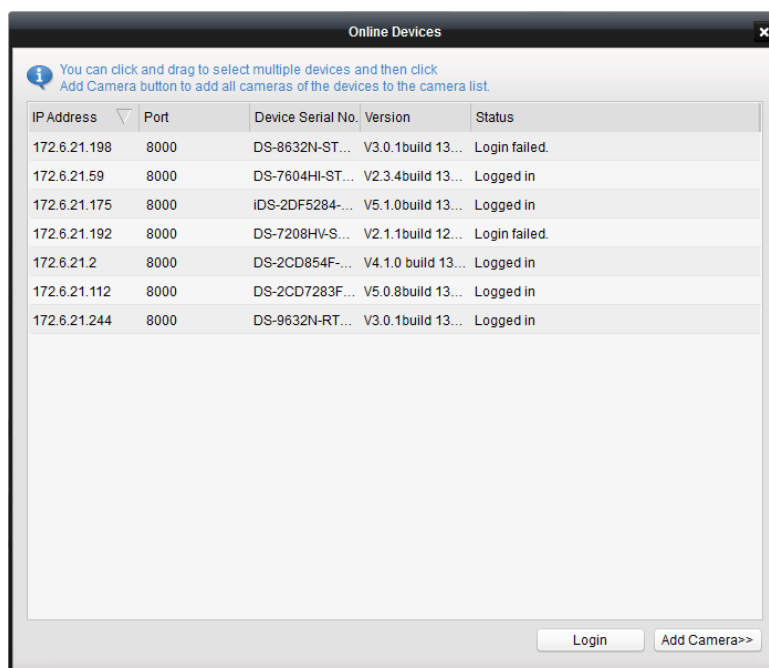
Device Type	Camera Name	Resolution	Frame Rate	Bitrate(kbps)	Recommended Bitrate(kbps)
DVR	Camera 1	4CIF	25	1792	1792

2.2 Adding Online Devices

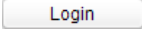

Perform the following steps to add online devices.

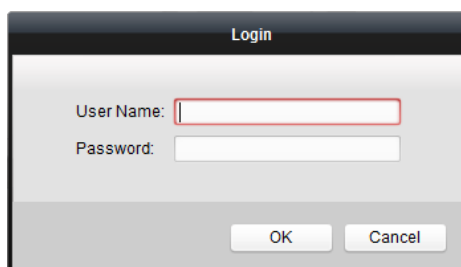
Steps:


1. Click button and the active online devices within the same subnet with the software will be displayed on the list.

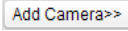



Notes:

- 1) The software will log in the online devices automatically by the user name of *admin* and the password of *12345*.
- 2) You are also allowed to log in the device manually: Select the device and click  button. And then input the user name and password of the selected device and click  button.



2. Click to select the device in the device list and then click  button to add all cameras of the selected device.

Note: You can click and drag to select multiple devices and then click  button to add all cameras of the devices to the camera list.

3. Click the icon  to close the Online Devices interface. And the device added will be displayed on the camera list.



Device Type	Camera Name	Resolution	Frame Rate	Bitrate(kbps)	Recommended Bitrate(kbps)
IPC	172.6.21.175_1	1080P(1920*1...	25	4096	6144
IPC	172.6.21.2_1	720P(1280*760)	25	2048	3072
IPC	172.6.21.112_1	1080P(1920*1...	25	4096	6144

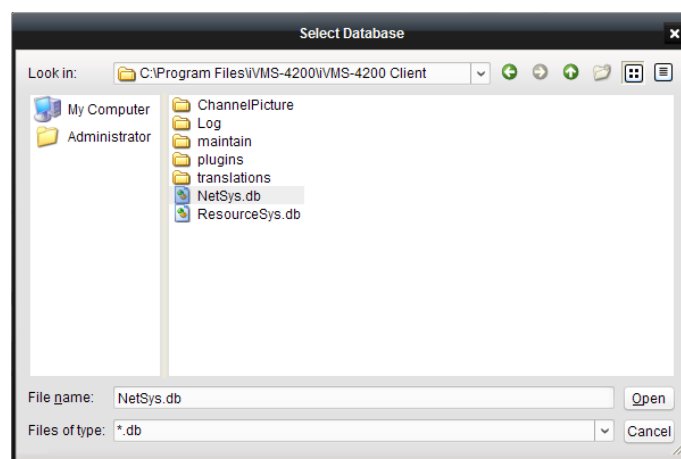
2.3 Importing From Client





Purpose:

Perform the following steps to import and add the device from client software.

Steps:

1. Click  button, and the corresponding interface shows up.
2. Click the icon  and select the installation path of the client software.



3. Select NetSys.db file and click  button to open the database file and close the Select Database window.
4. Click  button to import the database file and you can check the status of the devices on the list.
5. Click to select the device and then click  button to add the cameras of the selected device to the camera list.
6. Click  button to exit the Import from the Client interface and the cameras are added to the camera list in the main interface.

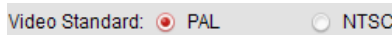
Chapter 3 Camera Configuration

Purpose:

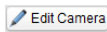
The software supports configuration of the cameras on the camera list. You can configure the device type, resolution, frame rate and bitrate. The video standard is also selectable.

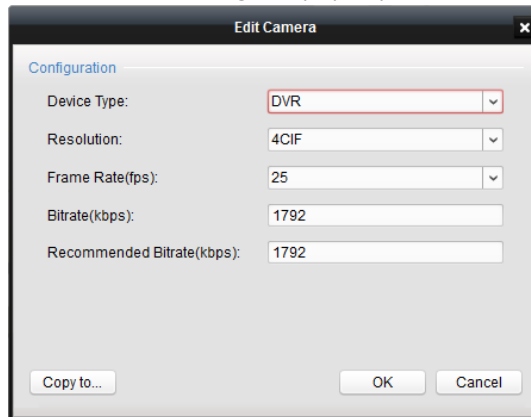
Before you start:


The device needs to be added to the camera list for camera configuration. You can select the video standard as PAL or NTSC at the top of main interface as shown below:



Steps:

1. Select the camera on the camera list and click  button, or just double-click the camera on the list. The Edit Camera dialog box pops up shown below:



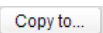
2. Click the arrow  to select the device type, resolution and frame rate in the corresponding drop-down list. Then the recommended bitrate will be displayed automatically and you are also allowed to customize the bitrate. Please refer to the table below for detailed information of the camera parameters.

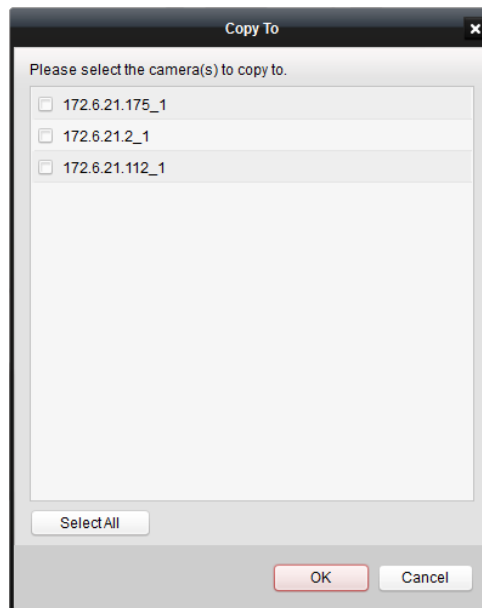
Description of Camera Parameters:


Camera Parameter	Description
Device Type	The device type can be selected as IPC or DVR.
Resolution	For DVRs, the resolution can be selected as 4CIF, 2CIF, CIF or QCIF. For IPCs, the resolution can be selected as 2560*1920, QXGA (2048*1536), 1080P and so on.
Frame Rate	The frame rate ranges from 1/16 to 25 in PAL format and from 1/16 to 30 in NTSC format.
Bitrate	The bitrate adopts the recommended bitrate by default. And it also can be customized.
Recommended Bitrate	The software calculates and displays the recommended bitrate automatically after other parameters are set.

Note: The Bitrate ranges from 32 to 16384.

3. Click  button to save the new configurations and close the dialog box.

You can click  button to copy the new configurations to the other cameras on the list.



To delete the camera added, select the camera on the list in the main interface and click  button. Then the selected camera will be deleted.

Chapter 4 Calculating

Purpose:

The main function of the software is to calculate the recording time value when given the disk space value and vice versa.

Before you start:

The device is required to be added to the camera list and the camera parameters need to be configured.

4.1 Calculating the Recording Time

Perform the following steps to calculate the recording time when disk space is given.

Steps:

1. Click **Disk Space Given** tab, and the calculating interface is shown as follows:

The screenshot displays the 'Calculate' window of the Disk Calculator software. The 'Calculate' tab is active, and the 'Disk Space Given' sub-tab is selected. The interface includes a 'Camera Configuration' table on the left and a calculation panel on the right. The calculation panel has two sections: 'Disk Space' and 'Recording Time'. The 'Disk Space' section has input fields for 'Disk Space' (with a unit selector set to 'TB') and an equals sign followed by a unit selector set to 'GB'. Below these is a 'Calculate' button. The 'Recording Time' section has three rows of input fields for 'Recording Time' (with unit selectors set to 'Month(s)', 'Week(s)', and 'Day(s)'). At the bottom, there is a field for 'Recording Time /day' set to '24' and a unit selector set to 'Hour(s)'. A red rectangle highlights the calculation panel.

Device Type	Camera Name	Resolution	Frame Rate(fps)	Bitrate(kbps)	Recommended Bitrate(kbps)
DVR	Camera 1	4CIF	25	1792	1792
IPC	172.6.21.175_1	1080P(1920*1080)	25	4096	6144
IPC	172.6.21.78_1	720P(1280*760)	25	2048	3072

2. Input the known disk space in the disk space text field with the TB or the GB for the unit. You can also set the recording time per day at the bottom of calculating interface.

Calculate

Disk Space Given | Recording Time Given

Disk Space:

5 TB

= 5000 GB

Calculate

Recording Time:

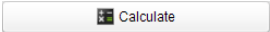
10 Month(s)

= 43 Week(s)

= 301 Day(s)

Recording Time /day: 20 Hour(s)

Notes:

- 1) The disk space value you entered should be the available storage space of the storage device.
 - 2) The unit of recording time includes month, week and day, assuming that each month has 30 days and each day has 24 hours.
 - 3) The value of record time per day is 24 hours by default.
3. Click  button to calculate, and the results will be displayed in the Recording Time panel shown below:

Recording Time:

10 Month(s)

= 43 Week(s)

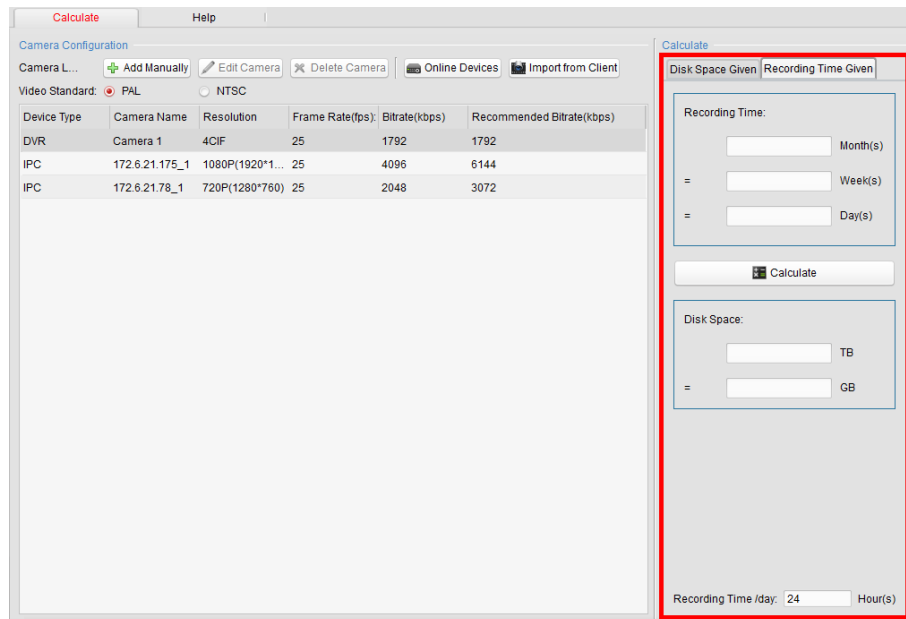
= 301 Day(s)

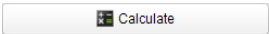
4.2 Calculating the Disk Space

Perform the following steps to calculate the disk space needed when recording time is given.

Steps:

1. Click **Recording Time Given** tab, and the calculating interface is shown as follows:



- Input the known recording time in the recording time text field with the month, the week or the day for the unit. You can also set the record time per day, and the default value is 24 hours.
- Click  button to calculate, and the results will be displayed in the Disk Space panel shown below:

Disk Space:

4
 TB

=
 3919
 GB