

## Optimizing Windows 7 for SDRuno

## 6/18/2017

Windows 7 by default is not optimized out of the box for performance. You have a plethora of options under the hood that allow you to change every aspect of Windows 7.

This guide will assist you in changing some of the Windows 7 settings for optimal SDR performance. **Only apply these changes if your comfortable doing so**. These changes are done in the Control Panel



SDRplay

Change the Control Panel display

G - 📴 + Control Panel + All Cont	trol Panel Items 🔸		<b>▼</b>	Search Control Panel
Adjust your computer's settings				View by: Large icons  Category
Action Center	Kan Administrative Tools	AutoPlay	Backup and Restore	Color I Small icons
👸 Credential Manager	Date and Time	💮 Default Programs	Desktop Gadgets	Device Manager
Devices and Printers	Display Display	Ease of Access Center	Folder Options	Fonts
Getting Started	🔏 HomeGroup	lndexing Options	Intel(R) Graphics and Media	Intel® PROSet/Wireless Tools
Internet Options	Keyboard	Lenovo - Power Controls	Location and Other Sensors	Mail (Microsoft Outlook 2016) (32-bit)
💣 Mouse	Network and Sharing Center	Notification Area Icons	Rarental Controls	Performance Information and Tools
Personalization	Phone and Modem	Power Options	Programs and Features	Recovery
Region and Language	RemoteApp and Desktop Connections	Sound	Speech Recognition	Sync Center
🙀 System	Taskbar and Start Menu	Troubleshooting	User Accounts	Windows Anytime Upgrade
Windows CardSpace	Windows Defender	Windows Firewall	Windows Mobility Center	Windows Update
1				

\* Click on the View by drop down as shown.
\* Select Large icons as shown.
\* Resize your Control Panel window to show the full set of Control Panel Icon.

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Action Center

Control Panel +	All Control Panel Items + Action Center	<ul> <li>✓ </li> <li>✓ Search Control Panel</li> </ul>
Control Panel Home Change Action Center settings	Review recent messages and resolve problems No issues have been detected by Action Center.	Θ
Change User Account Control settings View archived messages	Security 💿	
View performance information	Maintenance 📀	
	If you don't see your problem listed, try one of these:	
	Troubleshooting Find and fix problems Recovery Rectore your computer to an earlier time	
See also		
Backup and Restore		
Windows Update		
Windows Program Compatibility Troubleshooter		

- \* Click on the Action Center icon.
  \* Select Change Action Center settings.
  \* Uncheck all the options as shown.

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Change how Windows Update is run and what is installed.

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🚱 🌍 – 🏲 🕨 Control Panel 🕨 All Control Panel Items 🕨 Actio	n Center 🔸 Change Action Center settings		<b>▼</b> 4 <sub>7</sub>	Search Control Panel	P
	Turn messages on or off For each selected item, Windows will check for proble How does Action Center check for problems? Security messages	ms and send you a message if problems are found.			
	Network firewall	Virus protection			
	Maintenance messages Windows Backup Windows Troubleshooting Related settings	Check for updates			
	Customer Experience Improvement Program settir	ngs			
	Problem reporting settings Windows Update settings				
		OK Cancel			

\* After finishing the first step click Change Action Center settings again.
\* Click on Windows Update settings.
\* Change your Windows Update setting as shown

				×
🕞 💮 🗸 🖉 🕨 Control Panel 🕨 All Control Panel Items 🛚	Windows Update      Change settings	• \$ <del>'</del>	Search Control Panel	Q
	Choose how Windows can install updates When your computer is online, Windows can automatically check for important updates and install them using these settings. When new updates are available, you can also install them before shutting down the computer. How does automatic updating help me? Important updates Never check for updates (not recommended) Install new updates: Every day v at 300 AM v Install new updates: Every day v at 300 AM v Recommended updates Who can install updates Note: Windows Update might update itself automatically first when checking for other updates. Read our privacy statement online.			
	OK Cancel			

\* Click OK and click Control Panel Home on the top left. Administrative Tools.



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Control Pa	anel 🔸 All Control Panel Items 🔸 Administrative	Tools			✓ 4 Search Administrative 1	"ools	٩
Organize 🔻 Burn					8=	· • 🗍	0
☆ Favorites	Name	Date modified	Туре	Size			
🧮 Desktop	Component Services	7/14/2009 12:57 AM	Shortcut	2 KB			
\rm Downloads	🛃 Computer Management	7/14/2009 12:54 AM	Shortcut	2 KB			
🔛 Recent Places	Data Sources (ODBC)	7/14/2009 12:53 AM	Shortcut	2 KB			
	🛃 Event Viewer	7/14/2009 12:54 AM	Shortcut	2 KB			
📷 Libraries	😥 iSCSI Initiator	7/14/2009 12:54 AM	Shortcut	2 KB			
Documents	🛃 Local Security Policy	4/15/2017 4:45 PM	Shortcut	2 KB			
J Music	Performance Monitor	7/14/2009 12:53 AM	Shortcut	2 KB			
E Pictures	😹 Print Management	4/15/2017 4:45 PM	Shortcut	2 KB			
Videos	Services	7/14/2009 12:54 AM	Shortcut	2 KB			
	🛃 System Configuration	7/14/2009 12:53 AM	Shortcut	2 KB			
🜏 Homegroup	🔝 Task Scheduler	7/14/2009 12:54 AM	Shortcut	2 KB			
	🔗 Windows Firewall with Advanced Security	7/14/2009 12:54 AM	Shortcut	2 KB			
👰 Computer	📧 Windows Memory Diagnostic	7/14/2009 12:53 AM	Shortcut	2 KB			
🏭 SDrplay (C:)	😹 Windows PowerShell Modules	7/14/2009 1:32 AM	Shortcut	3 KB			
👝 Master Backup 12-28							
👊 Network							
-1							
14 items							

\* Please note that the advice given here is to stop startup tasks from running at startup or as certain times of the day. Please google each entry before you delete them.

🔿 🔿 - 🔯 🕨 Control Pa	inel 🕨 All Control Panel Items 🕨 Administrat	ve Tools -	Search Administrative	Tools P
Organize 👻 💽 Open	Burn	· · · · · · · · · · · · · · · · · · ·	1	= <b>- - 0</b>
Favorites	Name  Component Services Com	Date modified Type Size 7/14/2009 12:57 AM Shortcut 2 KB		
Libraries	Boats     File     Action     View     Help       Boats     Strain     Strain     Strain     Strain       Boats     Strain     Strain     Strain     Strain			Actions
Music  Pictures Videos Homegroup  Computer SDrplay (C:)	<ul> <li>֎ Pert</li> <li>▷ Cask Scheduler Library</li> <li>֎ Pert</li> <li>A Sett</li> <li>A Sett</li> <li>A Sett</li> <li>A Sett</li> <li>Win</li> <li>Win</li> <li>Win</li> </ul>	reame satus ingges restruun ilme Lastruun nesuit Author Createa		Task Scheduler Library <ul> <li>Task</li></ul>
🕞 Master Backup 12-28				View   G. Refresh  Help
Task Scheduler Shortcut	Date mod			

\* Double click Task Scheduler.

\* Select Task Scheduler Library and decide if you want task taking place in the background. You can choose the task and delete it from the right Action menu. Click the top right red X for both windows when finished.

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**Device Manager** 



\* Expand Universal Serial Bus controllers as shown.



\* Double click each Generic USB Hub in the drop menu.

\* Select the Power Management tab and uncheck "Allow the computer to turn of the device to save power".

- \* Do this for each Generic USB Hub in the list.
- \* Reboot your machine .
- \* Go back into your Control Panel after the machine restarts.



## Display



\* Select "Smaller – 100% (default) as shown.

\* Select "Set custom text size (DPI) as shown and leave it at the default value of 100%. Click OK.

			_ <b>–</b> X
🚱 💮 🗕 🖳 k Control Panel 🕨	All Control Panel Items      Display	👻 🍫 Search Control Panel	٩
Control Panel Home Adjust resolution	Make it easier to read what's on your screen You can change the size of text and other items on your screen by choosing one of these options. To temporarily enlarge just part of the screen, use the <u>Magnifier</u> tool.		Ø
Change display settings Connect to a projector	Smaller - 100% (default)     Preview		
Adjust ClearType text <u>Set custom text size (DPI)</u>	Medium - 125%		
	• Larger - 150%		
	Custom DPI Setting     23       For a custom DPI setting, select a percentage from the list, or drag the ruler with your mouse.     Apply       Scale to this percentage of normal size:     100% •       0     1     2       9 point Segoe UI at 96 pixels per inch.		
See also Personalization Devices and Printers	Use Windows XP style DPI scaling OK Cancel		

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## **Power Options**

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🚱 🕞 🗢 😼 🕨 Control Panel 🕨	All Control Panel Items   Power Options		▼ 47	Search Control Panel	٩
Control Panel Home	Select a power plan				0
Require a password on wakeup Choose what the power buttons do	Power plans can help you maximize your computer's performance or conserve ener selecting it, or choose a plan and customize it by changing its power settings. <u>Tell n plans</u>	gy. Make a plan active by the more about power	Ŋ		
Choose what closing the lid	Plans shown on the battery meter				
does	Balanced (recommended)	Change plan settings			
Create a power plan	Automatically balances performance with energy consumption on capable ha	ardware.			
Choose when to turn off the display	High performance	Change plan settings			
Change when the computer sleeps	Favors performance, but may use more energy.				
Power Manager	Hide additional plans	(	٢		
Battery Information	Maximum Battery Life	Change plan settings			
🜐 Buy a battery	💿 Maximum Performance	Change plan settings			
	<ul> <li>Power saver</li> <li>Saves energy by reducing your computer's performance where possible.</li> </ul>	Change plan settings			
	Power Source Optimized	Change plan settings			
	Timers off (Presentation)	Change plan settings			
	💿 Video Playback	Change plan settings			
See also					
Personalization					
Windows Mobility Center					
User Accounts					

- \* Select High performance as shown.\* Click Change plan settings next to High performance.

A A Control Danal & All Control Danal Barry	Rower Ontions . Edit Plan Setti	par		Search Control Panel	
Control Parlet   All Control Parlet Rents	Power options V Edit Plan Sett	1195		Search Control Pariet	~
	Change settings for the p	lan: High performance			
	Choose the sleep and display sett	ings that you want your comp	uter to use.		
		On battery	🛷 Plugged in		
	Turn off the display:	Never •	Never 🔹		
	Put the computer to sleep:	Never 🔻	Never		
	Change advanced power settings				
	Restore default settings for this pl	lan			
			Save changes Cancel		

- \* Select Never under each option (On battery & Plugged in)
  \* Click Save changes.
- \* Click Change plan settings next to High performance again. \* Click Change advanced power settings.



Power Options
Advanced settings
Select the power plan that you want to customize, and then choose settings that reflect how you want your computer to manage power.
High performance [Active]
<ul> <li>High performance         <ul> <li>Require a password on wakeup</li> <li>On battery: No</li> <li>Plugged in: No</li> <li>Hard disk</li> <li>Internet Explorer</li> <li>Desktop background settings</li> <li>Wireless Adapter Settings</li> <li>Sleep</li> <li>USB settings</li> <li>Interl(R) Graphics Settings</li> </ul> </li> </ul>
Restore plan defaults
OK Cancel Apply

\* Note that High performance is shown as the Active profile we are going to edit. The most important setting to change is USB selective suspend to Disabled. Please note my settings via these screen shots.

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Shown are important entries to consider changing.

Power Options		^
Advanced settings		
Select the power plan that you want to customize then choose settings that reflect how you want y computer to manage power.	e, and 'our	
High performance [Active]		
<ul> <li>High performance</li> <li>Require a password on wakeup</li> <li>On battery: No</li> <li>Plugged in: No</li> <li>Hard disk</li> <li>Turn off hard disk after</li> </ul>		
On battery: Never		
Internet Explorer		
Desktop background settings		Ŧ
Restore plan defa	ults	
OK Cancel	Ap	ply
Power Options	?	x
Power Options     Advanced settings	?	x
Power Options         Advanced settings         Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.	? and pur	×
<ul> <li>Power Options</li> <li>Advanced settings</li> <li>Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.</li> <li>High performance [Active]</li> </ul>	?	x
Power Options          Advanced settings         Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.         High performance [Active]         Sleep         Sleep after         On battery: Never	?	×
Advanced settings         Advanced settings         Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.         High performance [Active]         Sleep         Sleep after         On battery: Never         Plugged in: Never         On battery: Off         On battery: Off	? and our	×
<ul> <li>Power Options</li> <li>Advanced settings</li> <li>Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.</li> <li>High performance [Active]</li> <li>Sleep</li> <li>Sleep after</li> <li>On battery: Never</li> <li>Plugged in: Never</li> <li>Allow hybrid sleep</li> <li>On battery: Off</li> <li>Plugged in: Off</li> <li>Hibernate after</li> <li>On battery: Never</li> </ul>	? and our	
Advanced settings          Advanced settings         Select the power plan that you want to customize then choose settings that reflect how you want yo computer to manage power.         High performance [Active]         Sleep         Sleep after         On battery: Never         Plugged in: Never         Allow hybrid sleep         On battery: Off         Plugged in: Off         Hibernate after         On battery: Never         Plugged in: Never         On battery: Never         Plugged in: Off         Hibernate after         On battery: Never         Plugged in: Never         Plugged in: Never         On battery: Never         Plugged in: Never         Stepse	? and our	
Advanced settings         Advanced settings         Select the power plan that you want to customize then choose settings that reflect how you want you computer to manage power.         High performance [Active]         Sleep         Sleep after         On battery: Never         Plugged in: Never         Plugged in: Never         On battery: Off         Plugged in: Off         Hibernate after         On battery: Never         Plugged in: Never         Restore plan defau	? and our	









\* Reboot your machine .

\* Go back into your Control Panel after the machine restarts.

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SYSTEM



\* Click Advanced system settings on the left side. Your System Properties will now open.

System Properties	×
Computer Name Hard	ware Advanced System Protection Remote
Windows us on the netw	es the following information to identify your computer ork.
Computer description:	
	For example: "Kitchen Computer" or "Mary's Computer".
Full computer name:	Thinkpad
Workgroup:	WORKGROUP
To use a wizard to join Network ID.	a domain or workgroup, click Network ID
To rename this compu workgroup, click Chan	ter or change its domain or Change
	OK Cancel Apply

\* Go to the Remote Tab and uncheck "Allow Remote Assistance Connection to the computer".

\* Reboot your machine.