

Video Storage Tool User Manual

Video Storage Tool is designed to calculate the required number of the deployed DVR/NVRs and the HDDs intelligently and synchronously. The total storage space required can be worked out by calculating the record storage time and the system total stream which also can be worked out by the tool's calculating the different deployed channels of different stream parameters.

1. Run the Tool

You can run the tool without installing it. Go directly to VideoStorageTool→Tool file path and then double click VideoStorageTool.exe to run it. The main interface of the tool is shown as below. You can click “Help” button on the top right corner for its user manual or click “Exit” button to quit the tool.

The screenshot shows the 'HDD Calculator' application window. It has a dark theme and standard window controls (minimize, maximize, close) in the top right corner. Below the title bar, there are buttons for 'Help' and 'Exit'. The main interface is divided into several sections:

- System Deployment:** This section contains input fields for 'Name' (with a dropdown menu), 'Channels' (with a text input showing '1'), 'Resolution' (with a dropdown menu showing '5MP(2592×1944)'), 'Encoding Type' (with a dropdown menu showing 'H.264'), and 'Stream Size' (with a dropdown menu showing '6 Mbps(recommended)'). There are 'Save' and 'Add' buttons.
- Details:** This section shows 'System Total Stream (0 Kbps)' with 'Delete' and 'Clear' buttons.
- Table:** A table with columns: 'Name', 'Encoding Type', 'Resolution', 'Stream Size', 'Channels', and 'Select All' (with a checkbox). The table is currently empty.
- Disk Space Needed:** This section includes 'Set Saving Time' (with a dropdown showing '1'), radio buttons for 'Days', 'Weeks', and 'Months' (with 'Days' selected), 'Daily Recording Time' (with a slider set to '12' hours), and a display showing '0 GB'.
- DVR/NVR Needed:** This section has dropdowns for 'DVR/NVR Model Name' (showing 'Select'), 'RAID Type' (showing 'NA'), and 'Disk Size' (showing '500GB'). There is also a 'Type Management' dropdown.
- Footer:** At the bottom left, it says 'Version: v1.0.0.4'.

2. System Deployment

The tool itself will synchronously calculate the system total stream which is shown in the “System Deployment” area according to the different deployed channels of different stream parameters. The deployment of the different channels can be saved as an image which can be afterwards printed and viewed by clicking “Save” button.

The operation steps of the channel deployment are as follows.

1. Input the name of the channel deployment (or use the default) and the channel number, set the resolution, encoding type and the stream size and then click “Add” button to add one channel deployment.
2. Repeat Step 1 as you like and all the added channel deployments will be shown in the list. Refer to the picture as shown below. The System Total Stream will work out synchronously according to the calculation result of all the added channel deployments.

HDD Calculator

?

 Help

⏻

 Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (153600 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<div></div> <div></div> <div></div>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<div></div> <div></div> <div></div>
Channel(3)	H.264	3MP(2048×1536)	6 Mbps	10	<div></div> <div></div> <div></div>

Disk Space Needed

Set Saving Time

1

Days

Weeks

Months

Daily Recording Time

12

h

879

GB

DVR/NVR Needed

DVR/NVR Model Name

Select

RAID Type

NA



Disk Size

500GB

Type Management

Name	Stream Size	DVR/NVR Number	Disk Number
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Version: v1.0.0.4

Click  button to modify the channel deployment in the list. Click  button to save the modification after finishing the edition. Refer to the picture as shown below.

HDD Calculator

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 Help

⏻

 Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (92160 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<div></div> <div></div> <div></div>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<div></div> <div></div> <div></div>

Name

Channel

Channels

10

Resolution

4MP(2560×1440)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Disk Space Needed

Set Saving Time

1

Days

Weeks

Months

Daily Recording Time

12

h

527

GB

DVR/NVR Needed

DVR/NVR Model Name

Select

RAID Type

NA


Disk Size

500GB

Type Management

Name	Stream Size	DVR/NVR Number	Disk Number
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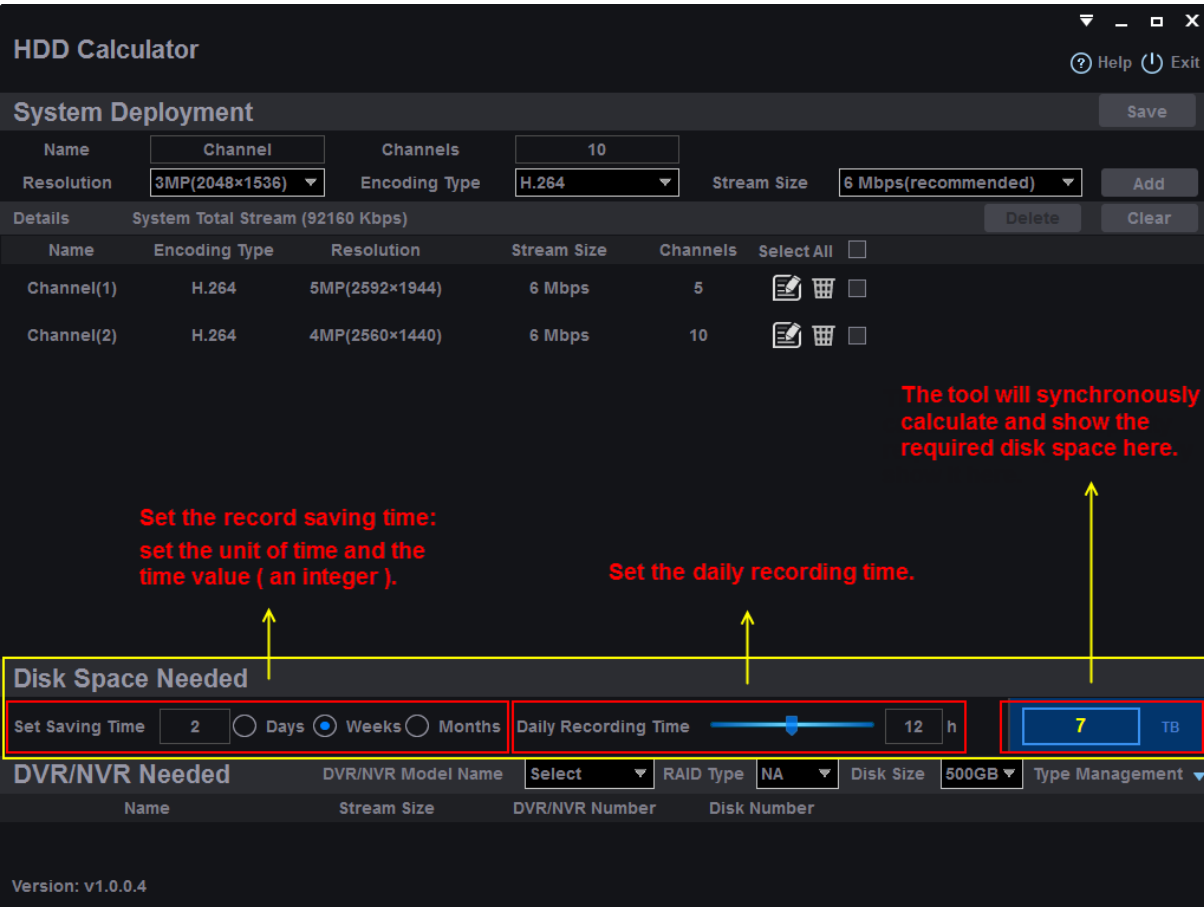
Version: v1.0.0.4

You can delete one channel deployment directly by clicking  button in the same row of the list, or check the channel deployments you want to delete in the list first, and then click “Delete” button to delete them in batch. All the channel deployments in the list will be deleted by clicking “Clear” button. You can check or uncheck all the channel deployments by checking or unchecking the “Select All” check box.

3. Disk Space Calculation

Refer to the picture below. Set the record saving time and daily recording time and the tool will synchronously calculate and show the required disk space according to the system total stream and the total recording time.

1. Set the record saving time: select the unit of time and set the time value (an integer between 0~999).
2. Set the daily recording time: input the time value (an integer between 0~24) or drag the time slider to set the value.
3. The disk space will be synchronously calculated and showed in the interface.





The screenshot shows the 'HDD Calculator' application window. It has a dark theme and includes a title bar with standard window controls. The interface is divided into several sections:

- System Deployment:** Contains input fields for 'Name' (set to 'Channel'), 'Channels' (set to '10'), 'Resolution' (set to '3MP(2048×1536)'), 'Encoding Type' (set to 'H.264'), and 'Stream Size' (set to '6 Mbps(recommended)'). There are 'Save', 'Add', 'Delete', and 'Clear' buttons.
- Details:** A table showing system details. The 'System Total Stream' is 92160 Kbps. The table has columns for Name, Encoding Type, Resolution, Stream Size, Channels, and Select All. It lists two channels: Channel(1) with 5 Mbps and Channel(2) with 10 Mbps.
- Disk Space Needed:** This section is highlighted with a red box and contains three red annotations with yellow arrows:
 - 'Set the record saving time: set the unit of time and the time value (an integer).' points to the 'Set Saving Time' section where '2' is entered, 'Days' is selected, and 'Weeks' is also visible.
 - 'Set the daily recording time.' points to the 'Daily Recording Time' section where a slider is set to '12 h'.
 - 'The tool will synchronously calculate and show the required disk space here.' points to the '7 TB' result displayed in a blue box.
- DVR/NVR Needed:** Contains fields for 'DVR/NVR Model Name' (set to 'Select'), 'RAID Type' (set to 'NA'), 'Disk Size' (set to '500GB'), and 'Type Management'.

At the bottom left, the version 'Version: V1.0.0.4' is displayed.

4. DVR/NVR Calculation

Refer to the picture below. Click  button on the right to unfold the DVR/NVR model list. You can click  button to fold it again if unfolded.

HDD Calculator

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 Help

⏻

 Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (92160 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>

Disk Space Needed

Set Saving Time

2

☐ Days
☒ Weeks
☐ Months

Daily Recording Time

20

h

12

TB

DVR/NVR Needed

DVR/NVR Model Name

Select

RAID Type

NA

Disk Size

500GB

Type Management

Name	Stream Size	DVR/NVR Number	Disk Number
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Version: v1.0.0.4

The operation steps of the DVR/NVR model list are as follows.

1. Refer to the picture below. Click “Add” button to pop up the “Add DVR/NVR Model” box.

HDD Calculator

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 Help

⏻

 Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (92160 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>

Disk Space Needed

Set Saving Time

2

☐ Days
☒ Weeks
☐ Months

Daily Recording Time

20

h

12

TB

DVR/NVR Needed

DVR/NVR Model Name

Select

RAID Type

NA

Disk Size

500GB

Type Management

DVR/NVR Model List

Import

Export

Add

Delete

Clear

Name	Encoding Type	Maximum Resolution	Inputting Bandwidth	Channels	Hard Disk Number	Select All
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Name	Stream Size	DVR/NVR Number	Disk Number
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Version: v1.0.0.4

Add DVR/NVR Model

Name

NVR

Channels

1

Hard Disk Number

1

Resolution

5MP(2592×1944)

Encoding Type

H.264

Inputting Bandwidth

32 Mbps

Confirm

Cancel

- Input the DVR/NVR model name, channel number and HDD number, select the resolution, encoding type and inputting bandwidth in the box and then click “Confirm” button to save the setting.
- Repeat Step 1 and Step 2 as you like to add more DVR/NVR model information. All the successfully added DVR/NVR model information will be shown in the list. Refer to the picture as shown below.

HDD Calculator

System Deployment

Name: Channel Channels: 10 Resolution: 3MP(2048x1536) Encoding Type: H.264 Stream Size: 6 Mbps(recommended)

Details System Total Stream (92160 Kbps)

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592x1944)	6 Mbps	5	<input type="checkbox"/>
Channel(2)	H.264	4MP(2560x1440)	6 Mbps	10	<input type="checkbox"/>

Disk Space Needed

Set Saving Time: 2 Days Weekly Recording Time: 20 h 12 TB



DVR/NVR Needed

DVR/NVR Model Name: Select RAID Type: NA Disk Size: 500GB Type Management

DVR/NVR Model List

Name	Encoding Type	Maximum Resolution	Inputting Bandwidth	Channels	Hard Disk Number	Select All
NVR(1)	H.264	5MP(2592x1944)	32 Mbps	16	2	<input type="checkbox"/>
DVR(2)	H.265	5MP(2592x1944)	32 Mbps	32	4	<input type="checkbox"/>

Version: v1.0.0.4

Click  button to modify the DVR/NVR model information in the list. Click  button to save the modification after finishing the edition. Refer to the picture as shown below.

HDD Calculator

?

 Help

⏻

 Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (92160 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<input type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>

Disk Space Needed

Set Saving Time

2

☐ Days
☒ Weeks
☐ Months

Daily Recording Time

20

h

12

TB

DVR/NVR Needed

DVR/NVR Model Name

Select

RAID Type

NA

Disk Size

500GB

Type Management

DVR/NVR Model List

Import

Export

Add

Delete

Clear

Name	Encoding Type	Maximum Resolution	Inputting Bandwidth	Channels	Hard Disk Number	Select All
NVR(1)	H.264	5MP(2592×1944)	32 Mbps	16	2	<input checked="" type="checkbox"/> <div> <div></div> <div></div> <div></div> </div>

Name

NVR

Channels

16

Hard Disk Number

2

Resolution

5MP(2592×1944)


Encoding Type

H.264

Inputting Bandwidth

32 Mbps

Version: v1.0.0.4

You can delete one DVR/NVR model directly by clicking  button in the same row of the list, or check the DVR/NVR models you want to delete in the list first, and then click “Delete” button to delete them in batch. All the DVR/NVR models in the list will be deleted by clicking “Clear” button. You can check or uncheck all the DVR/NVR models by checking or unchecking the “Select All” check box.

Select the “RAID Type” and “Disk Size” and then select the DVR/NVR model name in the “DVR/NVR Model Name” drop-down list or directly double click the DVR/NVR model name in the list, the tool will synchronously calculate and display the required number of the DVR/NVR models and HDDs in the interface according to the set parameters. Refer to the picture below.

HDD Calculator

?

Help

⏻

Exit

System Deployment

Save

Name

Channel

Channels

10

Resolution

3MP(2048×1536)

Encoding Type

H.264

Stream Size

6 Mbps(recommended)

Add

Details

System Total Stream (92160 Kbps)

Delete

Clear

Name	Encoding Type	Resolution	Stream Size	Channels	Select All
Channel(1)	H.264	5MP(2592×1944)	6 Mbps	5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Channel(2)	H.264	4MP(2560×1440)	6 Mbps	10	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Disk Space Needed

Set Saving Time

2

Days

Weeks

Months

Daily Recording Time

20

h

12

TB

DVR/NVR Needed

DVR/NVR Model Name

NVR(1)

RAID Type

RAID5

Disk Size

1TB

Type Management

DVR/NVR Model List

Import

Export

Add

Delete

Clear

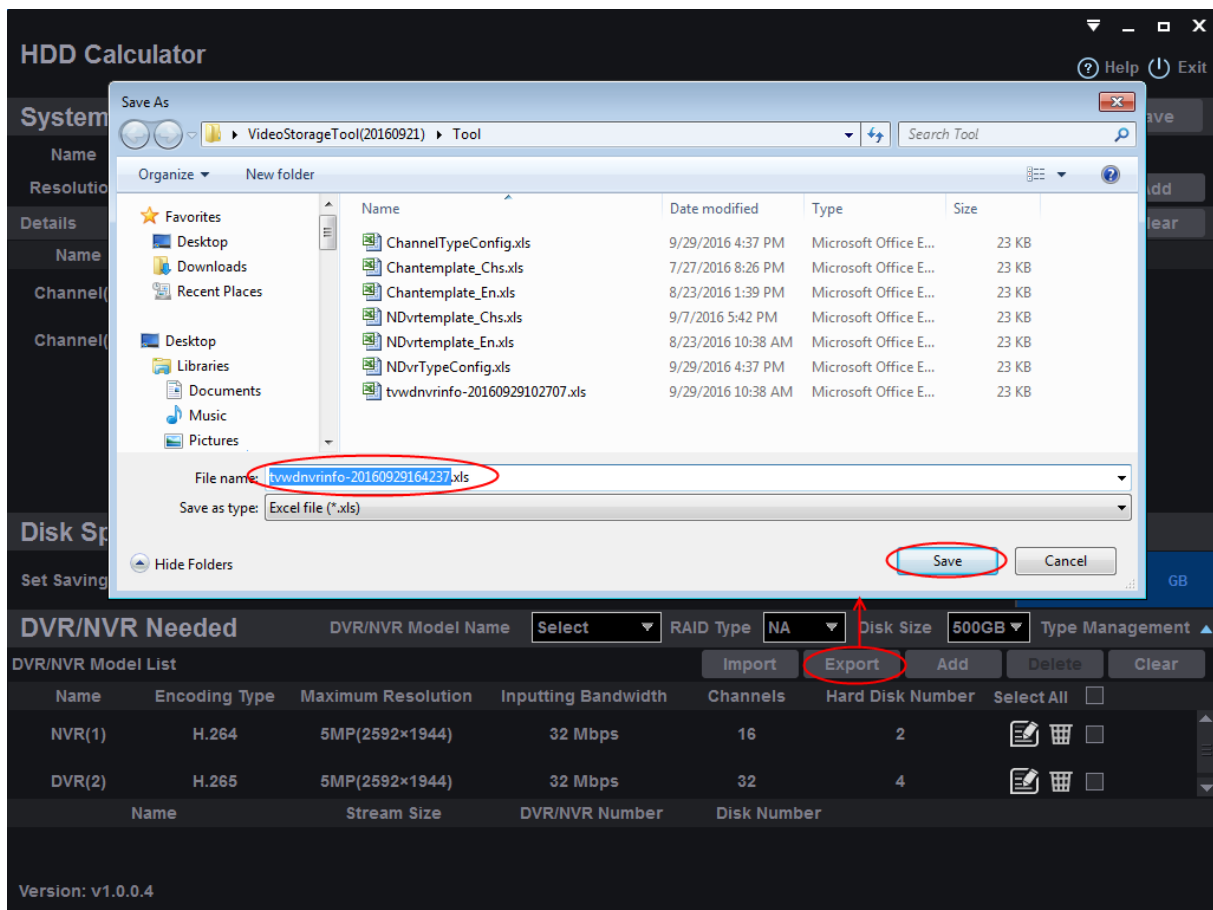
Name	Encoding Type	Maximum Resolution	Inputting Bandwidth	Channels	Hard Disk Number	Select All
NVR(1)	H.264	5MP(2592×1944)	32 Mbps	16	2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
DVR(2)	H.265	5MP(2592×1944)	32 Mbps	32	4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Name	Stream Size	DVR/NVR Number	Disk Number
NVR(1)	224 Mbps	7	13

Version: v1.0.0.4

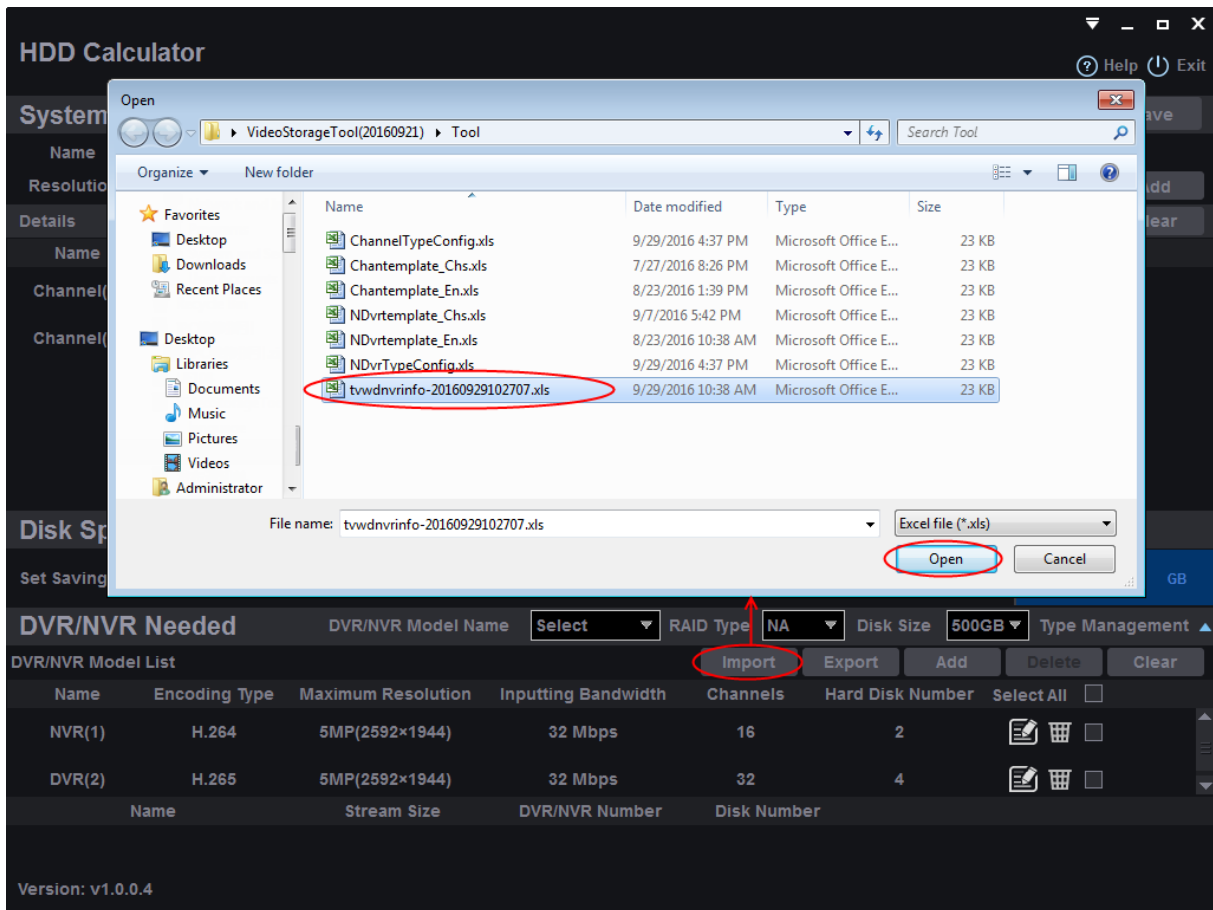
➤ DVR/NVR Model List Export

The DVR/NVR model list can be exported as an excel file for viewing, editing and importing afterwards. Refer to the picture below. Click “Export” button to pop up a window, select the file save path and set the file name in the window and then click “Save” button to save the file.

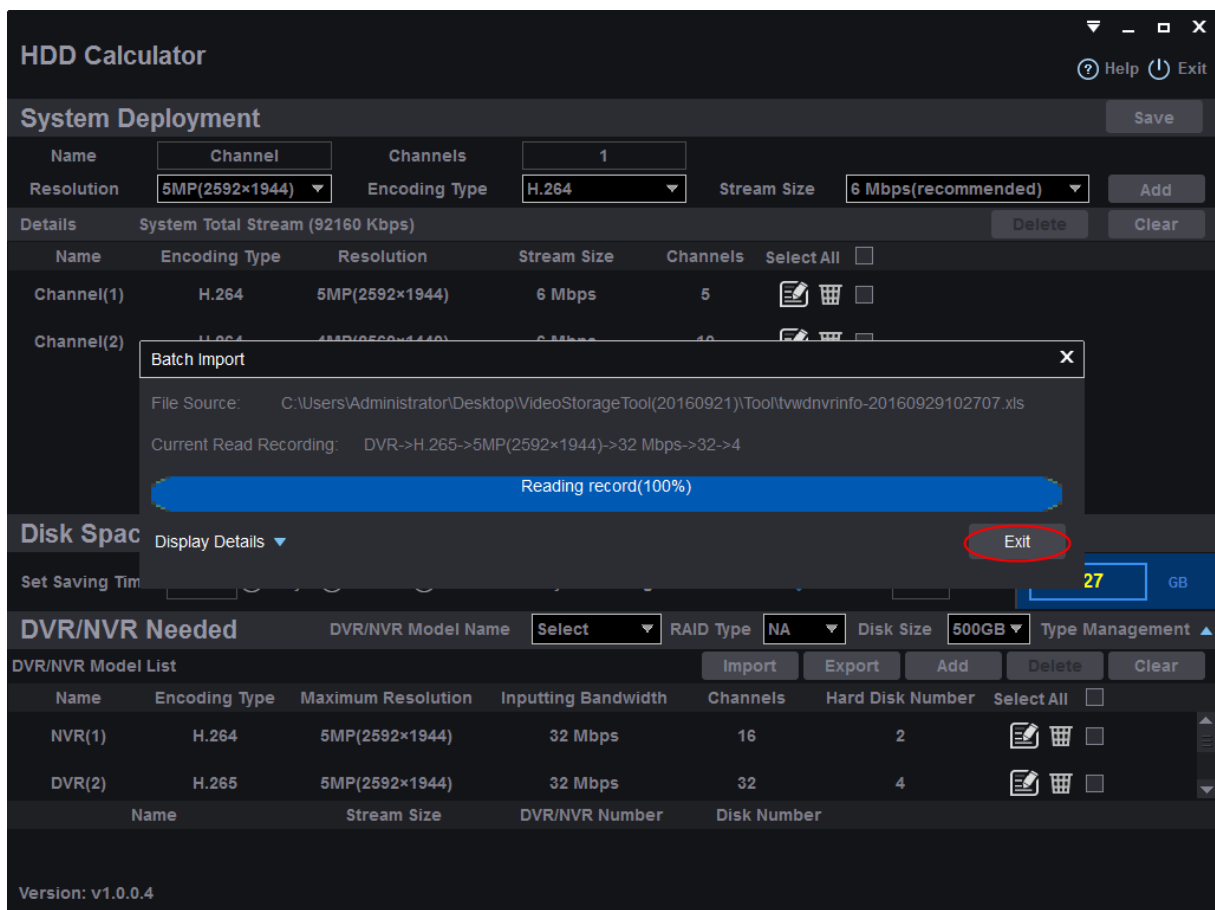


➤ DVR/NVR Model List Import

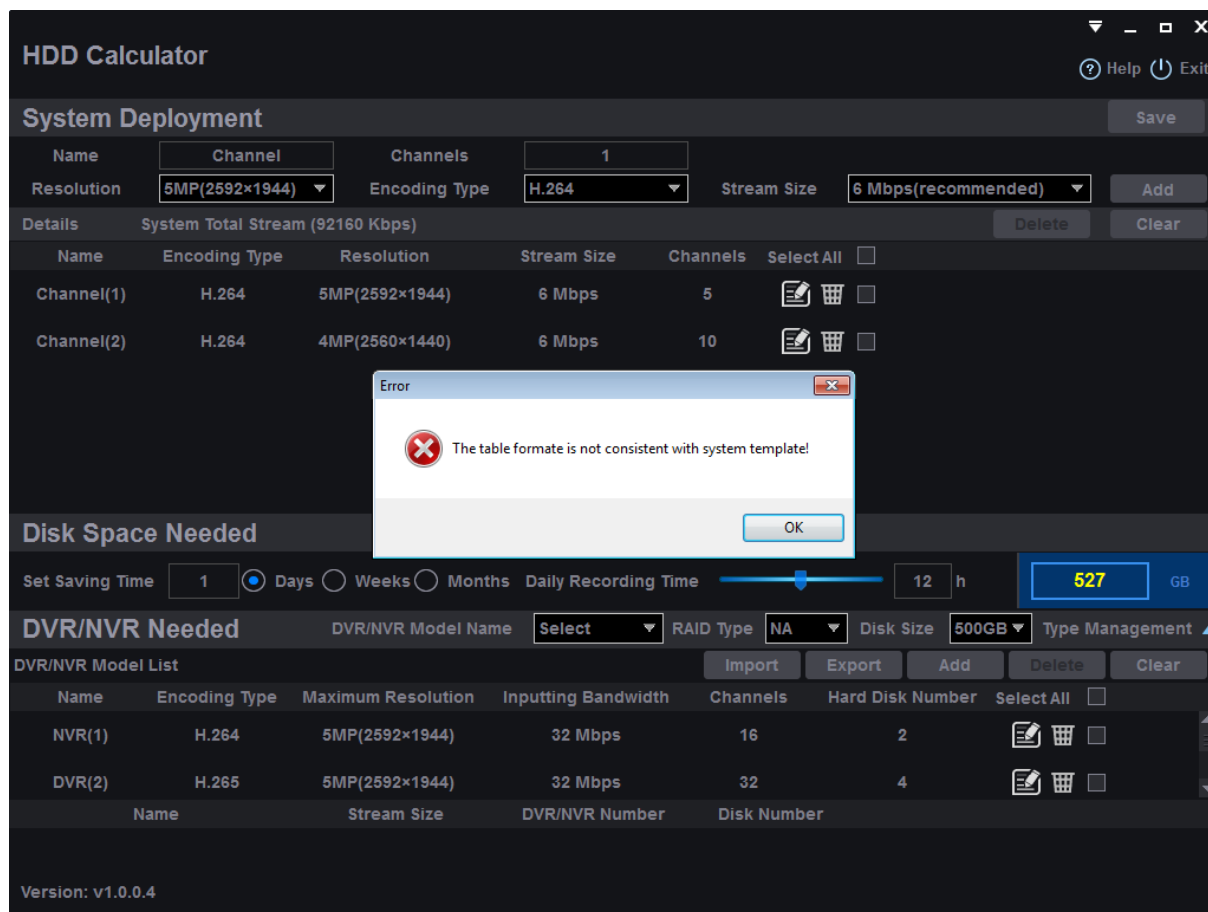
The file exported can be imported after being edited (it should be edited with appropriate formats). Refer to the picture below. Click “Import” button to pop up a window, find the excel file to be imported and then click “Open” button. Finally, click “Yes” button in the popup dialog box to confirm the import.




Refer to the picture below. Click “Exit” button to complete the importing after it is successfully imported. The imported DVR/NVR model information will be shown in the model list following the existing model information in the list without overwriting them.



If an error as shown in the picture below occurs during file importing, you should edit the exported excel file until its formats are in accord with the standard formats before re-importing it.



If a message as shown in the picture below shows up in the “Batch Import” window when the importing is over, you can click  button beside “Display Details” to view the detail information and edit the relevant locations in the excel file according to the locations and descriptions pointed out and then re-import the file.

HDD Calculator

System Denlovmnt

Batch Import

File Source: C:\Users\Administrator\Desktop\VideoStorageTool(20160921)\Tool\tdvdrinfo-20160929102707.xls

Current Read Recording: DVR->H.265->5MP(2592x1944)->32 Mbps->32->4

Reading record(100%)

Hide Details ▲ There are invalid datas in the form, please click to view details!

Exit

Location	Description
Line Number: 6, Column Number:6	Field \ "Hard Disk Number"Data is null or illegal

Disk Space

Set Saving Time

DVR/NVR

DVR/NVR Mode

- Name
- NVR(1)
- DVR(2)