Intel® Wireless Display 2.0.27.0
2.0 Production Version ReadMe File

The Intel Wireless Display is enabled through the following Intel software components: Intel Wireless Display, Intel® HD Graphics 3000 Driver, Intel® PROSet/Wireless Driver and Intel® My WiFi Technology 2.0.

Intel Wireless Display 2.0 Production Version 64-bit and 32-bit Software Release Build version 2.0.27.0
Adapter Firmware for Intel Wireless Display 2.0 Production Version Release Build version 2.0.23.0

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Intel Wireless Display requires a compatible Intel-based laptop PC, a third party TV adapter featuring Intel Wireless Display, and a TV with an available HDMI or Composite AV input. Compatible laptop PCs require a select 2010 Intel® Core™ Processor Family CPU or a 2nd Generation Intel Core processor for the best experience. For a complete list of requirements, visit www.intel.com/go/wirelessdisplay. Content requiring output protection such as Blu-ray* and DVD movie playback is not supported. Check with your PC manufacturer for specific details. Other names and brands may be claimed as the property of others.

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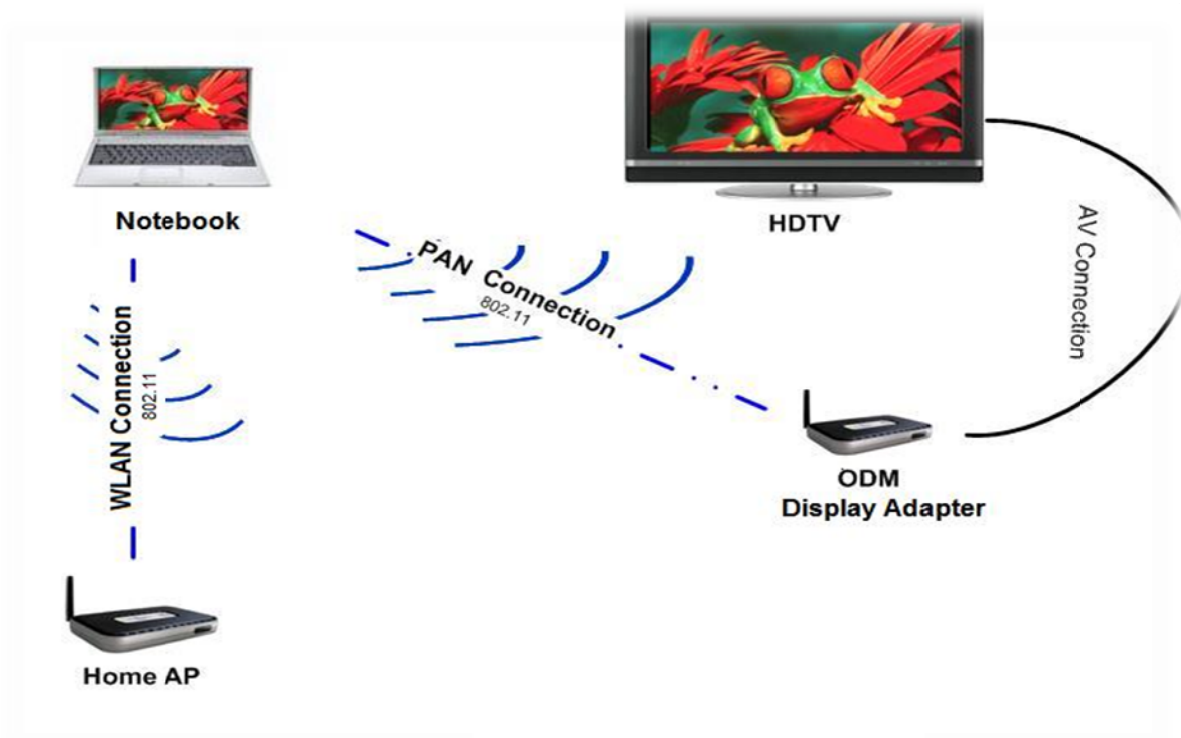# Contents

1. OVERVIEW

Intel® Wireless Display is a solution that enables a consumer to wirelessly project his or her notebook PC display to a TV across the living room. The experience is similar to a consumer connecting his or her Notebook PC to a TV via an HDMI cable.   Full desktop (including text, pictures, and video) are sent to the TV and audio is rendered in-sync with up to 1080p HD video. This is made possible through a display adapter that is connected to the TV via a standard HDMI connection. The display adapter wirelessly communicates over 802.11g/n with the notebook (PC) and receives its display information in a standard video format.

The usage model is simple: a user with a Wireless Display Technology-enabled laptop is in the same room as a TV (e.g., living room) with a wireless display adapter attached. The user selects the adapter as the source in the TV input selection, and initiates wireless connection from PC. The PC display and audio, if present, will be sent over the wireless connection. Though it is generally useful for desktop remoting, applications requiring very low latency interactions may not be usable.

The adapter setup (first time use) is secure & simple. At the first power on and connection attempt, the adapter displays a security code on the TV screen. The user enters this security code during the initial launch of the wireless display host software, thereby pairing the adapter and host.

2. SYSTEM REQUIREMENTS

1. Intel® Wireless Display 2.0 64-bit and 32-bit requires a mobile Personal Computer (PC) configured with one of the following Intel supported configurations:

Supported platform configurations
Intel® Core™[1] processor family: (SV and ULV)
- Intel Core i3 mobile processor
- Intel Core i5 mobile processor
- Intel Core i7 mobile processor

Mobile Graphics Controller
- Intel® HD Graphics 3000

Intel 6 Series Chipset
- Mobile Intel HM67 Chipset
- Mobile Intel HM65 Chipset
- Mobile Intel QM67 Chipset
- Mobile Intel QS67 Chipset

Intel Centrino®[2] processor technology (supported on 13.3 PV driver or later)
- Intel Centrino Ultimate-N 6300
- Intel Centrino Advanced-N + WiMAX 6250
- Intel Centrino Advanced-N 6200
- Intel Centrino Wireless-N 1000

Intel Centrino processor technology (supported on 14.0 PV driver or later)
- Intel Centrino Advanced-N 6230
- Intel Centrino Advanced-N + WiMAX 6150
- Intel Centrino Advanced-N 6205
- Intel Centrino Wireless-N 1030

2. The following operating systems are supported for this Intel® Wireless Display 2.0 release:

Supported Operating System
Windows* 7 Home Premium 64bit & 32-bit editions
Windows* 7 Ultimate 64bit & 32-bit editions
Windows* 7 Professional 64bit & 32-bit editions
Windows* 7 Home Basic 64bit & 32-bit editions

3. Intel Wireless Display requires the following software components to be installed and configured on one of the supported operating systems listed above:

Intel Wireless Display-compatible version of the Intel® HD Graphics 3000 Driver
Intel Wireless Display-compatible version of the Intel® PROSet/Wireless Driver and Intel My WiFi Technology software v13.3 (Production Version) , 14.0 (Production Version) or later versions
Intel Wireless Display software

***Note: Intel® HD Graphics Driver & the Intel PROSet/Wireless Driver and Intel My WiFi Technology software must be installed prior to installing Intel Wireless Display software to meet platform detection requirements in the Intel Wireless Display software.

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3. SUPPORTED LANGUAGES

- English (ENU)
- Arabic (ARA)
- Czech (CSY)
- Danish (DAN)
- Dutch (NLD)
- Finnish (FIN)
- French (FRA)
- German (DEU)
- Greek (ELL)
- Hebrew (HEB)
- Hungarian (HUN)
- Italian (ITA)
- Japanese (JPN)
- Korean (KOR)
- Norwegian (NOR)
- Polish (POL)
- Portuguese - Brazil (PTB)
- Portuguese -Portugal (PTG)
- Russian (RUS)
- Simplified Chinese (CHS)
- Spanish (ESP)
- Swedish (SVE)
- Thai (THA)
- Traditional Chinese (CHT)
- Turkish (TRK)

4. INSTALLING & CONFIGURING INTEL® WIRELESS DISPLAY SOFTWARE

General Installation Notes for Intel Wireless Display software and Firmware: Intel Wireless Display 2.0 Production Version release is a single-file based installer.

1. Exit all other programs before installing the Intel Wireless Display software.

2. Copy the Intel Wireless Display "Setup.exe" to an accessible drive. Navigate to the location of the setup.exe file and double click on the setup.exe file, to initiate the software install.

3. Click 'Next' to continue.

4. Read License Agreement and select "I accept the terms in the license agreement" and click 'Next' to continue.

5. Select 'Install' to start installing the Intel Wireless Display software.

6. Follow the installer prompts to complete the installation.

4.1 SOFTWARE COMMAND LINE INSTALLATION SWITCHES

Silent Installations:
>   Silent install mode is used to run the setup.exe silently in a non verbose mode using the following command line (setup.exe /S<space>/v/qn)

Installer Log:
>   Create an installation progress log file using the following command line /v"/log <filename>" (example>: setup.exe<space>/v"/log c:\setup_log.txt")

Desktop Shortcut:
>   Desktop Shortcut is used to enable or disable a desktop shortcut using the following command line options /v"WIDIAPP_DESKTOP_SHORTCUT=x"
>   (Examples>:
>   (setup.exe<space>/v"WIDIAPP_DESKTOP_SHORTCUT=1") to Enable
>   (setup.exe<space>/v"WIDIAPP_DESKTOP_SHORTCUT=0") to Disable

Help:
>   Help is used to display the supported command line options using the following command line (/v/help) (Example>: setup.exe /v/help)

Suppress Reboot prompt:
>   Suppress Reboot prompt is used to suppress prompts for rebooting using the following command line /v"REBOOTPROMPT=S"
>   (Example>: setup.exe<space>/v"REBOOTPROMPT=S")

4.2 UNINSTALLING WIRELESS DISPLAY SOFTWARE

NOTE: This procedure assumes the above installation process was successful. The uninstall procedure is specific to the version of the driver and application files included in this release package.

1. Click the start button then select the "Control Panel" icon, and then click on the "Programs and Features" icon.

2. Select Intel Wireless Display.

3. Click the "Uninstall" option button to uninstall the Intel Wireless Display

4. Reboot the system to complete the uninstall process.

5. ADAPTER DEVICE REQUIREMENTS

Intel® Wireless Display requires a third party TV adapter for Intel Wireless Display configured or updated with the corresponding adapter firmware for Intel Wireless Display firmware in this release.

5.1 INSTALLING ADAPTER FIRMWARE

Note: This firmware installation procedure is specific only to this release of Intel Wireless Display!

Step 1: Install Intel Wireless Display software release on the computer.

Step 2: Start Intel Wireless Display to establish a connection with the adapter to be updated.

Step 3: Shortly after a connection is established, a dialog box will appear informing you that there is a "Firmware Update" available. Select "Yes" to proceed to the Firmware Update page and click "Update"

Step 4: Follow the prompts to complete the update process

Step 5: Once the update process is complete and the adapter has rebooted you should close the Intel Wireless Display application and re-launch the Intel Wireless Display application to re-establish a connection to the updated adapter and start a new Intel Wireless Display sessions.

RELEASE NOTES SECTION

6. New Features

Features Added to this version of Intel® Wireless Display	
Reference No.	**Title / Description**
N/A	Unified 32/64-bit Software Installer, using single file
N/A	Up to 1080p (Full HD) with Intel® Quick Sync Video based H.264 encoding
N/A	802.11n PAN support: 2.4GHz and 5GHz bands
N/A	Intel Quick Sync Video based H.264 Video encoding
N/A	Interoperability with V1 Netgear adapters with first generation feature set (e.g., 720p & 2.4GHz)

6.1 Known Errata & Limitations

	Known Errata with Intel® Wireless Display	

Reference No.	Description	Affected Areas (Sub-Components)
1220 1196	In clone mode the Windows* cursor position is not updated on the TV when display is rotated to the following modes 90/180/270 degrees. **Workaround:** Don't use rotation.	Intel Wireless Display software
1173 1326	Windows cursor and Wireless Display fast cursor are visible at the same time on the TV for approximately 1 second. **Workaround:** None	Intel Wireless Display software
1141	When Media Center is used during a Wireless Display session, lowering the volume mutes the TV volume. **Workaround:** Un-mute the volume in Windows Media Center or in the audio mixer panel	Intel Wireless Display software
1336	In some instances the Intel Wireless Display User interface is not brought to the front of other applications windows. **Workaround:** Minimize the other application to see the Wireless Display User interface.	Intel Wireless Display software
632	Intel Wireless Display user interface shows status as "Connecting" and the adapter displays status as "Connected" permanently during a connect/disconnect scenario in which the User attempts to cancel during WiFi Protected Setup and clicks connect again. **Workaround:** Click the cancel button and wait ~40secs for adapter to return to the ready for connection state.	Intel Wireless Display software
1232	When more than one Media Player application is being used simultaneously all audio is being heard on the TV. **Workaround:** Use one media player at a time.	Intel Wireless Display software
1555	Multiple cursors are seen on TV when "Allow the pointer to change based on the context" option is checked under behavior tab. **Workaround**: This issue is observed when windows cursor themes are installed. Do not check this option when windows cursor themes are in use.	Intel Wireless Display software
1521	Wireless Display does not list any 1.x adapters with Host connected to 5GHz Access Point **Workaround**: This is expected behavior	Intel Wireless Display software
1695	Wireless Display Freezes when Bluetooth file transfer is initiated on systems incorporating **Workaround**: None	Intel PROSet/Wireless software
1552	Mouse pointers displayed on TV are not correct with 3rd party mouse pointer themes installed. **Workaround**: Refrain from using customized mouse pointer packages.	Intel Wireless Display Software
1745	Wireless mode 802.1 b causes streaming delay Initially and then the connection to the adapter is lost. **Workaround**: None. My WiFi Technology does not support 802.11 b on the WPAN network.	Intel My WiFi Technology

Known Errata with Intel® Wireless Display		
Reference No.	**Description**	**Affected Areas** (Sub-Components)
1773 1716	Wireless Display session is automatically closed without warning after changing the audio format from 16 bit 48000Hz to unsupported 24 bit 48000Hz. **Workaround:** None. Windows or Audio Driver not sending notification or sending incorrect notification	Windows 7
1826	While switching from clone mode to remote only mode video streaming stops with Quick Time player but audio streaming continues. **Workaround:** Restart the QuickTime player application.	QuickTime player application
1884	Wireless Display connection is lost when scanning for new Bluetooth devices. **Workaround:** Restart Wireless Display connection after Bluetooth device pairing is completed.	Intel PROSet/Wireless software
1969	The "Your video mode has changed to a resolution, color depth, or operating mode that cannot be displayed remotely" message is misleading. The option button to keep the current settings and close the connection only affects the display mode while the adapter is connected and since this option closes the connection this option really has no affect. **Workaround:** Close the Intel Wireless Display application before changing the local display settings to the desired settings.	Intel Wireless Display software
1723	The unsupported Audio mode message reports that the current sample size as 32 bits but the current sample size is not 32 bit. The Windows 7 API function is returning an incorrect sample size. **Workaround:** None	Windows 7

6.2 Known Issues

Reference No.	Description	Affected Areas (Sub-Components)	Date (Est. Fix)
	Known Issues in Intel® Wireless Display		
1577	Audio stutter/dropout observed with Windows Media Center picture slide show playback during streaming session **Workaround:** None	Intel Wireless Display software	2.0
884	Google Earth - Mouse Pointer - Hand symbol is not visible on TV screen. **Workaround:** None	Intel HD Graphics	TBD
1094	Multiple instances of the Intel Wireless Display Installer can be invoked. **Workaround:** Do not launch two instances of the installer	Intel Wireless Display software Installer	2.0
1122	Intel Wireless Display error message "Wrong security code" and TV displays PIN repetitively if there is a delay greater then ~90 seconds in entering the pin for pairing. **Workaround:** Disconnect from the adapter to return to the idle state and then re-connect and enter the PIN as soon as prompted.	Intel Wireless Display software	2.0
1120	In rare instances connection with adapter fails, the adapter screen prompts the user to enter the 4 pin security code the next time a connection is attempted. **Workaround:** Enter the PIN code as shown on TV and Pairing procedure is carried out with Adapter screen showing "Security Configuration Successful", followed by Desktop being shown on TV.	Intel Wireless Display software	2.0
1113	In some instances exclusive audio mode-related error message is displayed while trying to connect to an adapter. **Workaround:** Disconnect then reconnect and or close any application that could have exclusive audio mode.	Intel Wireless Display software	2.0
1115	Unable to select another adapter to enabled Auto Connect feature by using the right click menu function once an adapter is selected. **Workaround:** Use the Adapter properties setting to change the Auto Connection preferences.	Intel Wireless Display software	2.0
947	Adapter name change is not being seen on the first PC after a secondary PC changes the adapter name and first PC reconnects to the adapter. **Workaround:** Rescan on the first host before connecting again to the same adapter.	Intel Wireless Display software	2.0
1361	If the adapter name contains an underscore "_" in the name, it is not displayed on the TV screen. **Workaround:** Use Gen2 adapter with 2.0.15.0 firmware or later. No workaround for Gen1 adapter.	Adapter Firmware for Intel Wireless Display	2.0

Known Issues in Intel® Wireless Display

Reference No.	Description	Affected Areas (Sub-Components)	Date (Est. Fix)
1483	During active Wireless Display session, uninstalling Intel HD Graphics Driver causes Blue Screen or screen blanking on the host. **Workaround**: Disconnect Wireless Display session prior to uninstalling graphics driver.	Intel HD Graphics	TBD
1899	Intel Wireless Display flashes with some 1080p pictures and videos.	Intel HD Graphics	TBD
3543905	During Intel WiDi long haul stress test, the system may freeze or Blue Screen. **Workaround**: Do not perform long haul stress testing or use 13.3 PV WiFi driver for production WiFi cards 6300, 6250, 6200, 1000 Wireless LAN adapters.	Intel PROSet/Wireless software	14.x
1979	When switching to Extended mode from Duplicate mode using Windows Screen Resolution settings sometimes results in some corruption in the image on the TV. **Workaround:** Use Windows-key+P to change from Duplicate to Extended mode.	Intel Wireless Display software	2.1

6.3 Issues Resolved

Issues Resolved in Intel® Wireless Display		
Reference No.	Description	Release Resolved
1605	Video playback on host gets distorted on hardware encoding a 1080p video using MFX_transcoder	Intel HD Graphics
1713	User experiences BSOD after some time(around 2 hours) with MWG 14.0 driver	Intel PROSet/Wireless software
1731	Unsupported video mode message is not displayed when any unsupported resolution is selected.	Intel HD Graphics
1736	Unable to select the resolutions 1280*768, 1280*800 , 1366*768, 1400x900,1600x900 in all attempts	Intel HD Graphics
1737	Observed a pop up message requesting the user to close the application-Intel Services Manager, while uninstallation	Intel Wireless Display software
1766	TV image freezes after playing for a few minutes	Intel Wireless Display software
1768	Duplicate hotkey "R" in Application Properties dialog	Intel Wireless Display software
1769	error happens during upgrade - uninstall msi gets corrupted	Intel Wireless Display software
1795	WiDi App Issue error loop after cancel connect and reconnecting to WiDi.	Intel Wireless Display software
1814	WCM is not able connect with the adapter with Host connected to 5GHz NetGear AP	Intel PROSet/Wireless software
1820	LiveUpdate does not re launch upgrade once upgrade was canceled	Intel Wireless Display software
1825	Faq's for "How do I reset Application settings" and "How do I update Firmware" are same	Intel Wireless Display software
898	System will blue screen if the graphics driver is un-installed during an active Intel Wireless Display session.	Intel HD Graphics
1844	Work Shop: A/V drops during specific sections of Knowing Video	Intel Wireless Display software
1861	Workshop-Performance Test Case: PC restart with active session results WiDi reconnect in clone mode should be extended	Intel Wireless Display software
1873	When Adapter name is changed and user clicks 'resize TV picture button', it's not giving a pop up message to save the changes done	Intel Wireless Display software
1879	Resolution changes to 720p on clicking restore setting and resume connection button in 800x600p	Intel Wireless Display software
346	Intel Wireless Display software doesn't reflect the adapter availability status if you reboot the adapter while scanning for that paired adapter.	Intel Wireless Display software
330	Audio does not function through HDMI when audio setting changes are made to HDMI during an active session.	Intel Wireless Display software

Reference No.	Description	Release Resolved
	Issues Resolved in Intel® Wireless Display	
662	In some instances the TV image may not be properly centered when using the composite interface to connect to the TV.	Adapter Firmware for Intel Wireless Display
462	NTSC format 4.43 Variations on Composite interface is not supported. Only the 3.58 NTSC format is supported.	Adapter Firmware for Intel Wireless Display
420 430	Attempting to change audio settings in the Windows Audio Mixer during an active Wireless Display connection may result in Wireless Display disruption. Typically the connection will be momentarily dropped and re-established causing the TV screen to momentarily flicker.	Intel Wireless Display software
934	An error message is displayed when attempting to connect an adapter while DHCP is OFF.	Intel Wireless Display software
554	In some instances the initial scan will not detect all available adapters.	Intel Wireless Display software
886	Intel Wireless Display command line installation help message is not displayed if the wrong command line parameter is used when Wireless Display is already installed.	Intel Wireless Display software
469	Intel Wireless Display is streaming audio for unsupported format 24 bit 44.1K and 24 bit 48K.	Intel Wireless Display software
432	In rare instances the Adapter audio & video may freeze.	Adapter Firmware for Intel Wireless Display
1268	Windows cursor and Wireless Display fast cursor are visible at the same time on the TV for approximately 1 second.	Intel Wireless Display software
1697	When Media Center is used during a Wireless Display session, muting the volume mutes the TV volume.	Intel Wireless Display software
1947	E2E Latency regression	Intel Wireless Display software
1976	Audio output is lost	Intel Wireless Display software
1966	Adapter Screen Saver is getting stuck in the top right corner of the TV Screen and needs hard power reset	Intel Wireless Display software
1959	BSOD D3 found in Sys-Common Scenario Stress with IO & Disable Enable with IO & Sleep Stress with IO	Intel Wireless Display software
1956	WHQL BSOD 03B occurred in System-Disable Enable with IO	Intel Wireless Display software
1897	BSOD 0XD3 with WHQL System-Common Scenario Stress with IO Test	Intel Wireless Display software

Issues Resolved in Intel® Wireless Display		
Reference No.	Description	Release Resolved
3032499	After 5-20 min. video streaming during active Intel WiDi session, the adapter may disconnect with Intel My WiFi freeze.	Intel PROSet/Wireless software
3543333 3543863	Security PIN may need to be to be entered twice for WiDi adapter to be successfully connected.	Intel PROSet/Wireless software
3271226	Connecting to an access point during an active Intel WiDi session may cause a system freeze or blue screen.	Intel PROSet/Wireless software
3032626	Low Transmit throughput on WPAN Side using 802.11n on 20MHz channel.	Intel PROSet/Wireless software
1516	Error window pops up on trying to connect to adapter after changing Intel WiDi display to unsupported resolution in extended mode	Intel Wireless Display software

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