Program – Computer running slow

Symptoms:

The computer is running slow and may have problems with the audio stuttering over the air. Operations on the PC seem to take longer than usual.

Solutions:

The following section is to assist in configuring Windows so that the Digilink-Xtreme will run in optimal conditions. It is important to understand that the On Air computer is meant only to be used as an On Air computer. The automation is only as reliable as the computer is, and it is imperative to keep the On Air computer as clean and efficient as possible. It is recommended to follow these steps every 3 months to insure that everything remains proper. Some steps may be omitted because they are not applicable to your computer.

The following instructions are critical to the performance of your machine, and should be followed exactly:

1) PC Requirements / Recommendations
> For the Digilink-Xtreme to run optimally, certain specifications are required for the PC. If you chose to not meet these specifications, you will likely have problems. These requirements are:
> (A) Windows 7 Professional
> (B) RS232 port (it is an option to use an RS232 to USB adapter if necessary, but we recommend having an RS232 port built in to the computer if possible)
> (C) At least 2GB of RAM (more RAM the better)
> (D) At least 80GB of Hard drive space (250GB will be more than enough for most stations)
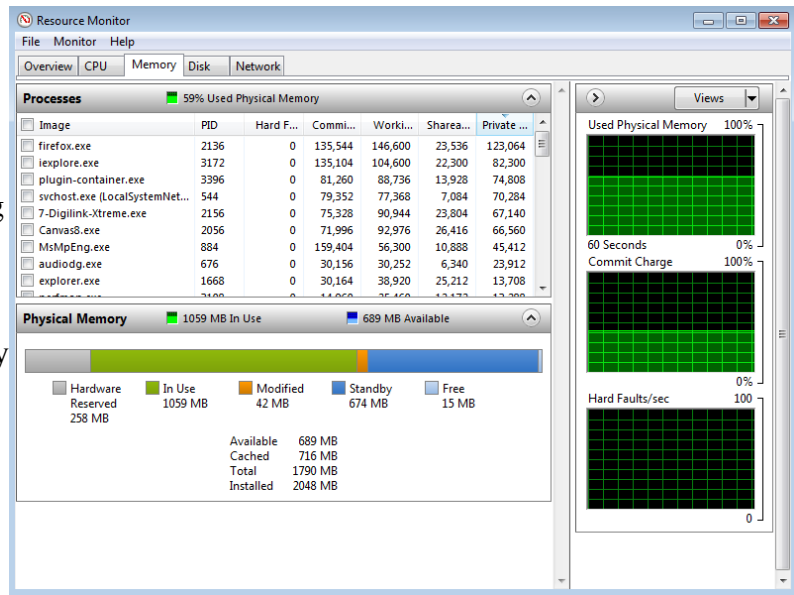
2) DO NOT INSTALL SOFTWARE ONTO THE ON AIR COMPUTER
It is very common for users to install various types of software onto the On Air computer. It is a fact, the more software installed onto a computer, the more problems will occur. Do NOT install software onto the On Air computer without explicit permission from the instruction manual or Arrakis customer support personnel.
Programs will often run in the background, even if you think that only the Digilink-Xtreme software is running. To illustrate how much is really running in the background:
> 1) press **Ctrl**, **Alt** and **Del** on your keyboard at the same time. Select **Start Task Manager**. This will bring up the Task Manager
> 2) select the **Performance** tab and click on the **Resource Monitor** button

3) on the **Resource Monitor** screen there is the **Processes** screen. This screen will display all the actual programs and operations that are running in the background. The number of processes running should be around **30**, any more than this may mean that there are too many programs running for the automation run reliably. On the bottom is the **Physical Memory** screen. This will list the amount of **RAM** that is being used and how much is available still. You should have only **200** to **300MB** of RAM **In Use**. Any more than this range and you are at risk of audio skips or other serious problems.
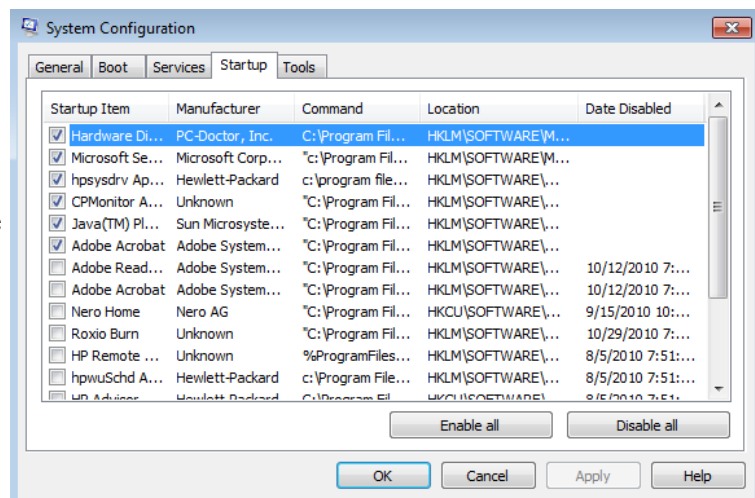
Oftentimes, brand new computers will come with software already installed on it, and will conflict with the Digilink-Xtreme. For those situations, follow these steps:

1) check the number of processes and physical memory in the task manager. If the numbers are higher than recommended, you may need to uninstall software
2) click on the **Windows** icon and open **Control Panel**
3) in the Search box, type in **Add or Remove Programs**
4) open **Add or Remove Programs**
5) go through this list and find programs that you are certain you will not use. Do not delete programs unless you know exactly what it does and only if it is not critical to your computer

Another way to prevent programs from running in the background is to not let it startup when the computer is booted. To do this:

1) click on **Windows** icon
2) in the Search box, type in **msconfig.exe**
3) open **msconfig.exe**
4) click on the **Startup** tab
5) go through this list and make sure that no unnecessary programs are selected to startup. Typically programs that are contained in the Windows folder are necessary, while programs contained in the Program Files folder are not necessary to have checked
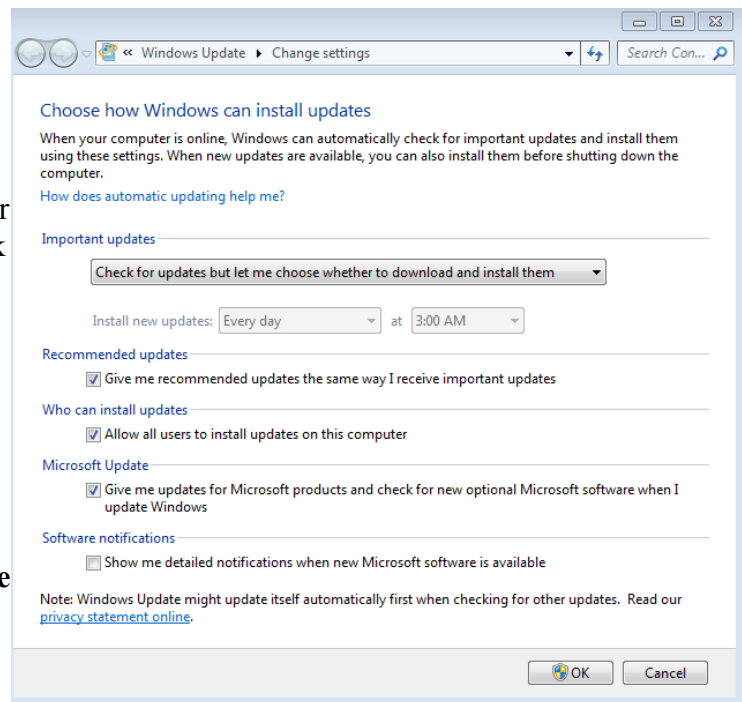
3) Adjust for best performance

By doing this you will use less Ram for visual effects. The computer may not be as pretty but this will increase the performance of your computer's processing. To do this:

1) click on **Windows** icon
2) in the Search box type in **View advanced system settings** and select
3) under **Performance** click on the **Settings** button
4) then select **Adjust for best performance**

4) Turn off Automatic Updates

If you have Automatic Updates turned on, it will run in the background and may install the new updates while you are on the air, which may cause audio glitches. It is important to turn off Automatic Updates and to do the updates when it won't interrupt your On Air computer. It is recommended to check for Windows Updates once a month and install them when the Xtreme isn't running on the air. To turn off Windows Automatic Updates you:

1) click on the **Windows** icon
2) in the search box type in **Turn automatic updating on or off**
3) under **Important updates**, select **Check for updates but let me choose whether to download and install them.** You may then chose a proper time to download and install updates to the PC at a time that the Xtreme can be turned off

5) Anti-Virus Software

Do NOT use any unapproved anti-virus software on the On Air computer. There is only one anti-virus program that we recommend using, called Microsoft Security Essentials. This software can be found at this link: http://www.microsoft.com/security_essentials/ or by searching for Microsoft Security Essentials. Perform a scan on your computer once a week to once a month. Do these scans when you can take the On Air computer offline for 1-2 hours.

Some popular anti-virus software that will cause major problems, and should **NEVER be installed** is:
-AVG antivirus -MacAfee -Symantic Norton -Avast -Bit Defender -Microsoft Defender
-Panda Antivirus -Spybot Search & Destroy -CCleaner -Registry Cleaner

6) Remote Computer Access

Do NOT use any unapproved remote access software. We only recommend using GoToMyPC and can be found at www.gotomypc.com or Windows Remote Desktop
DO NOT USE the software LogMeIn. This software will cause your computer to crash. E-mail support@arrakis-systems.com for a current compliant list of remote access software.
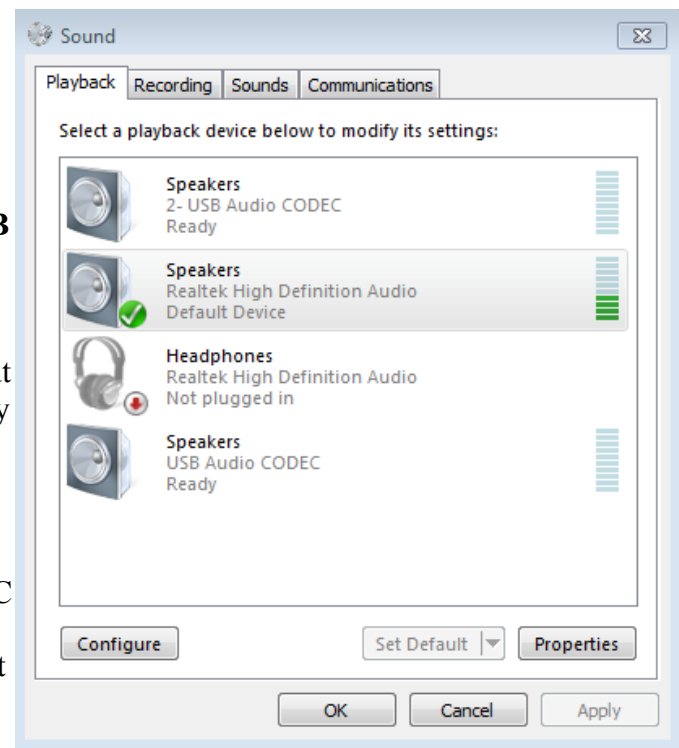
7) High Windows Priority

You will want to make the Digilink-Xtreme high in Windows priority list. To do this:
1) go into the **Digilink-Xtreme** software
2) click on **Menu** and click on **Setup**
3) there is a check mark box in toward the middle of this screen that says **High Windows Priority**. Check mark this box

8) Sound Card Assignments

It is essential that the PC is assigned to ONLY use the PC sound cards, not the USB sound cards found on the bridge. You will experience problems if the PC steals the USB sound cards. To check and change these settings:
1) click on the **Windows** icon
2) in the search box, type in: **Change sound card settings**
3) select **Sounds and Audio Devices**
4) click on the **Playback tab**
5) select your PC sound card and click on the **Set Default** button. <u>Do NOT</u> select the **USB Audio CODEC** or **2-USB Audio CODEC**. A green check mark should now be next to your PC sound card
6) plug in a dummy plug into the **Line In** input (blue input on back of PC). This may be any plug that has an 1/8" connection, such as headphones. This dummy plug is to never come out from the input
7) click on the **Recording** tab, and now do the same thing as in step 5 for selecting your PC sound card for recording
8) once these are set, press the button **Apply** at the bottom right of this screen
9) check that both **Playback** and **Recording** are set to the PC sound card and then click **OK**

9) Power Options

It is imperative that your computer does not shut itself off or hibernate while on air. This may cause serious problems and must not be allowed to happen. To change the settings so it does not do this:
1) click on the **Windows** icon
2) search for: **Power** options
3) for the Power Schemes under Home/Office Desk, select Never for every option listed

10) Place Digilink-Xtreme in Startup

It is essential to setup the Xtreme to start every time the computer turns on. If for example the power goes out and comes back on, then the Xtreme will automatically load up and start the automation from where it should be according to the schedule. To set this up:
1) click on the **Windows** icon and highlight the All Programs option
2) then place your mouse cursor over **Startup**, right click on it and select **Open**. This will open the **Startup** folder
3) copy the **Xtreme shortcut** on the desktop and paste it in the **Startup** folder. This will cause the

Xtreme to start up every time the computer turns on. Make sure it is a shortcut, not the actual program
4) this will not work if the shortcut does not work, check that the shortcut on the desktop will start the program

11) FTP auto-update
The newest version of the Digilink-Xtreme 1.9.1 1-21-10, has the ability to automatically upload your latest unlock code from the internet. If you do not have internet connected to the computer or your internet connection is slow, then you will want to turn this option off. You can tell if your internet connection is too slow by an audio blip at :15, :30, :45 and :55 past the hour. To turn this off:
1) open the **Digilink-Xtreme** software
2) click on the **Menu** button
3) click on the **Setup** button
4) uncheck the **FTP auto-update** option. You will need to now get your codes manually