

IBM System x



IBM RDX removeable cartridge USB hard drive

IBM RDX drive disappearing from host server in Windows



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RDX drive disappearing from host server in Windows

The purpose of this document is to get the RDX USB device either visible again in the Windows Operating System and / or to eject the RDX data cartridge from the RDX drive bay.

Affected RDX units

- IBM RDX 160 GB External USB (2.0) Drive, p/n 362516X, any CRU / FRU
- IBM RDX 320 GB External USB (2.0) Drive, p/n 362532X, any CRU / FRU
- IBM RDX 500 GB External USB (2.0) Drive, p/n 362550X, any CRU / FRU
- IBM RDX 160 GB Internal USB (2.0) Drive, p/n 46C5364, any CRU / FRU
- IBM RDX 320 GB Internal USB (2.0) Drive, p/n 46C5387, any CRU / FRU
- IBM RDX 500 GB Internal USB (2.0) Drive, p/n 46C5388, any CRU / FRU
- IBM RDX USB 3.0 External Dock with 320GB Cartridge, p/n 362532Y, any CRU / FRU
- IBM RDX USB 3.0 External Dock with 500GB Cartridge, p/n 362550Y, any CRU / FRU
- IBM RDX USB 3.0 External Dock with 1TB Cartridge, p/n 36251TY, any CRU / FRU
- IBM RDX Internal USB 3.0 Dock with 320GB Cartridge, p/n 00D2786, any CRU / FRU
- IBM RDX Internal USB 3.0 Dock with 500GB Cartridge, p/n 00D2787, any CRU / FRU
- IBM RDX Internal USB 3.0 Dock with 1TB Cartridge, p/n 00D2788, any CRU / FRU
- IBM RDX 750 GB Cartridge p/n 81Y3645, no CRU / FRU

Affected Operating systems

Any Windows Operating System that is supported with the RDX drive.

- Any RDX USB 2.0 Unit – Windows 2003 and higher
- Any RDX USB 3.0 Unit – Windows 2008 and higher

Affected IBM Server

Any IBM Server, where the corresponding RDX unit is listed on IBM ServerProven. See also:

<http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>

for further details.

NOTE

In both scenarios make sure that the Data Cartridge is not being written to.

This can easily be identified by watching the LED of the Data Cartridge. Ensure that the LED is not flashing, as that would indicate that the drive is being accessed. It is recommended to watch the Data Cartridge LED for one minute to ensure that it is not flashing, as there could be a pause in any data being sent to the cartridge. Further documentation on the Dock and Cartridge LED can be found at the bottom of this document in [Tables 1](#) and [2](#). Once a minute has passed proceed with either [Scenario 1 The RDX Dock is seen but the media will not eject](#) or [Scenario 2 The Dock is no longer seen in Windows](#).

Scenario 1 The RDX Dock is seen but the media will not eject

Please follow the [Note](#) at the beginning of these scenarios.

WARNING!

NOTE: The Cartridge LED must **not** be flashing when attempting to eject the cartridge. As noted [above](#) it is busy either reading, writing or seeking. Wait for the cartridge LED to stay steady green for 1 minute before attempting to eject the data cartridge.

1. Go to device manager, and look at the Universal Serial Bus Controllers on the right hand side of Device manager
2. Ensure that the USB Mass Storage Device is normally seen

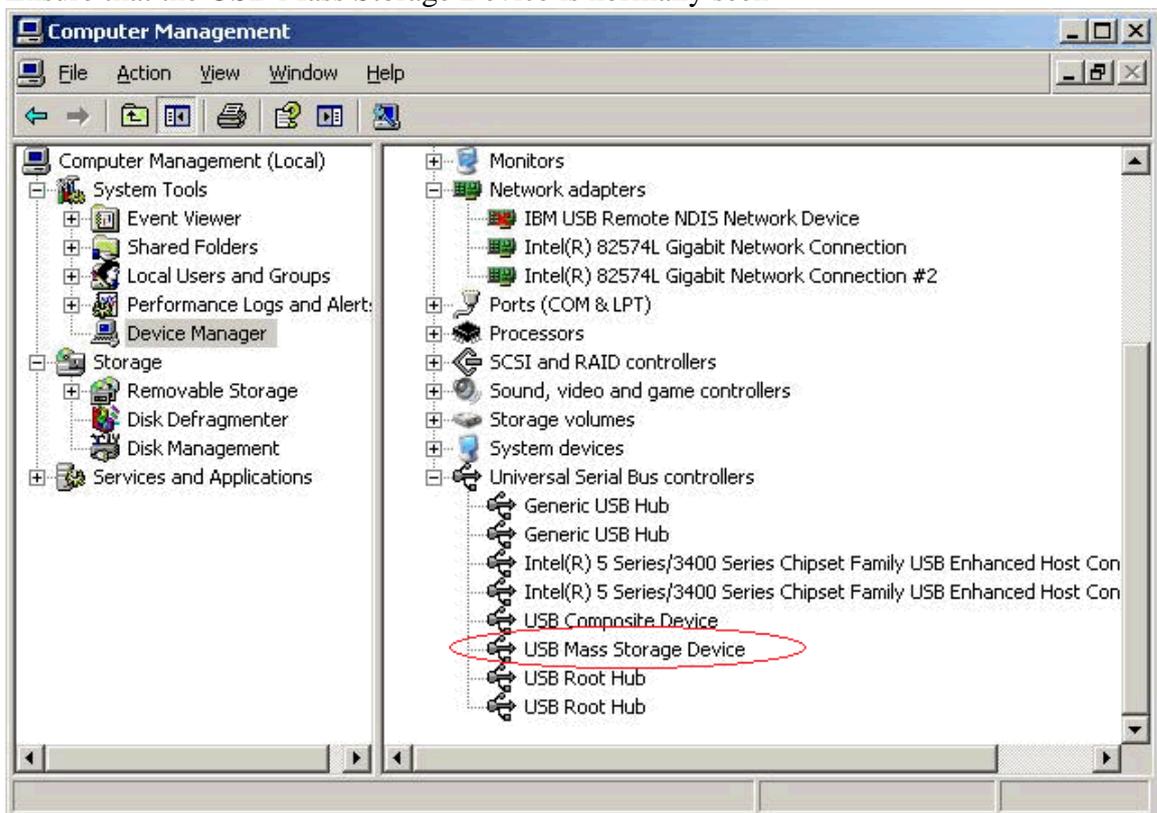


Figure 1 - Windows Device Manager sees the RDX drive correctly

If this is not the case go to "[Scenario 2 The Dock is no longer seen in Windows](#)"

3. Go into Windows Explorer

4. Select the RDX Drive, then right click and select Eject. This should Eject the data cartridge in the RDX dock

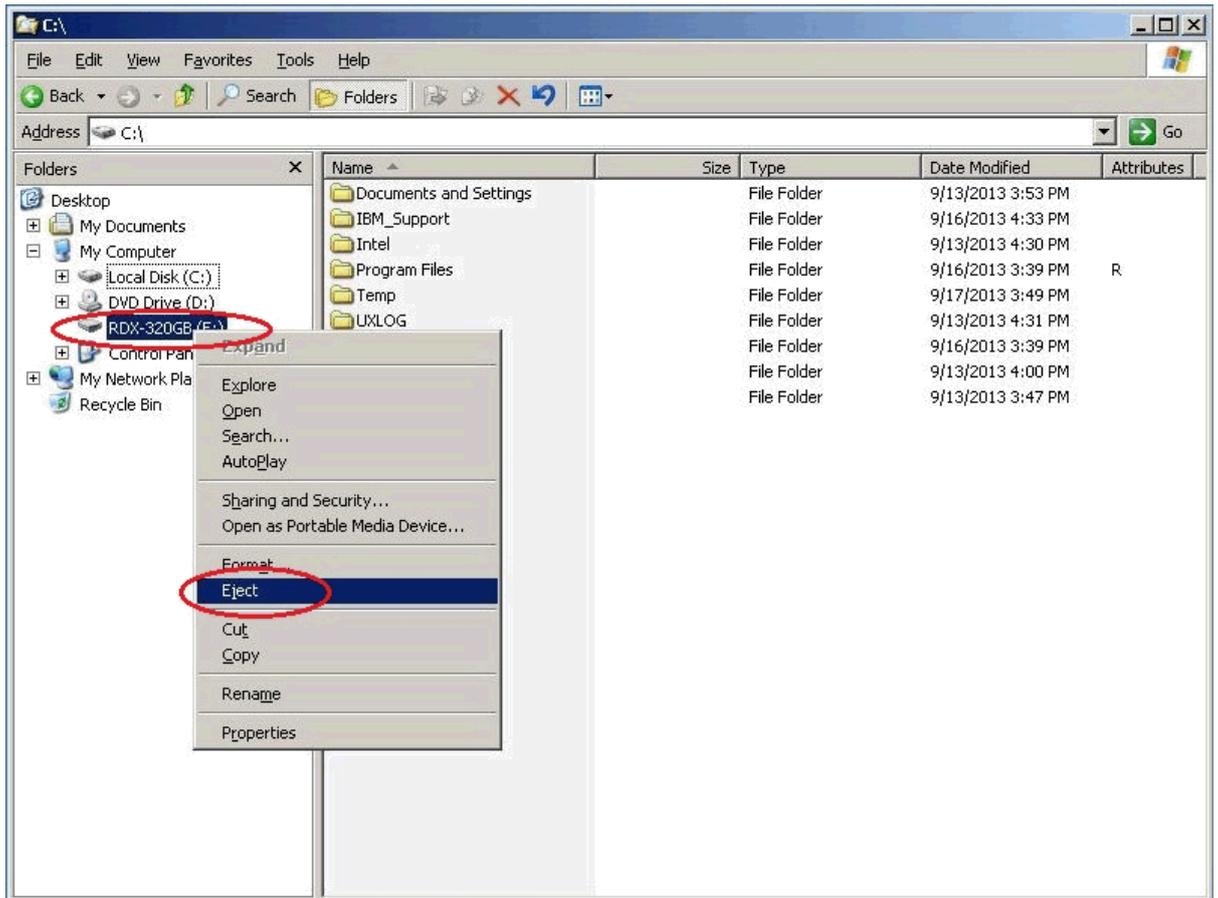


Figure 2 - Ejecting RDX cartridge via Windows Device Manager

5. Alternative method for ejecting the data cartridge:
 - Double click My Computer on the Windows Desktop
 - Select the RDX Drive, then right click and select Eject. This should Eject the data cartridge in the RDX dock

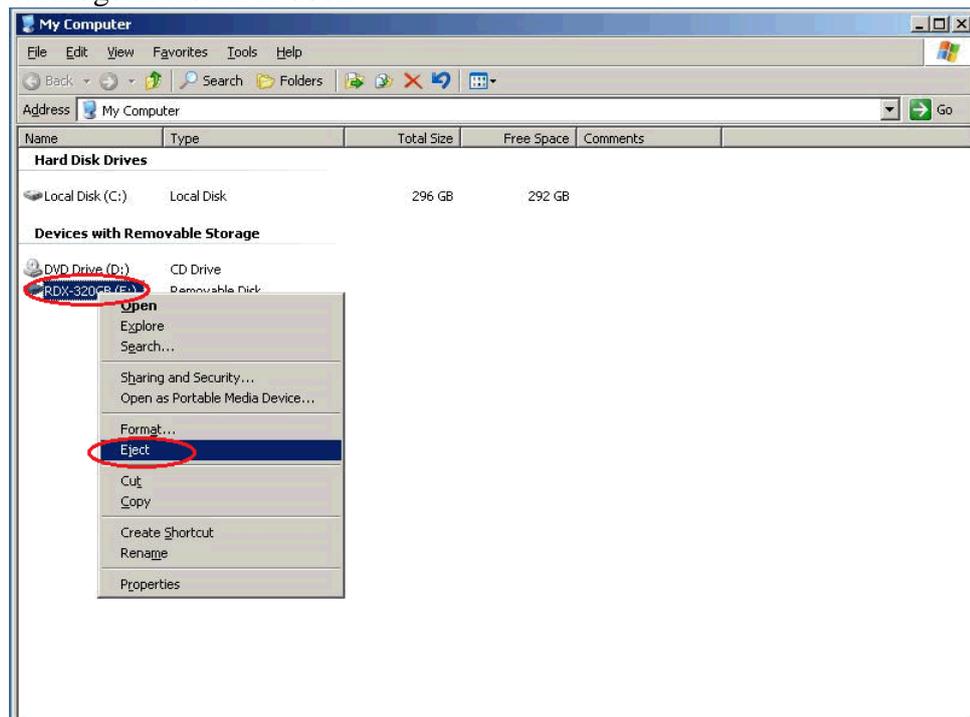


Figure 3 - Ejecting RDX cartridge via "My Computer"

If all of the above actions fail use the manual eject method.

Use the manual-ejection hole (see [Figure 6 on page 8](#)) to eject the cartridge in case of a power loss or when the other methods of cartridge ejection fail. To eject a cartridge, complete the following steps:

- Insert a straightened paper clip or similar object into the manual ejection hole until the cartridge is ejected.
- After the cartridge is ejected, pull the cartridge out of the drive.
- In case the server operating system does not recognize the RDX media immediately after manual ejection of an RDX cartridge then:
 - a) Restart the server to reset the drive for an internal RDX
 - b) Restart the External RDX and then the Server to reset the drive.

Attention: Do not manually eject an RDX cartridge while the cartridge-indicator LED is flashing.

Scenario 2 The Dock is no longer seen in Windows

Please follow the [Note](#) at the beginning of these scenarios.

WARNING!

NOTE: The Cartridge LED must **not** be flashing when attempting to eject the cartridge. As noted [above](#) it is busy either reading, writing or seeking. Wait for the cartridge LED to stay steady green for 1 minute before attempting to eject the data cartridge.

1. In the Windows Device Manager check under Universal Serial Bus Controllers the right hand side of Device manager
It may be looking like in Figure 4

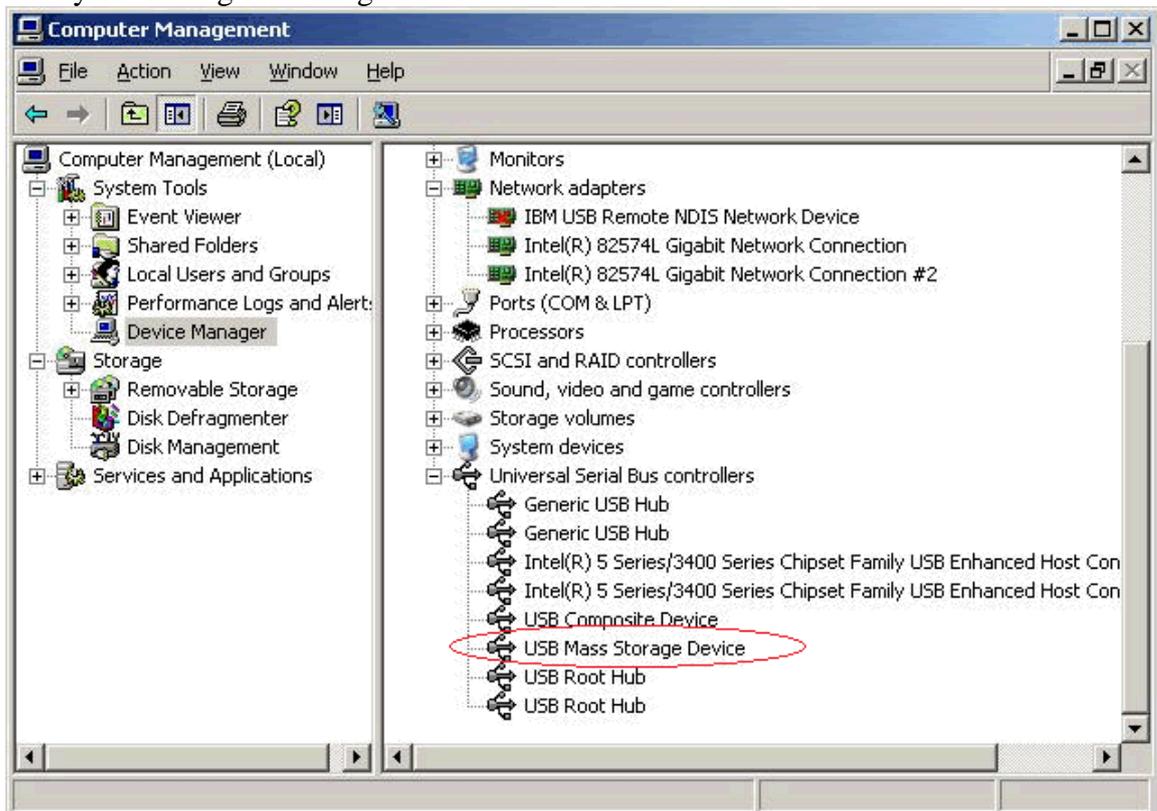
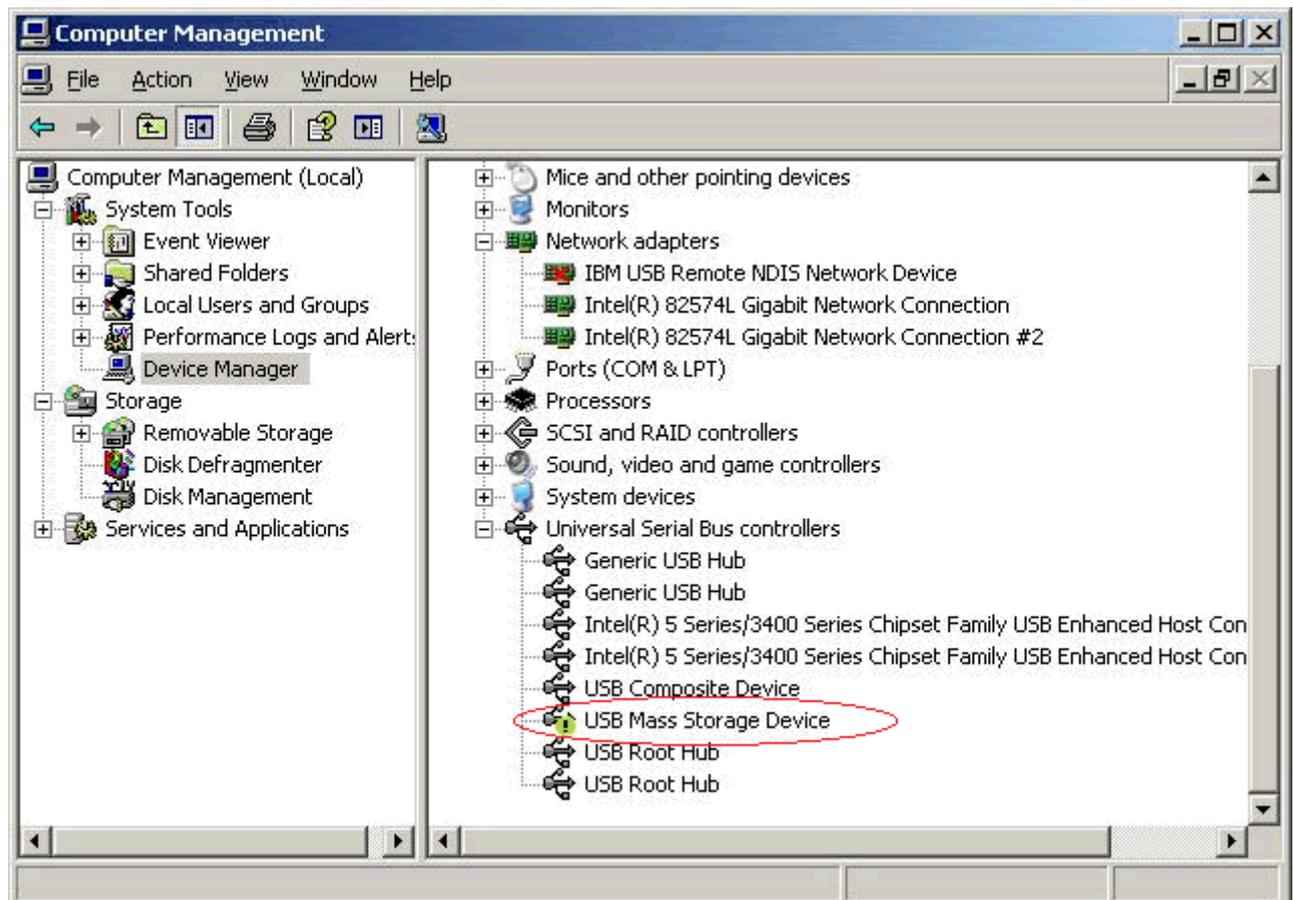


Figure 4 - Windows Device Manager sees the RDX drive correctly

If the RDX unit is shown in the Windows Device Manager launch the RDX Utility and check if it sees the RDX Dock.

If it is seen then try to manually eject the cartridge using the eject button on the dock or follow steps [3 and 4](#), or [5](#) in "[Scenario 1 The RDX Dock is seen but the media will not eject](#)".

It could also look as shown in Figure 5 with the yellow exclamation mark next to the USB Mass Storage Device.



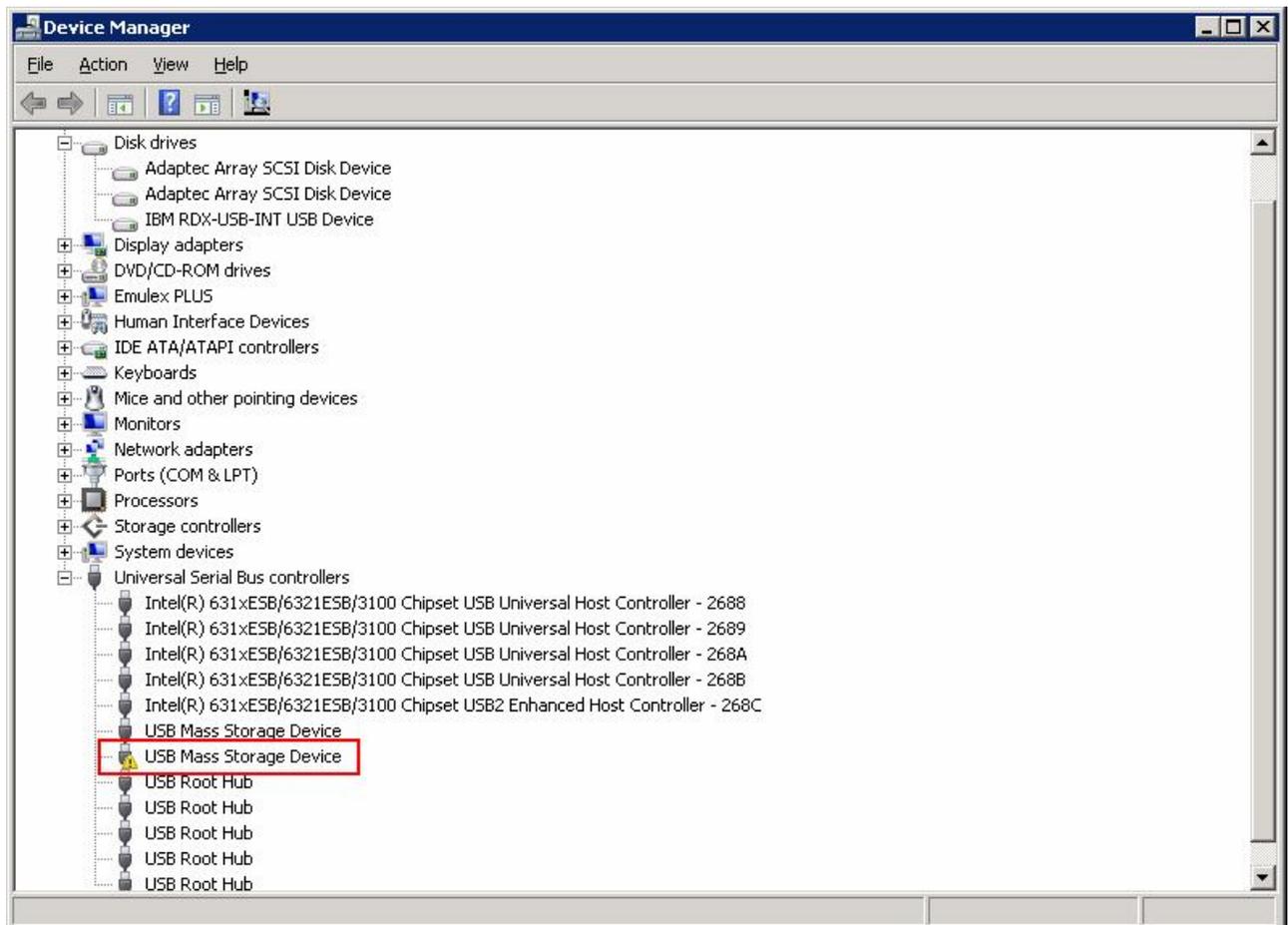


Figure 5 – Windows Device Manager shows a yellow ! against the drive

WARNING!

NOTE: The Cartridge LED must not be flashing when attempting to eject the cartridge. As noted [above](#) it is busy either reading, writing or seeking. Wait for the cartridge LED to stay steady green for 1 minute before attempting to eject the data cartridge.

1. If the USB Mass Storage Device has the yellow exclamation mark then this will be easy to resolve, and no parts nor an SSR will need to go on site
2. If it looks [Figure 5](#) do the following:
 - Depress and hold the eject button on the RDX dock for 15 - 20 seconds. At about 15 seconds the eject button should flash 4 times, at that point you can release the button, any media that was in the dock should now be ejected. The RDX Dock should now be seen in Windows.

Deciphering the LED on the RDX Dock, and the RDX Data Cartridge

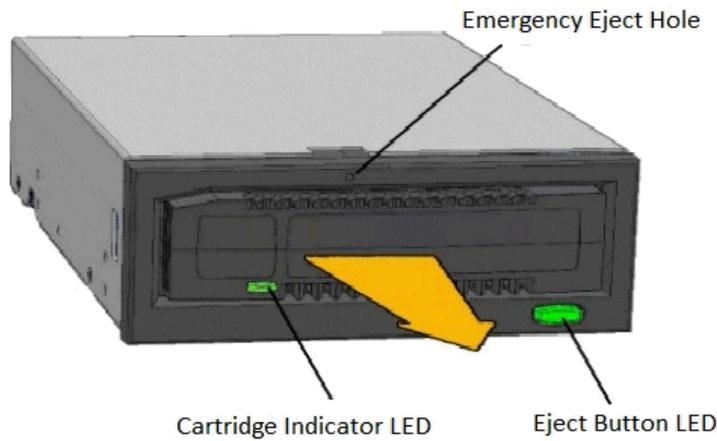


Figure 6 - Front view RDX drive / bay

LED Status	Meaning	RDX Drive Status
Off	No Power	The drive does not have power
Steady Green	Ready	The power is on and the drive is working
Flashing Green	Ejecting	The cartridge is ejecting
Steady Amber	Fault	The drive has detected a fault condition. For more information, run a diagnostic application (see software documentation included with drive).
Flashing Amber	Prevent Eject	The eject button was pushed while the host server is accessing the media. After a few seconds, the LED will return to a steady green status and the cartridge will eject.

Table 1 - Reading the eject-button LED

LED Status	Meaning	RDX Cartridge Status
Off	No Power	The cartridge was not inserted properly, or the drive has no power.
Steady Green	Ready	The cartridge is ready.
Flashing Green	Activity	The cartridge is in the process of reading, writing or seeking.
Steady Amber	Fault	The drive has detected a cartridge-fault condition. For more information, run a diagnostic application (see the software documentation included with the drive).

Table 2 - Reading the cartridge-indicator LED

