

# ScreenBeam Mini Wireless Display Receiver

Model#: SBWD50A

## User Manual

V1.0

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# Chapter One. Getting Started

## Introduction

Congratulations on your purchase of Actiontec's ScreenBeam Mini Wireless Display Receiver (hereinafter refer to as "the Receiver").

The Receiver lets you wirelessly streams what's on your Intel WiDi or Miracast™ compatible device to your HDTV, including movies, videos, photos, music, and more. The Receiver frees your eyes from a tiny screen.

The Receiver boasts some great features, including fast setup, smooth video playback, full 1080p HD support, ultra-low delay, Windows 8.1 optimization, versatile compatibility, low power consumption, and more.

This user manual will take you through the procedures needed to install, connect to, operate, configure, and upgrade the Receiver, and also describe a few different possible scenarios about locating faults.

## Package Contents

Contents in the Receiver's package are listed below:

- ScreenBeam Mini Wireless Display Receiver (1)
- USB Cable (1)
- HDMI® Cable (1)
- AC Power Adapter
- Product documentation

## System Requirements

### Receiver

To install the Receiver, you must have the following items:

- A display device with one HDMI port (Type A) and one USB port (USB 2.0) available

### Compatible Devices

The Receiver connects with devices that run one of the following operating systems:

- 4th Gen Ultrabook with Intel WiDi 4.0 or higher
- Laptop or notebook with Intel WiDi 3.5 or higher
- Smartphone, tablet, or laptop running Windows 8.1 or higher
- Miracast™-enabled Android device

# Chapter Two. Installing the Receiver

This chapter explains how to connect the Receiver to an HDTV. Make sure you have all the contents from the Receiver's package available before starting.

## Connecting the Receiver to an HDTV

It is quite easy and fast to setup the Receiver. You can complete the connection in just one minute.

To connect the Receiver to an HDTV:

1. Get the **Receiver**, **USB cable**, and **HDMI cable** from the Receiver's package.
  2. Plug the male connector (smaller end) of the **USB cable** to the Receiver's micro USB port labeled "**Power**".
  3. Plug the Receiver into an available HDMI port on your HDTV.
  4. Plug the male connector (larger end) of the **USB cable** to a USB port on your HDTV.
- When Steps 1, 2, 3, and 4 are complete, the hardware should be connected as shown in the figure below:



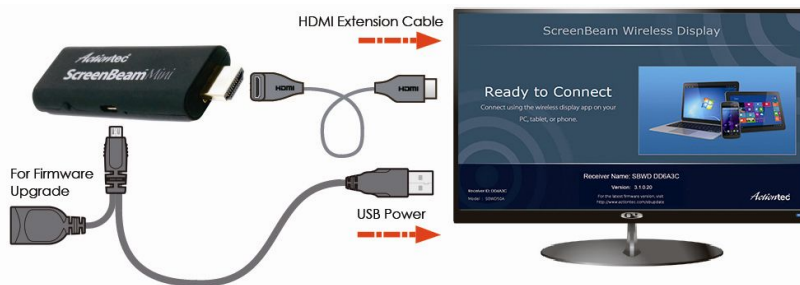
5. Turn on the HDTV and set it to display the input from the correct HDMI port (the one you have the Receiver plugged into in Step 3).
6. Verify that the "**Ready To Connect**" screen appears on the HDTV.



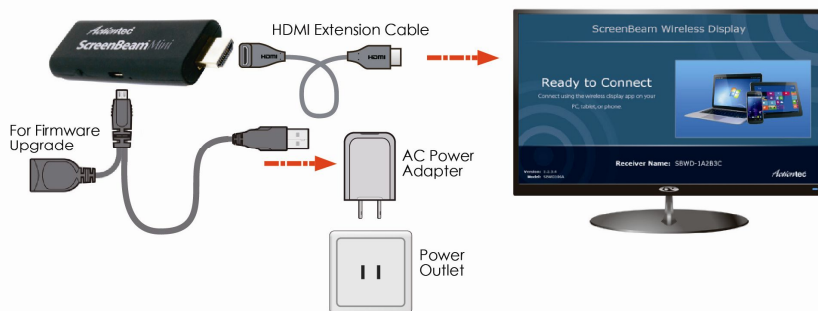
The Receiver is connected to the HDTV, and it is ready for use.

**Note:**

- If you cannot plug the Receiver into an HDMI port on your HDTV (due to component interference, or a poorly accessible port), use the supplied HDMI cable to connect the Receiver. The connection is shown in the figure below:



- If there is no available USB port on your HDTV, you can power the Receiver with an AC power adapter, as shown below:



# Chapter Three. Setting Up for the First Time

This chapter explains how to connect the Receiver for the first time to the source device. There are three source device options: Intel WiDi, Windows 8.1+, and Miracast™.

**Note:** The Receiver works in the 2.4 GHz wireless band only. Make sure your device is not connected to a 5 GHz access point (AP) prior to connecting to the Receiver.

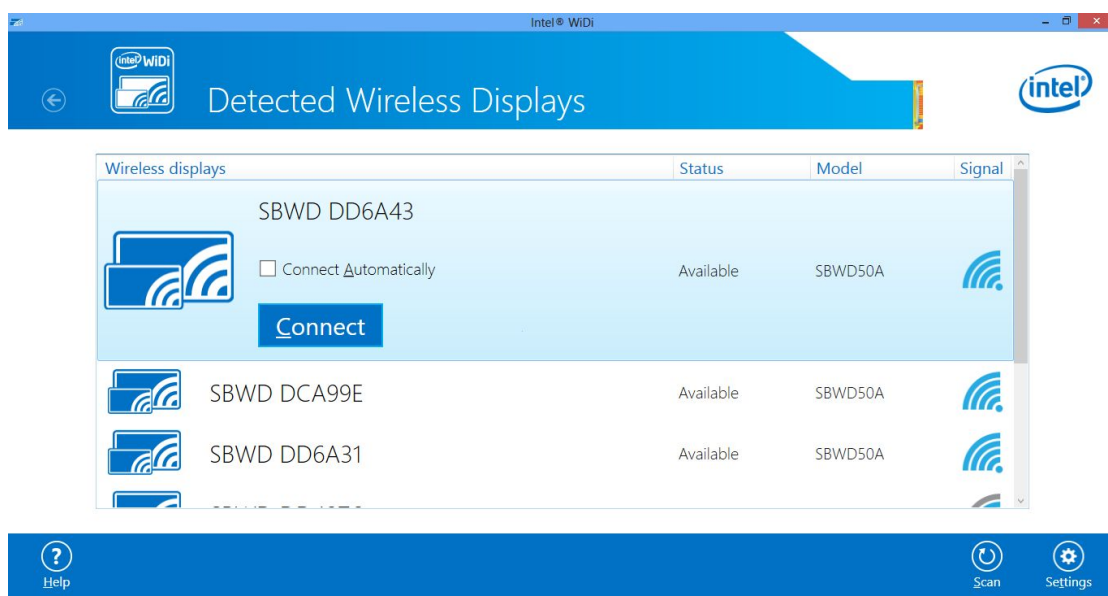
## Connecting via Intel WiDi App

This section explains how to connect a device running Intel's WiDi application to the Receiver.

**Note:** If the device's operating system is Windows 8.1 or higher, go to the next section in this manual ("**Connecting via Windows 8.1+**") for connection instructions.

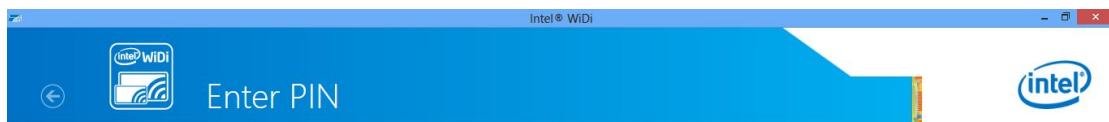
Follow the procedure below to connect your device to the Receiver:

1. Launch the **Intel Wireless Display Application** on the device. To find the application, go to **Windows Search** on the device and search for "**Intel WiDi.**"
2. The Intel WiDi application scans for available receivers automatically. Select the same receiver name as seen on the HDTV and click **Connect**. (The "**Connect Automatically**" checkbox is optional.)



**Note:** If your receiver is found, you can click the **Scan** button to scan again.

- Wait until the Receiver displays a PIN on the HDTV, and a PIN entry box is displayed on the screen of the WiDi device. Enter the PIN in the PIN entry box on the WiDi device, and then click **Continue**.



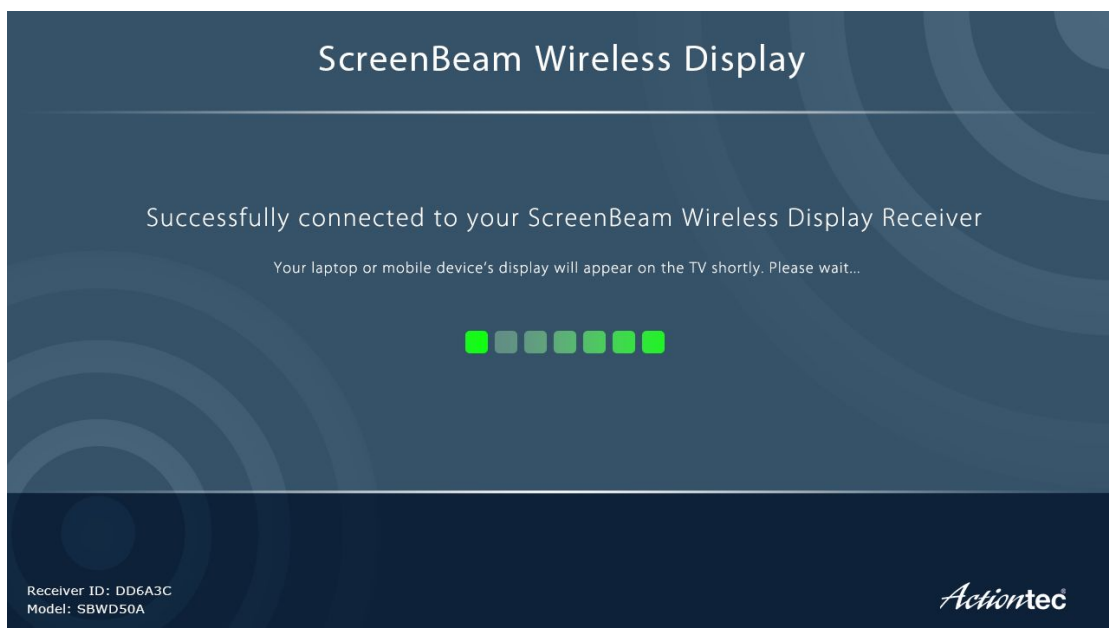
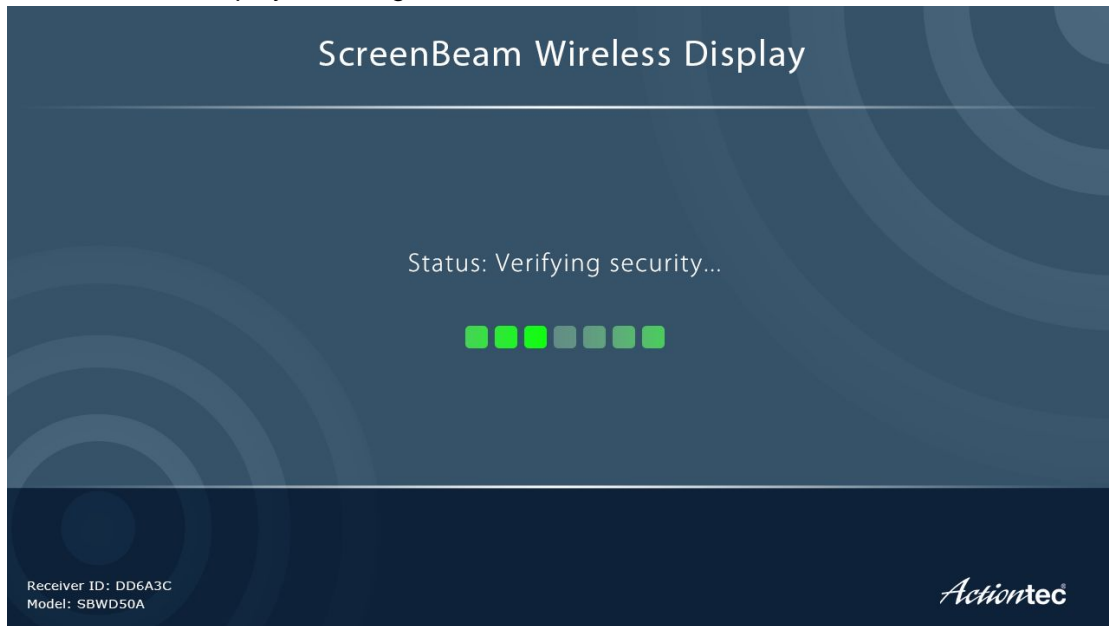
To finalize the connection please enter the PIN code from your Wireless Display.

14478703

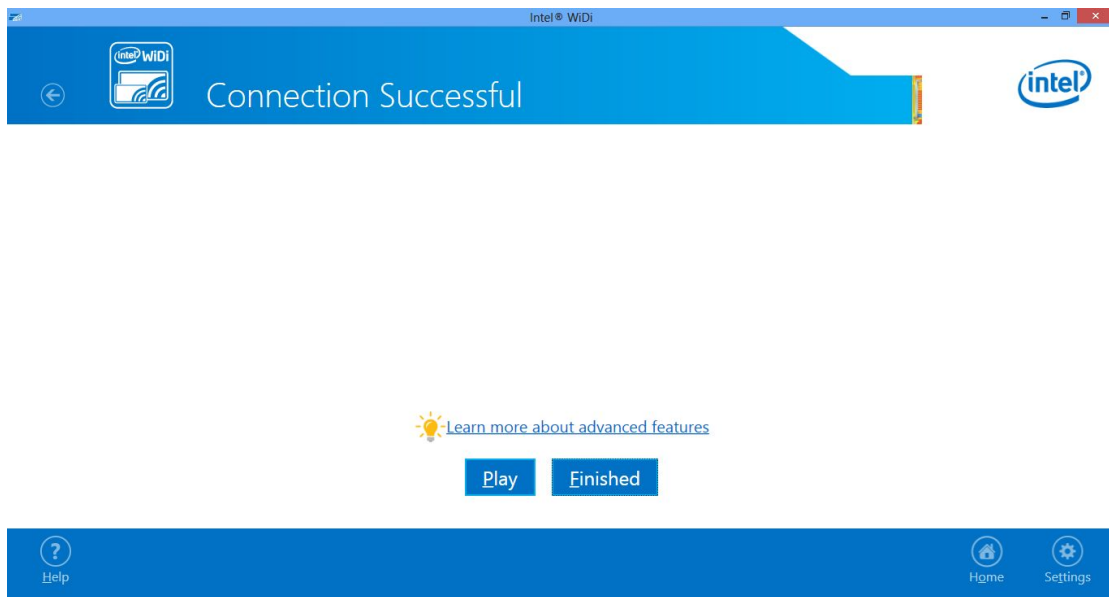




4. The HDTV displays messages to show the status of the connection.



5. A "**Connection Successful**" screen appears on the device's screen. Click **Finished**, and the device's screen is displayed on the HDTV.

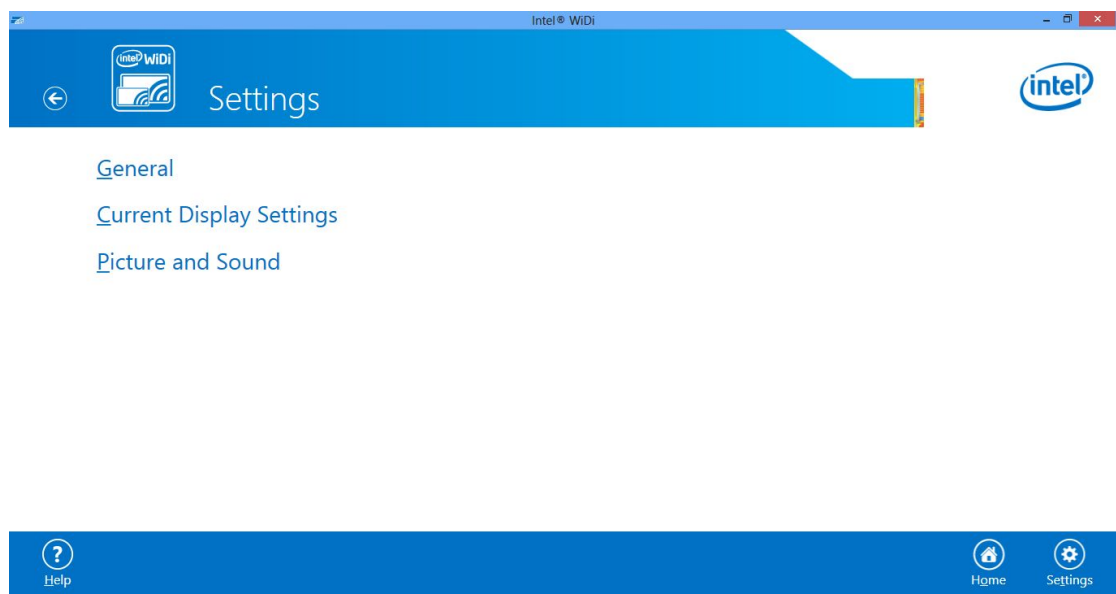


## Adjusting the HDTV Picture

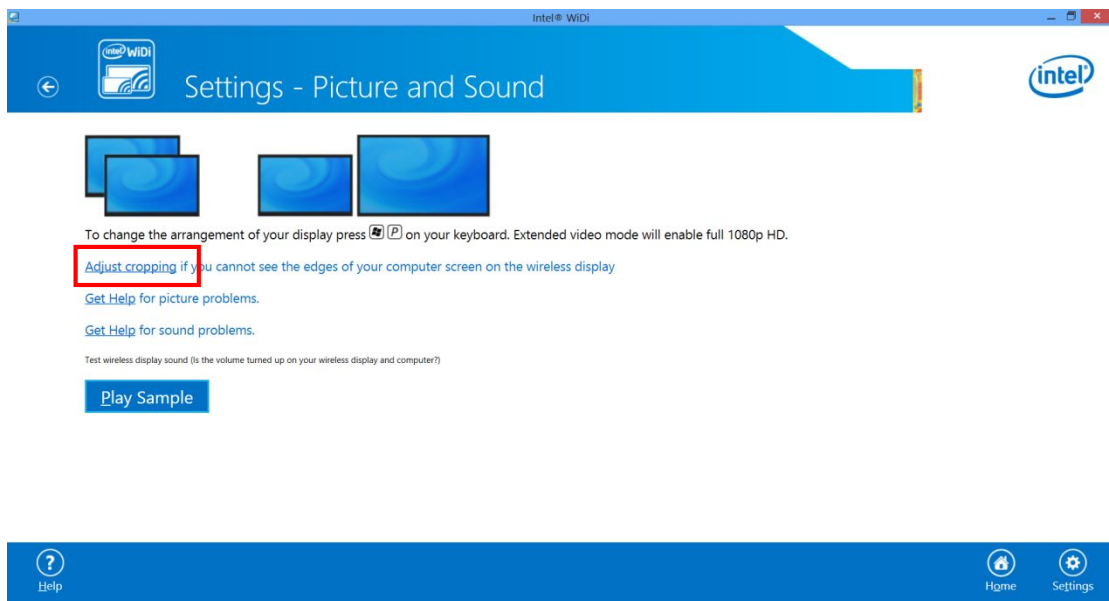
If edges of the device screen cannot be seen on the HDTV, you can adjust the cropping settings.

Follow the steps below to adjust cropping:

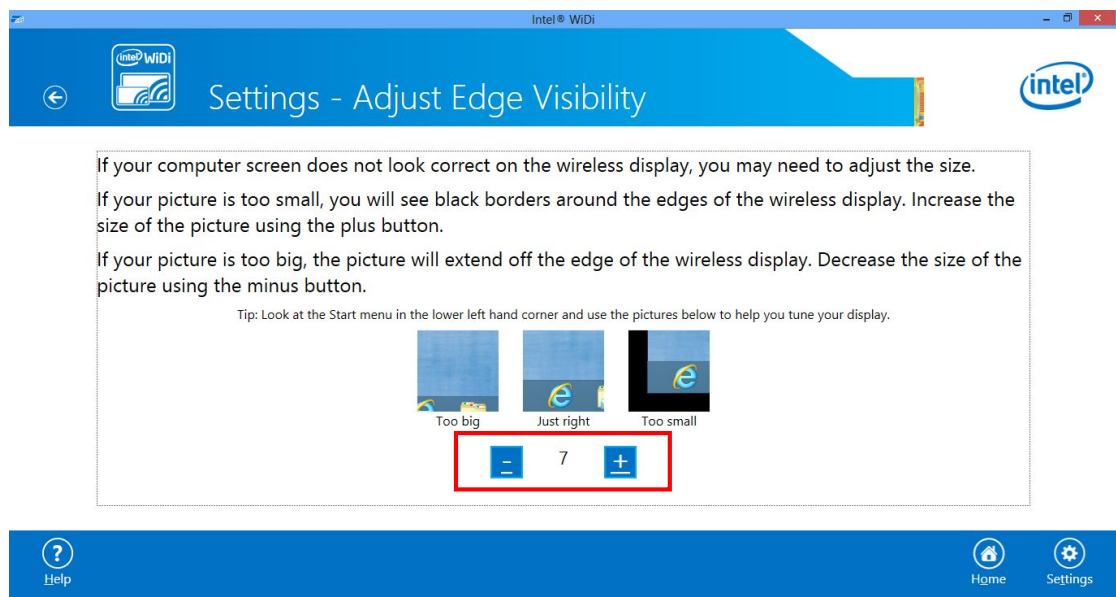
1. Go to the Intel WiDi application and click the **Settings** button to open the **Settings** page.



2. Go to the "Picture and Sound" section, and select "Adjust cropping".



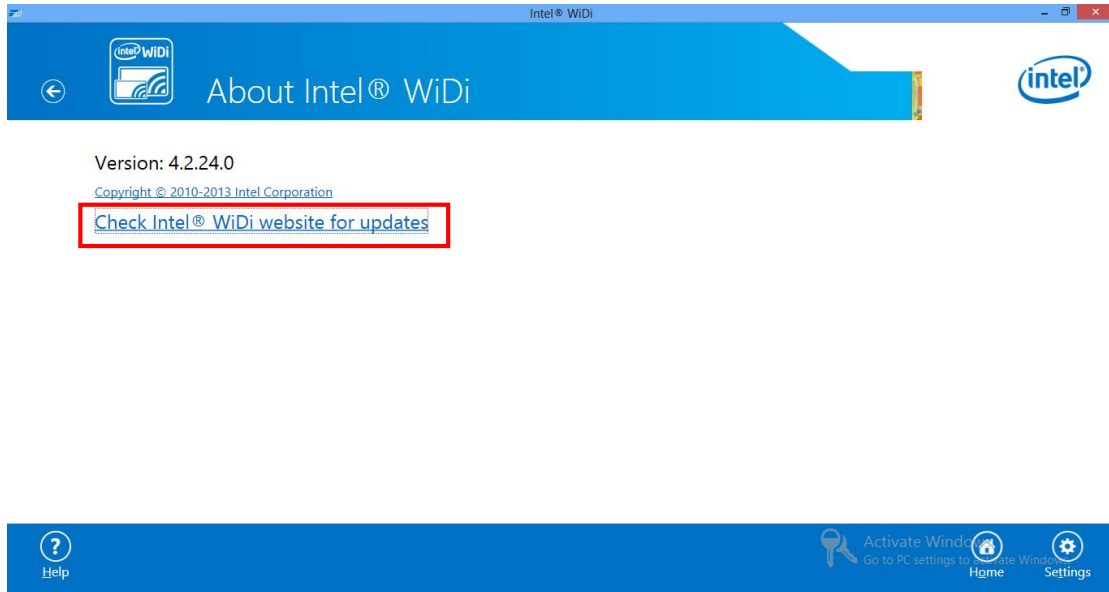
3. Adjust the HDTV picture by clicking "+" (plus) or "-" (minus).



## WiDi Software Version Support

Make sure the device supports Intel Wireless Display (WiDi) software version 3.5 or higher. To find out which version of Intel WiDi the device is running, launch the Intel WiDi application and click the **Help** button, and then navigate to the "**About Intel® WiDi**" section. To obtain the latest Intel WiDi software and drivers, go to:

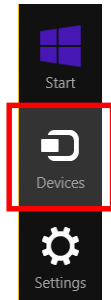
<http://www.intel.com/go/wirelessdisplayupdate>; or directly click the **Check Intel® WiDi website for updates** link on the page.



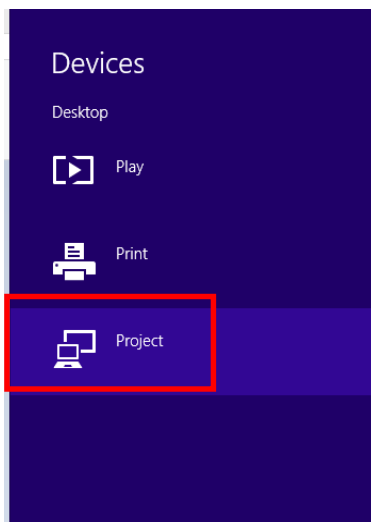
## Connecting via Windows 8.1+

This section explains how to connect a device running Windows 8.1 or higher to the Receiver.

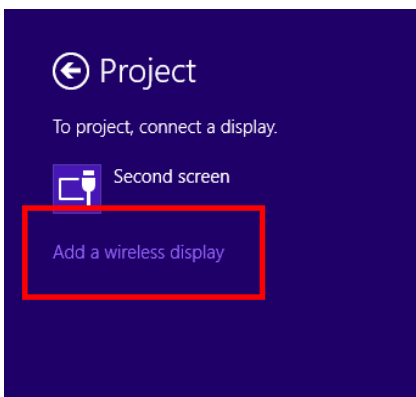
1. From the Windows desktop, go to the **Charms** menu and select **Devices** to open the **Devices** menu. You can also use the shortcut keys, **Windows** logo + **K**.



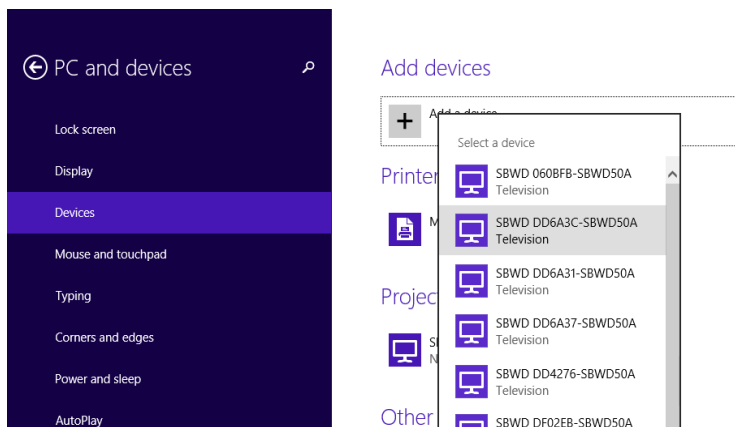
2. From the **Devices** menu, click **Project**.



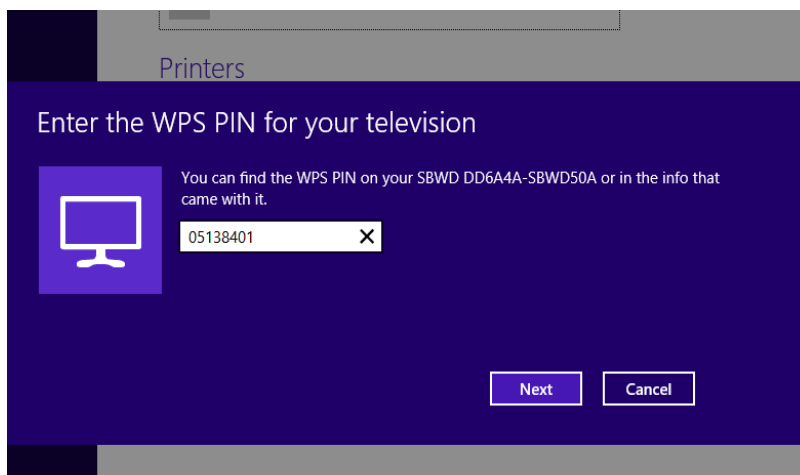
3. From the **Project** menu, select **Add a wireless display**. Windows will search for available devices.



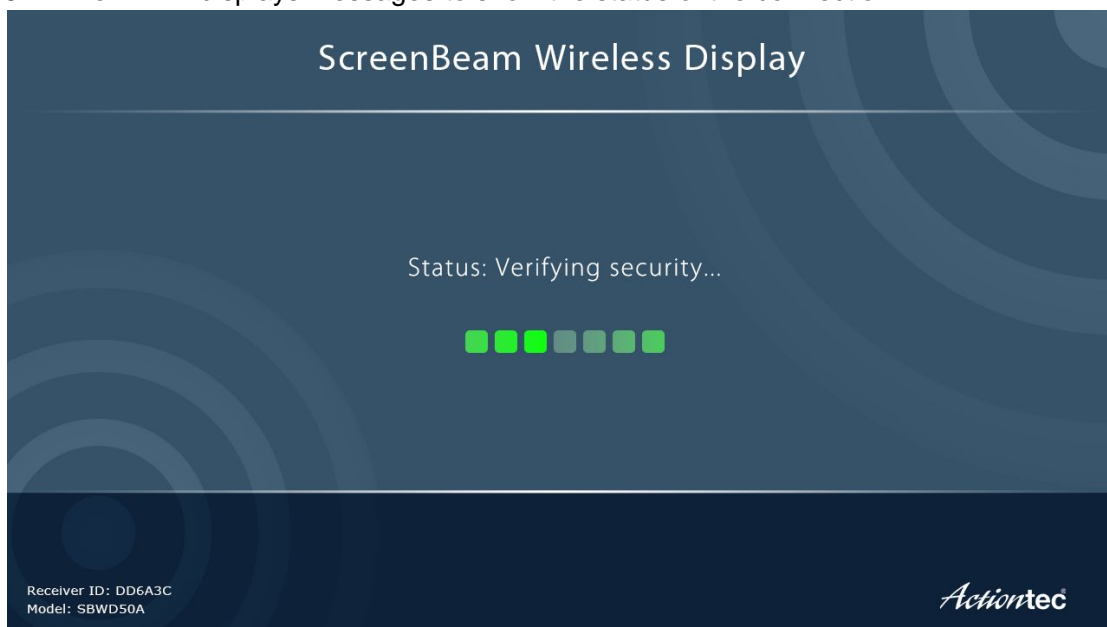
4. Select an appropriate Receiver from the device list.

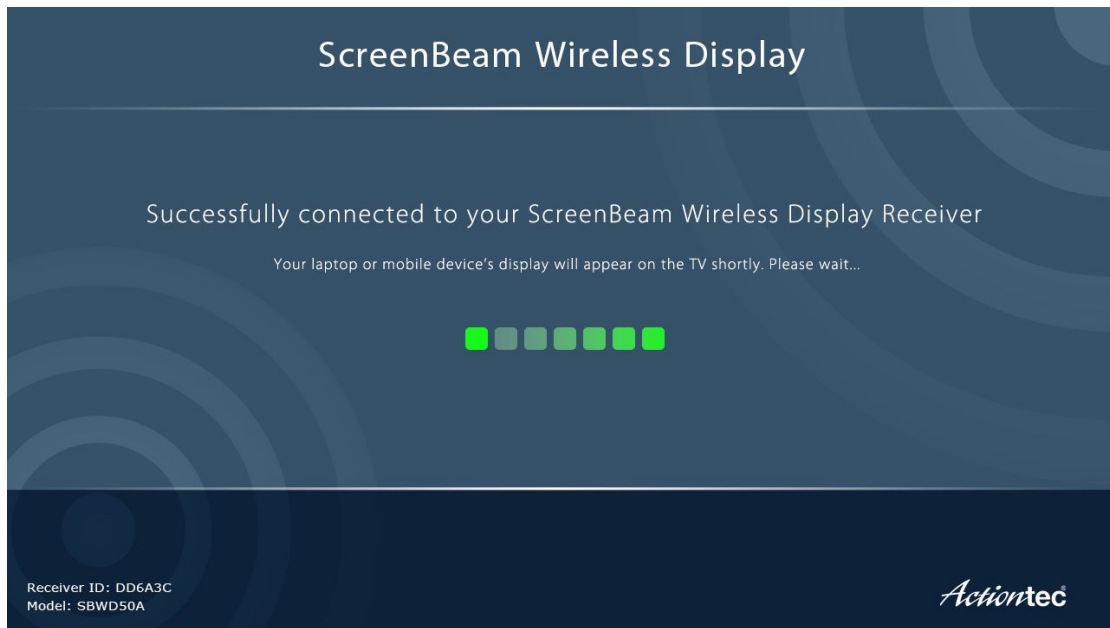


5. Enter the PIN code that is displayed on the television screen, and then click **Next** to continue.



6. The HDTV displays messages to show the status of the connection.





7. The device has connected to the Receiver. And the device's screen is displayed on the HDTV.

**Note:** If you are running Windows 8.1 and the screens above do not appear, go to <http://www.actiontec.com/widi81> for the latest software update. Or, you can update your Windows 8.1 via the **Windows Update** application.

## Connecting via Miracast™

This section explains how to connect a Miracast™-enabled Android device, such as a smartphone, a tablet, or a game console, to the Receiver. For the best performance, the Miracast™ device should be running the latest software.

1. On a Miracast™-enabled Android device, locate and open the Wireless Display Application (check for the application under “**Settings**”).

**Note:** The name of the Wireless Display Application depends on the device type and model. Refer to the device's user manual for more details.

2. The Wireless Display Application scans for available devices. Select the Receiver from the device list. You may be required to enter a PIN code, which is displayed on the HDTV screen.
3. Wait for the device to pair with the Receiver. When it does, the device's screen will be displayed on the HDTV.

## Tips for Optimal Performance

For optimal performance, you should keep these rules in mind:

- Keep the Receiver within line-of-sight of the source device. Doing this will help ensure the Receiver receives the best possible signal.
- The Receiver's optimal wireless range is within 15 feet of the source device. However, actual range and effectiveness depends on many factors, including other sources of interference and the building materials used in the surrounding structure.

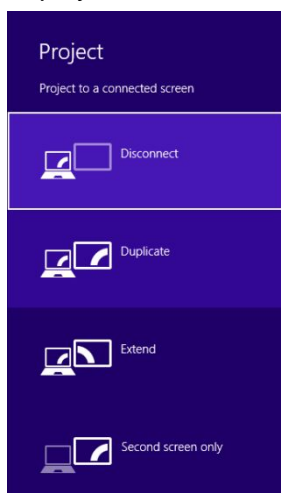


# Chapter Four. Display and Control Options

This chapter describes the various display modes and control options that are supported by the Receiver.

## Display Mode

The Receiver supports three display modes when connected with a compatible wireless display application (Intel WiDi or Windows 8.1 Project, for example). In Windows, press the **Windows** logo + **P** keys simultaneously to launch the display options and select the desired display mode from the options.



- **Duplicate**

The **Duplicate** mode is used to display the same content on both the device's screen and the HDTV simultaneously.

**Note:** There may be minor delay between the content displayed on the HDTV screen compared to the device's screen. This is due to the current state of wireless display technology.

- **Extend**

The **Extend** mode creates a single, extended "screen" between the source device and the HDTV. When in Extend mode, dragging windows to the right side of the device's screen displays those windows on the HDTV, while dragging windows to the left of the HDTV screen displays them back on the device's screen. This mode allows users to display selected content on the HDTV, while all other windows remain on the device's screen. When this mode is first selected, the HDTV displays only the Windows desktop.

- **Second Screen Only**

The **Second Screen Only** mode causes the HDTV to be the only display for the device. You'll see everything on the connected screen, and your device's screen will be blank.

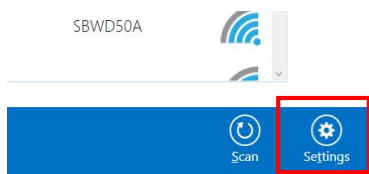
## Ultra-Low Delay

The Receiver also supports Ultra-Low Delay mode, which helps reduce end-to-end wireless display latency. Real-time applications, such as games, can run without noticeable delay when Ultra-Low Delay mode is enabled on supported devices.

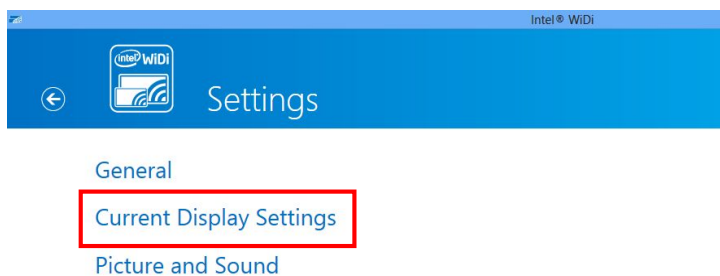
## Intel WiDi 3.5 and higher

To activate Ultra-Low Delay on a device running Intel WiDi 3.5 or higher, follow the steps below:

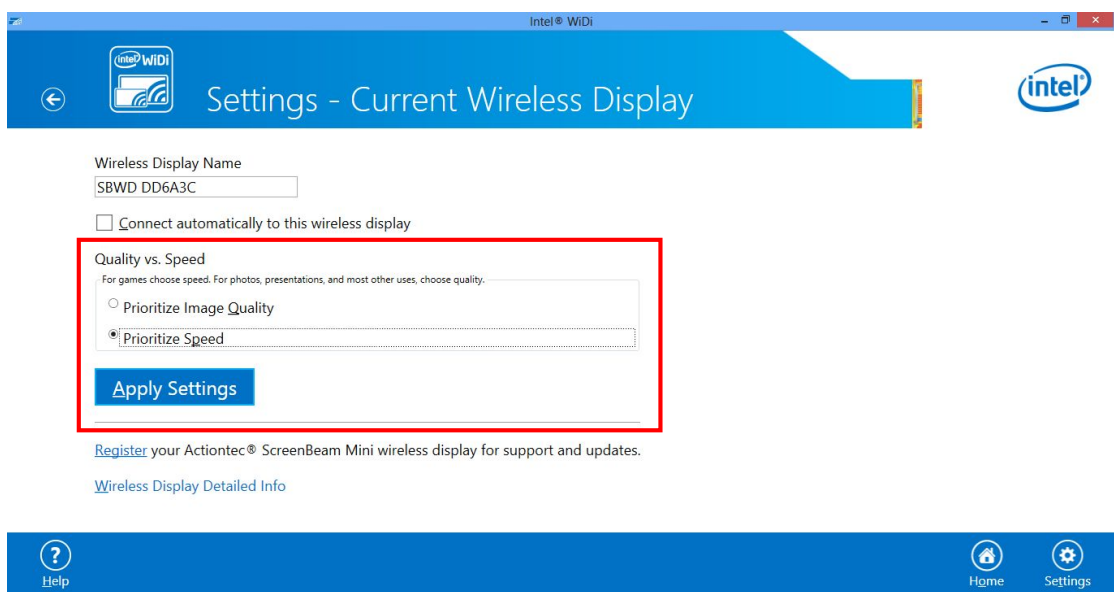
1. Launch the Intel WiDi application, connect to the Receiver you are using, and then click the **Settings** button.



2. On the "**Settings**" screen, select **Current Display Settings**.



3. Select **Prioritize Speed** on the "**Quality vs. Speed**" section and click the **Apply Settings** button. Refer to Intel's support documentation for more information.



## NVIDIA Shield

Follow the steps below to achieve ultra low delay on NVIDIA Shield:

1. Go to "**Settings**", and then select **Miracast**.
2. Tap on the toggle switch to turn "**Game Mode**" on.

**Note:** The output resolution will reset to 720P once this mode is enabled. Refer to the device's user manual for more information.

## Restore to Default

To restore the Receiver's default factory settings:

1. Power on the Receiver, and wait until the "**Ready to Connect**" screen appears.
  2. Hold down the Receiver's "**Reset**" button.
  3. When the "**Reset to Default**" screen appears on the HDTV, release the "**Reset**" button.
- The Receiver reboots, and it will be running with its default settings.

# Chapter Five. Configuring and Upgrading ScreenBeam Mini

Actiontec's ScreenBeam Configuration Utility allows the configuration and upgrade of Actiontec ScreenBeam series receivers, by using either P2P wireless or USB flash drive. There are two versions available: for Windows 8.1 and for Windows 7/8.

## Installing ScreenBeam Configuration Utility

### Installation in Windows 8.1

- **System Requirements**

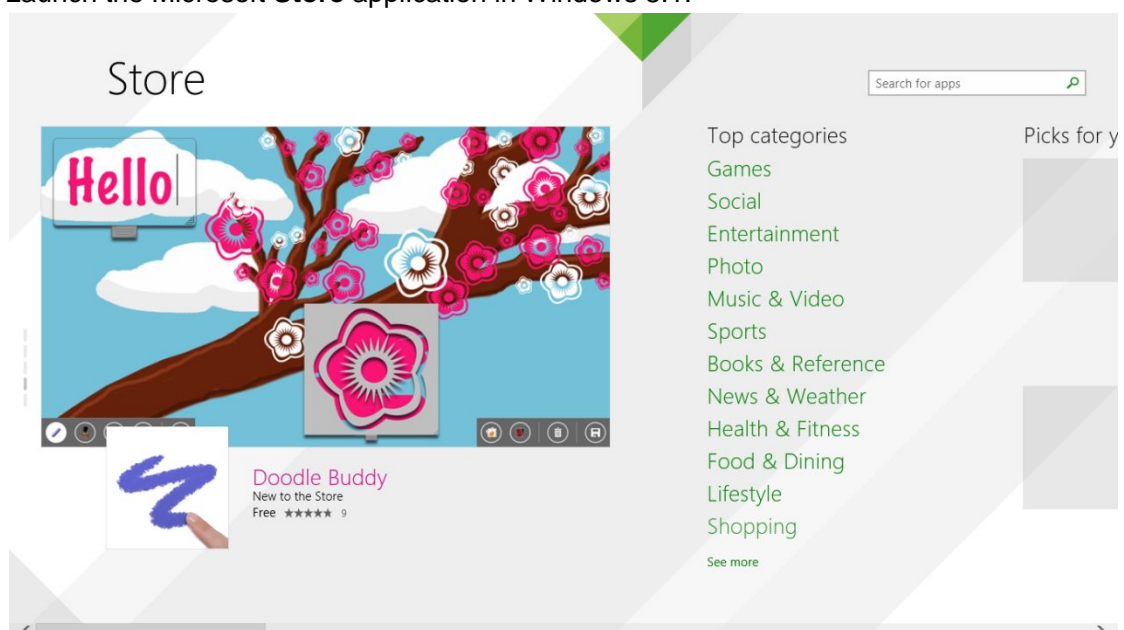
Recommended system requirements for installing the ScreenBeam Configuration Utility (Windows 8.1) are listed below:

- Operating System: Windows 8.1
- CPU: x86, x64, ARM
- Wi-Fi and Graphics Card: Compatible with Microsoft Windows 8.1 Project
- Internet connectivity

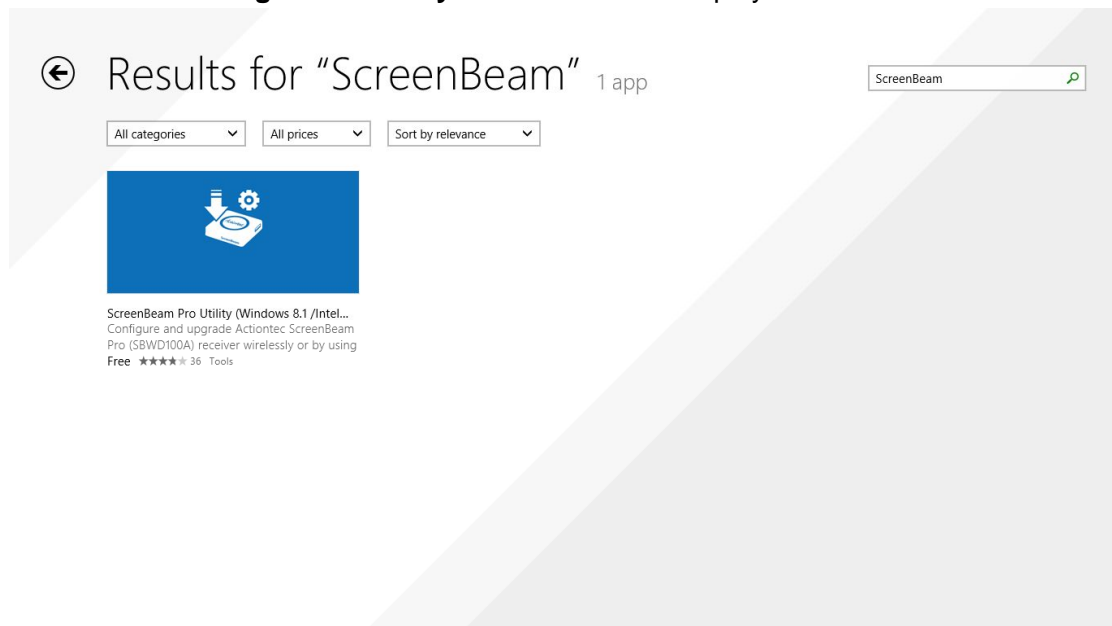
- **Installing ScreenBeam Configuration Utility**

The ScreenBeam Configuration Utility for Windows 8.1 is available on the Microsoft Store. Follow the procedure below to install the ScreenBeam Configuration Utility:

1. Launch the Microsoft **Store** application in Windows 8.1.



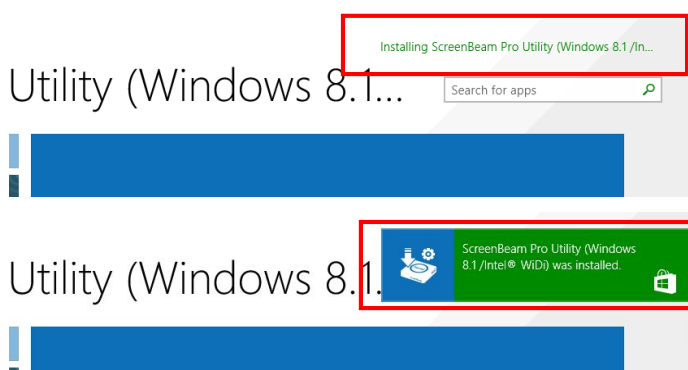
2. In the **Search for apps** box, type **"ScreenBeam"** and click the search icon. The **ScreenBeam Configuration Utility** will be found and displayed in the search result.



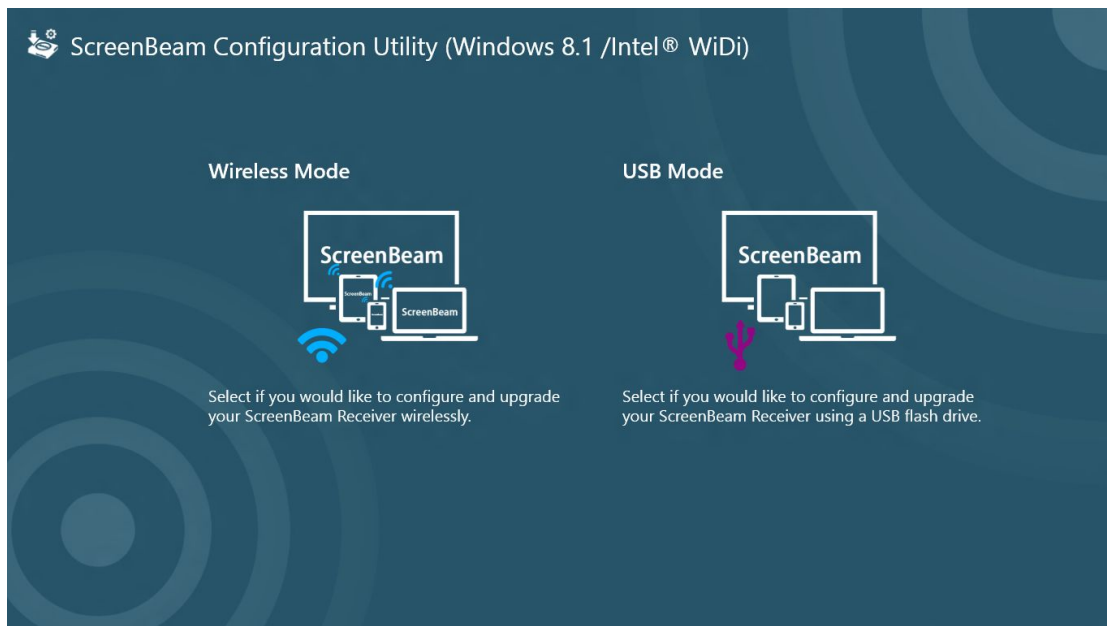
3. Click the **ScreenBeam Configuration Utility** tile to view details.



4. On the page, click the **Install** button to install **ScreenBeam Configuration Utility**. Installation status messages will be displayed in the top right corner of the screen.



After the app is installed, you can launch the Utility to configure and upgrade Actiontec's ScreenBeam series receivers.



## Installation in Windows 7/8

- **System Requirements**

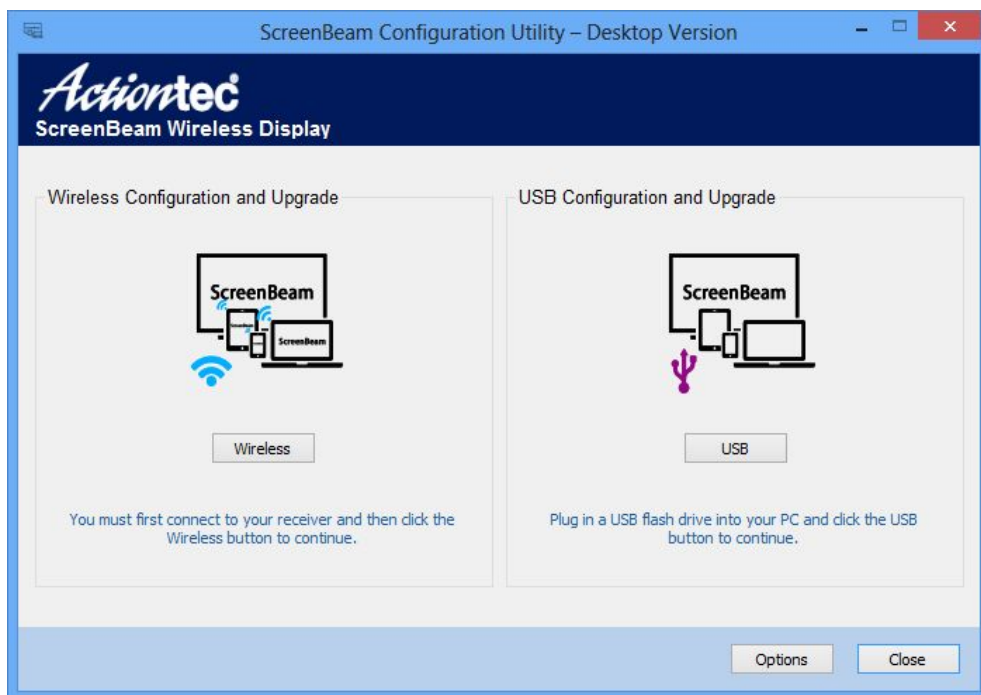
Recommended system requirements for installing the ScreenBeam Configuration Utility (Windows 7/8) are listed below:

- Operating System: Windows 7 or 8
- Intel WiDi enabled system (wireless configuration/upgrade)
- Internet connectivity

- **Installing ScreenBeam Configuration Utility**

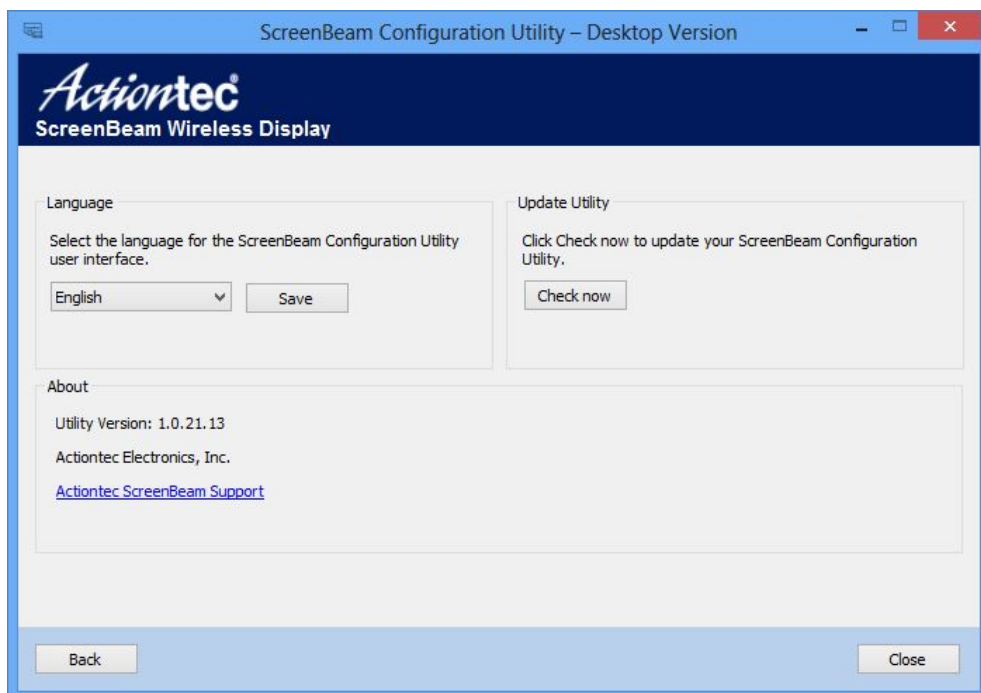
Follow the procedure below to install ScreenBeam Configuration Utility:

1. Download the latest version of ScreenBeam Configuration Utility from Actiontec's website ([www.actiontec.com](http://www.actiontec.com)).
2. Extract the zip file and locate the **SBWD\_Utility.exe** file in the extracted file folder. You can double-click the **SBWD\_Utility.exe** file to launch ScreenBeam Configuration Utility now.



### ● About ScreenBeam Configuration Utility

You can configure the utility's UI language, download a new version utility, and check information of the utility through the **Options** button.



## Preparing Your System

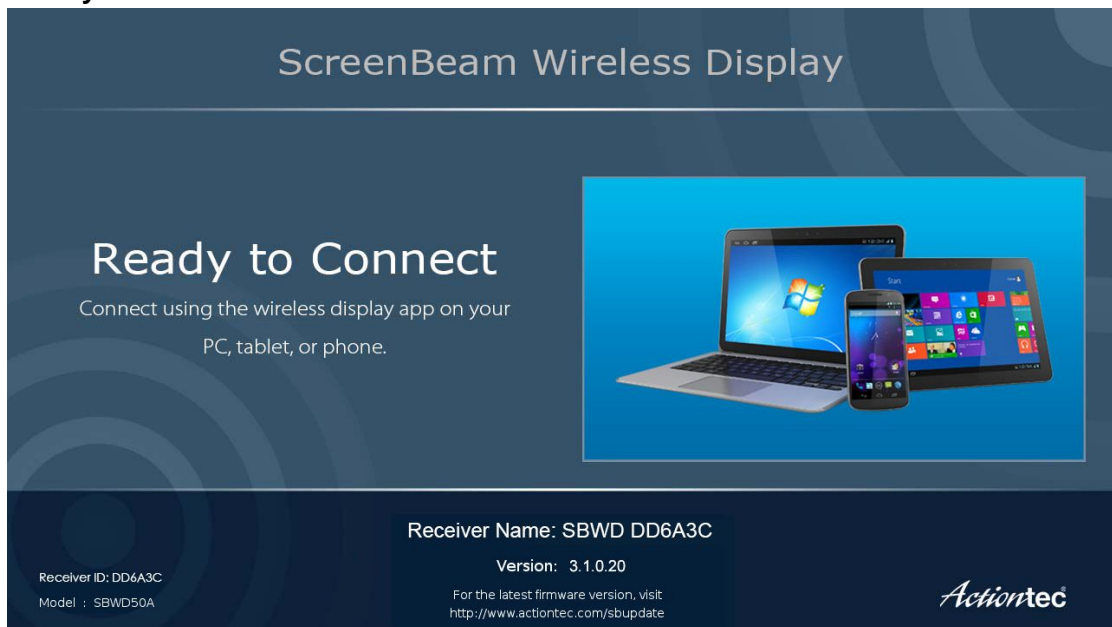
Before configuring or upgrading your receiver, you must have your system well prepared.

**Note:** The preparation for configuring/upgrading the Receiver using both versions of ScreenBeam Configuration Utilities is similar. We take the preparation for ScreenBeam Configuration Utility (Windows 8.1) as an example to describe operation detail.

### Wireless Mode

Follow the procedure below to preparing your system:

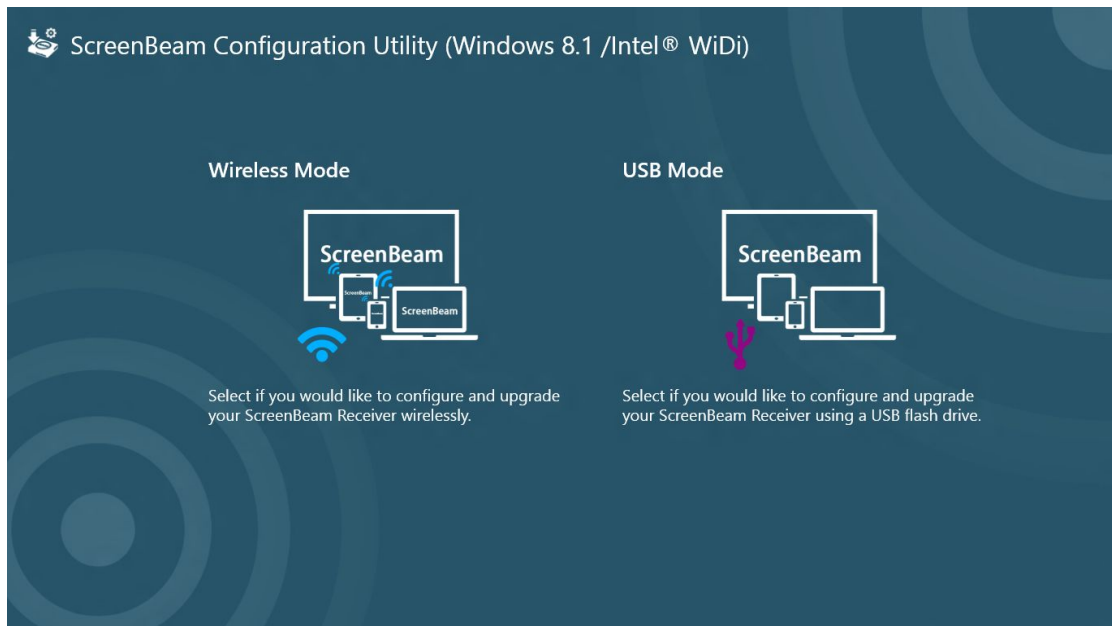
1. Connect your receiver to an HDTV or another display device, and power on the receiver. Refer to the **Installing the Receiver** section for instructions.
2. Make sure the TV to which the ScreenBeam receiver is connected is displaying the "Ready to Connect" screen.



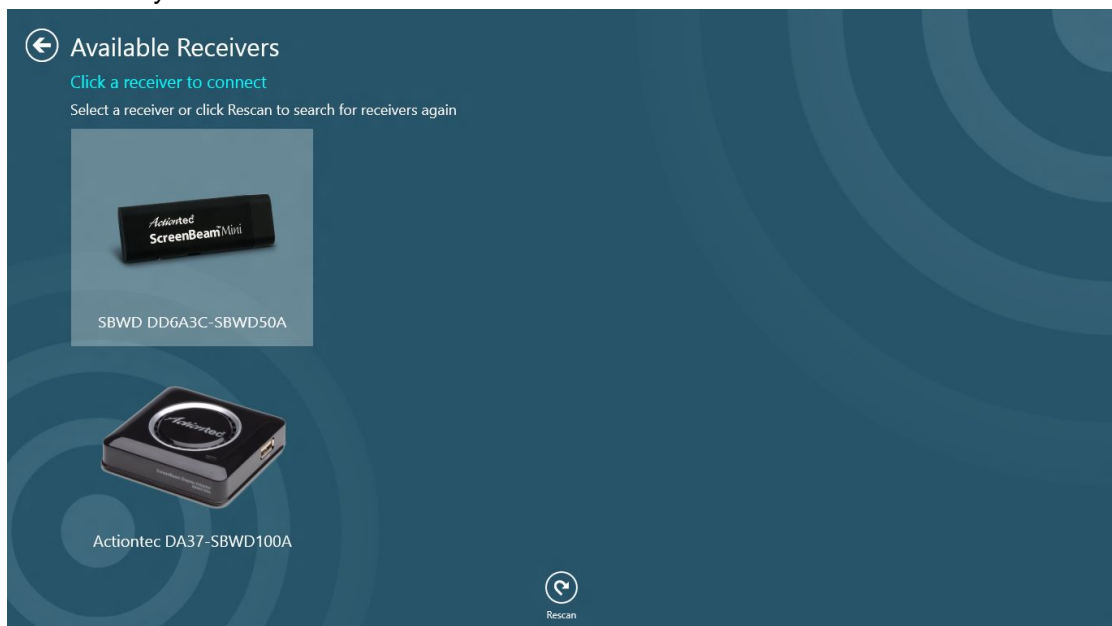
3. Connect your Windows 8.1 device to the receiver. Refer to the **Setting Up for the First Time** section for instructions.
4. From the Windows Start menu, find and launch **ScreenBeam Configuration Utility**. (Tip: Search for "**ScreenBeam**")

The ScreenBeam Configuration Utility provides two modes for configuring and upgrading Actiontec's ScreenBeam series receivers, **Wireless Mode** and **USB Mode**.





5. Select **Wireless Mode**, and the utility will scan for available ScreenBeam receivers automatically.

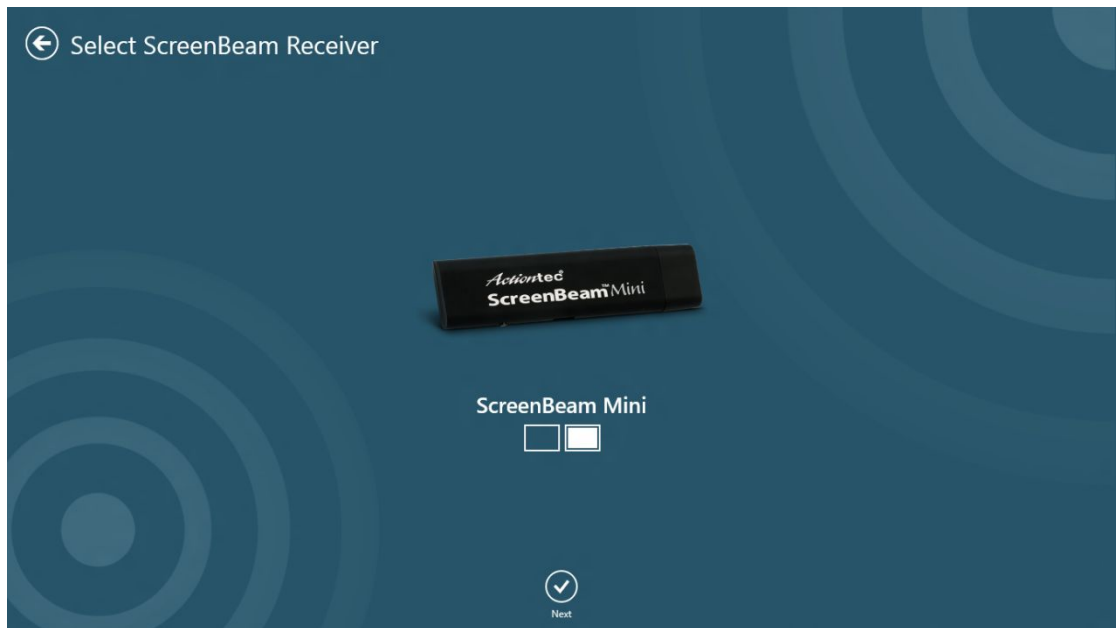


6. Click the receiver you want to configure to open the configuration or firmware upgrade page. Now, it is ready for configuration and firmware upgrade.

## USB Mode

Follow the procedure below to preparing your system:

1. Complete Steps 1, 2 and 3 in the **Preparation for Wireless Mode** section.
2. Plug a blank USB flash drive (FAT32 formatted) into your device.
3. From the Windows Start menu, find and launch **ScreenBeam Configuration Utility**. (Tip: Search for "**ScreenBeam**")
4. Select **USB Mode**, and then select the type of receiver you are going to configure or upgrade. Click the **Next** button.



## Configuring ScreenBeam Mini

With **ScreenBeam Configuration Utility**, you can configure the ScreenBeam series receivers to your liking. There are two methods to configure your receiver: **Wireless Mode** and **USB Mode**.

**Note:** The procedure for configuring the Receiver using both versions of ScreenBeam Configuration Utilities is similar. We take the configuration procedure with ScreenBeam Configuration Utility (Windows 8.1) as an example to describe instructions.

### Wireless Mode

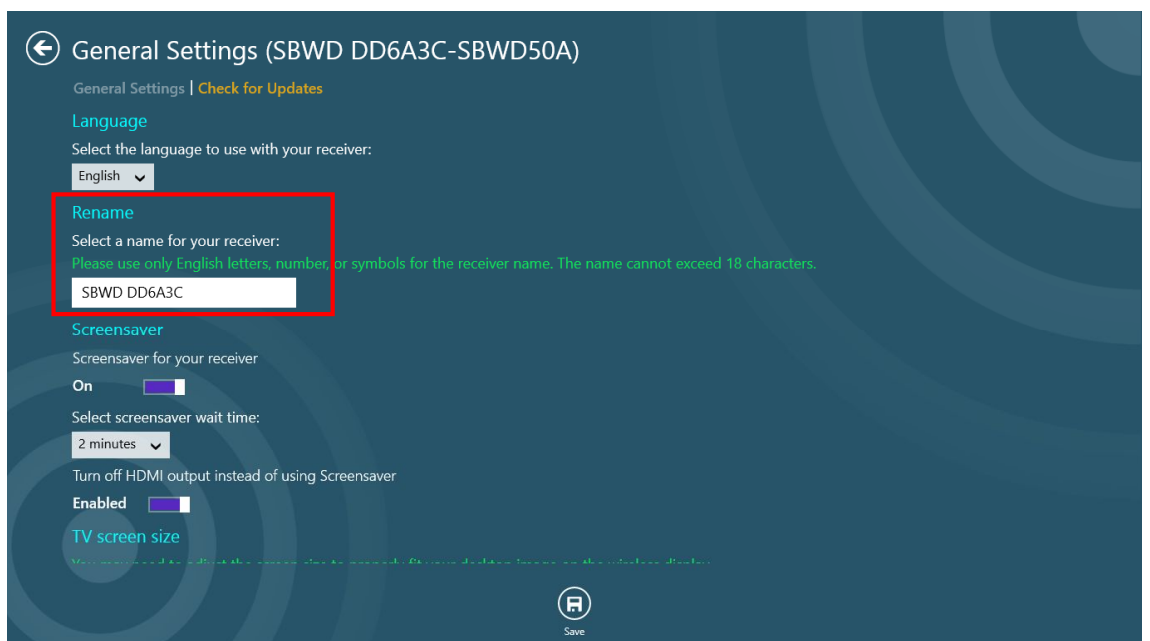
**Note:** You must connect your device to the Receiver before configuring your receiver with **ScreenBeam Configuration Utility**.

Follow the procedure below to configure your receiver wirelessly:

1. On the **General Settings** page, you can configure the following items in your receiver.
  - a. Select a language. Currently available languages are English, French, Italian, Japanese, Simplified Chinese, Traditional Chinese, Russian, Spanish, and German.



- b. Rename your Receiver.

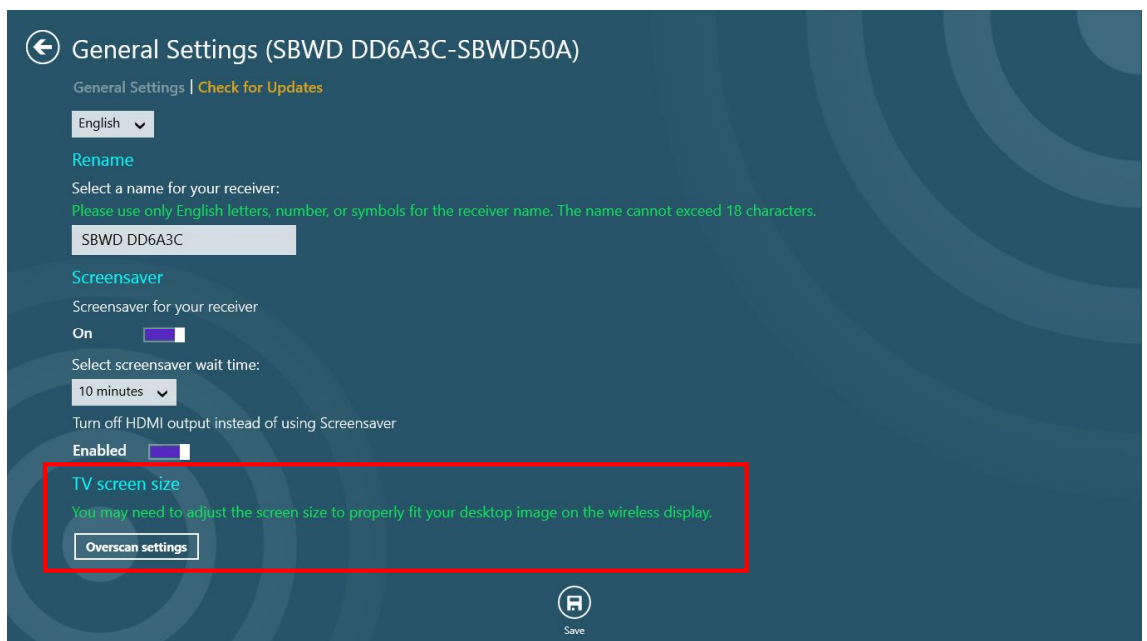


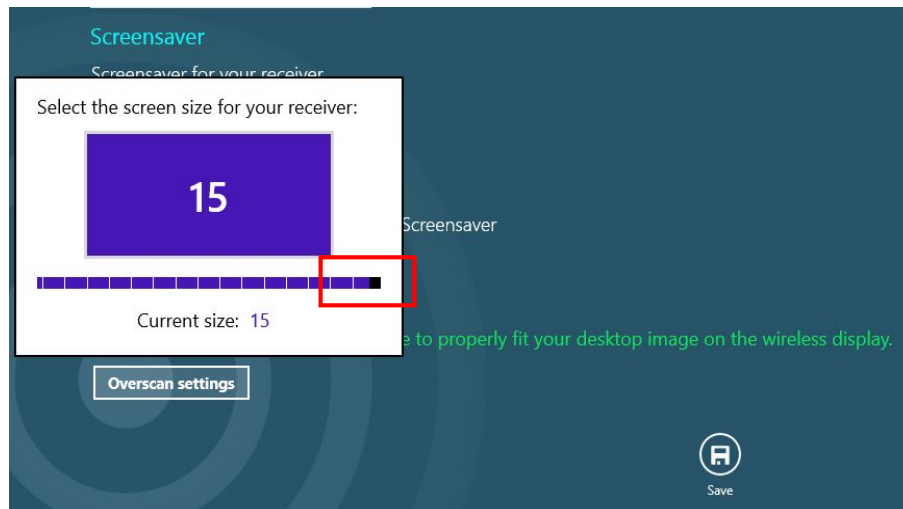
- c. Enable/disable Screen saver. When you set the screen saver to **On**, you can select an idle time for the screen saver and turn off/on HDMI output.



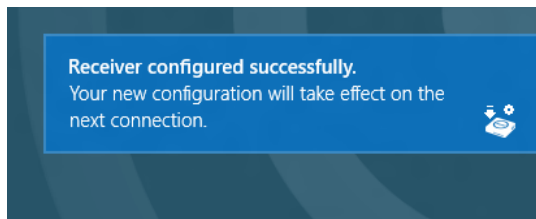
- d. Adjust TV screen size. In the **TV screen size** section, click **Overscan settings**, and a TV screen size adjustment window pops up. Drag the black slider to adjust the size of the output screen.

**Note:** This function is available when your device has been connected to your receiver.





2. Click the **Save** button after the configuration is done. A message will pop up in the top right corner of the screen, showing that the Receiver is configured successfully. New settings will take effect on the next connection.

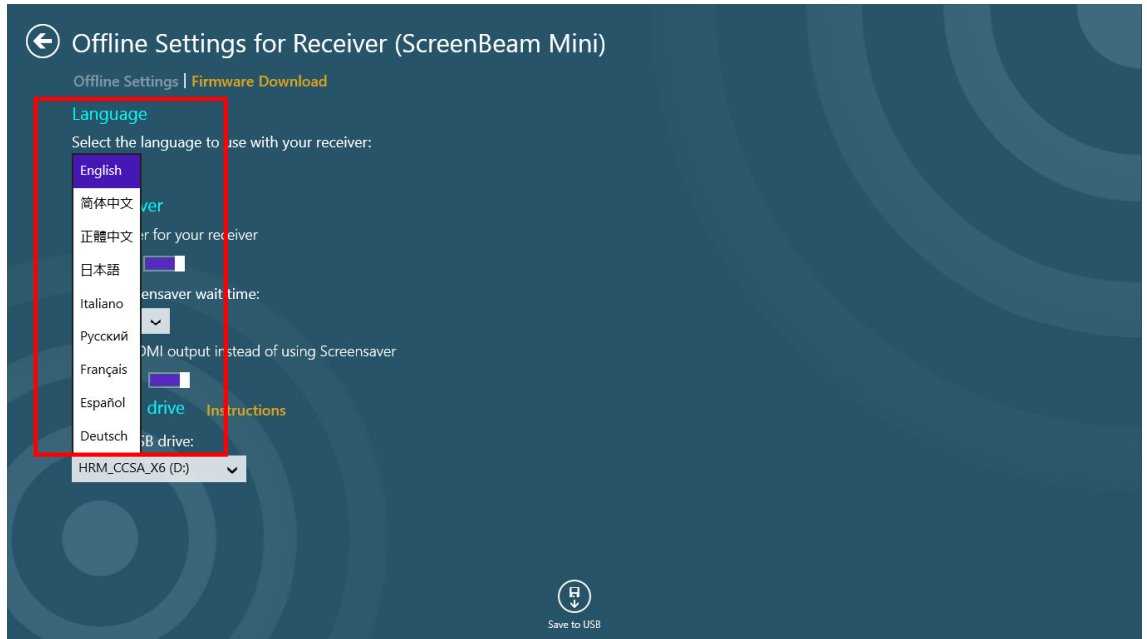


3. The ScreenBeam Configuration Utility returns to the mode selection page.

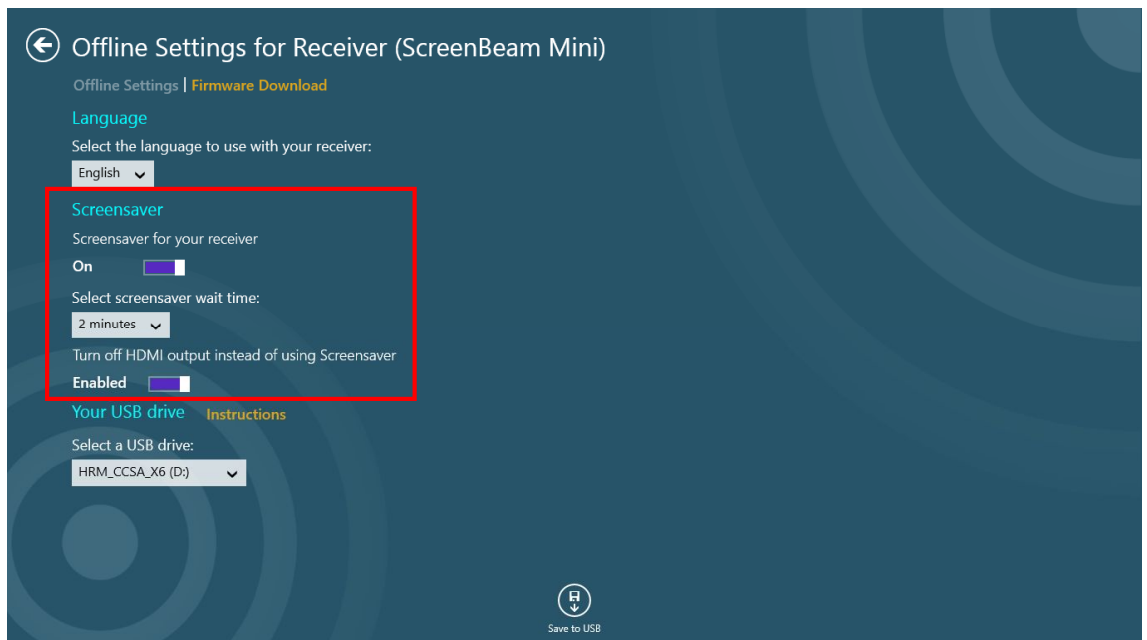
## USB Mode

Follow the procedure below to configure your receiver by using a USB flash drive:

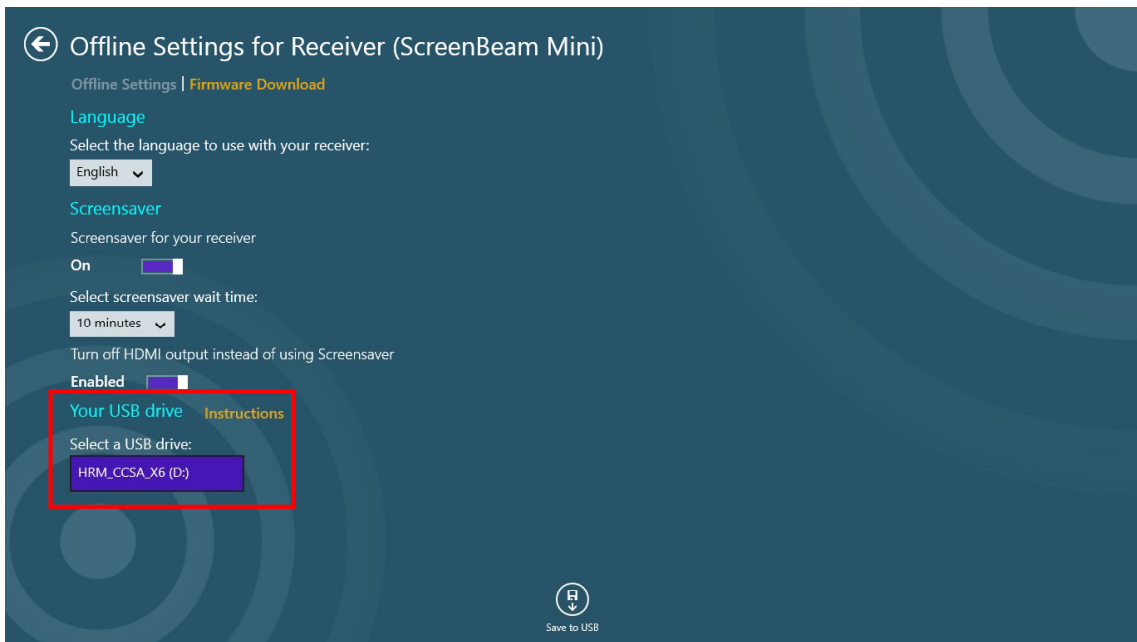
1. On the **Offline Settings** page, you can configure the following items in your receiver.
  - a. Select a language. Currently available languages are English, French, Italian, Japanese, Simplified Chinese, Traditional Chinese, Russian, Spanish, and German.



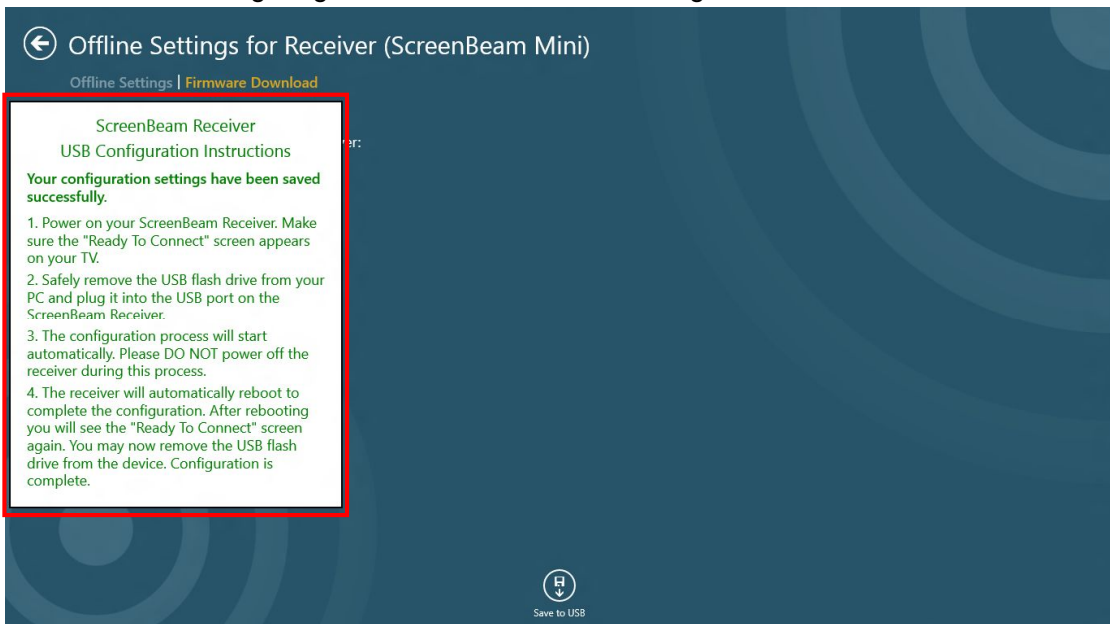
- b. Enable/disable Screensaver. When you set the **Screensaver** to **On**, you can select an idle time for the screensaver.



2. Select the USB flash drive for saving the configuration file.



3. Click the **Save to USB** button to download the setting file to your USB flash drive. After the file has been saved to your USB flash drive, a message box pops up, showing instructions for configuring ScreenBeam Receivers using the USB flash drive.



4. Follow the onscreen instructions to complete the configuration. If no message box pops up, follow the instructions from **Step 5 to Step 8** to complete the configuration.
5. Power on your receiver. Make sure the **"Ready To Connect"** screen appears on your TV.
6. Safely remove the USB flash drive from your PC and connect it to the female connector of the USB cable.
7. The Receiver implements the configuration automatically. Please DO NOT power off the Receiver or remove the USB flash drive during this process.
8. The Receiver reboots to complete the configuration, and the **"Ready To Connect"**

screen appears again. Configuration completes. You may now remove the USB flash drive from the Receiver.

## Upgrading ScreenBeam Mini

There are three methods to upgrade your receiver: **Wireless Mode**, **USB Mode**, and **Manual Firmware Upgrade**.

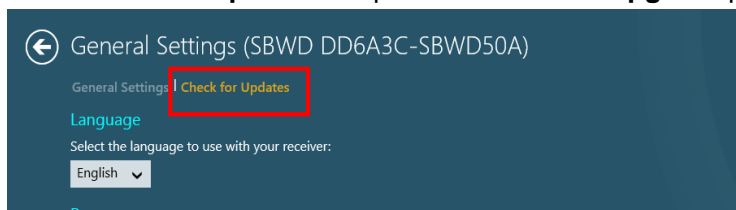
**Note:** The procedure for upgrading the Receiver using both versions of ScreenBeam Configuration Utilities is similar. We take the upgrade procedure with ScreenBeam Configuration Utility (Windows 8.1) as an example to describe instructions.

### Wireless Mode

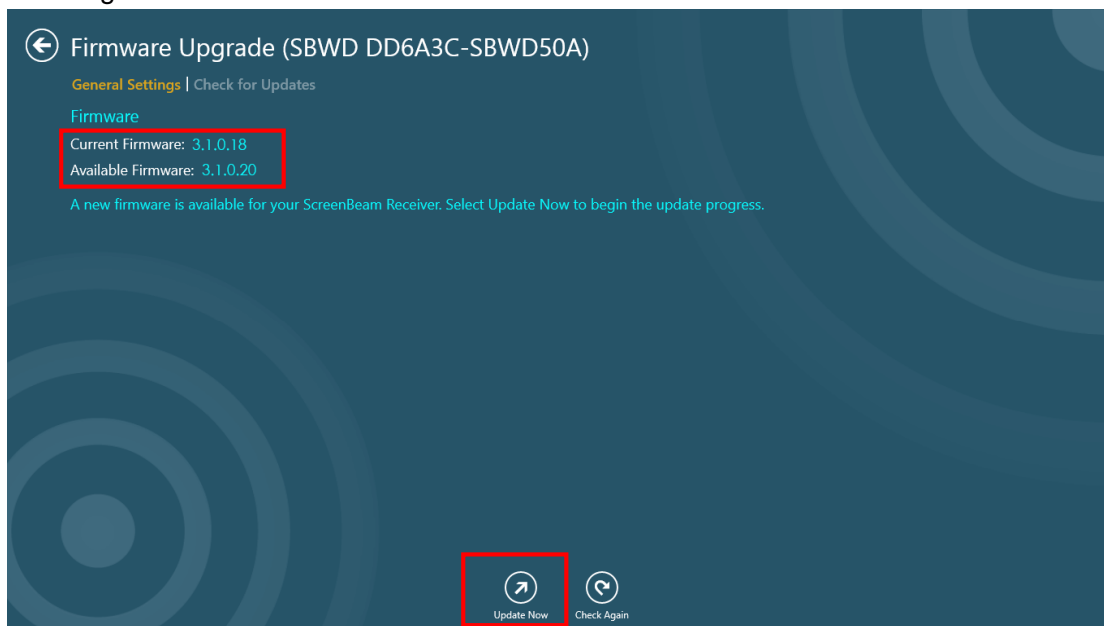
**Note:** You must connect your device to the Receiver with the Intel WiDi application before upgrading your receiver with ScreenBeam Configuration Utility in Windows 7/8.

Follow the procedure to upgrade your receiver wirelessly:

1. Make sure you have an Internet connection.
2. Click **Check for Updates** to open the **Firmware Upgrade** page.

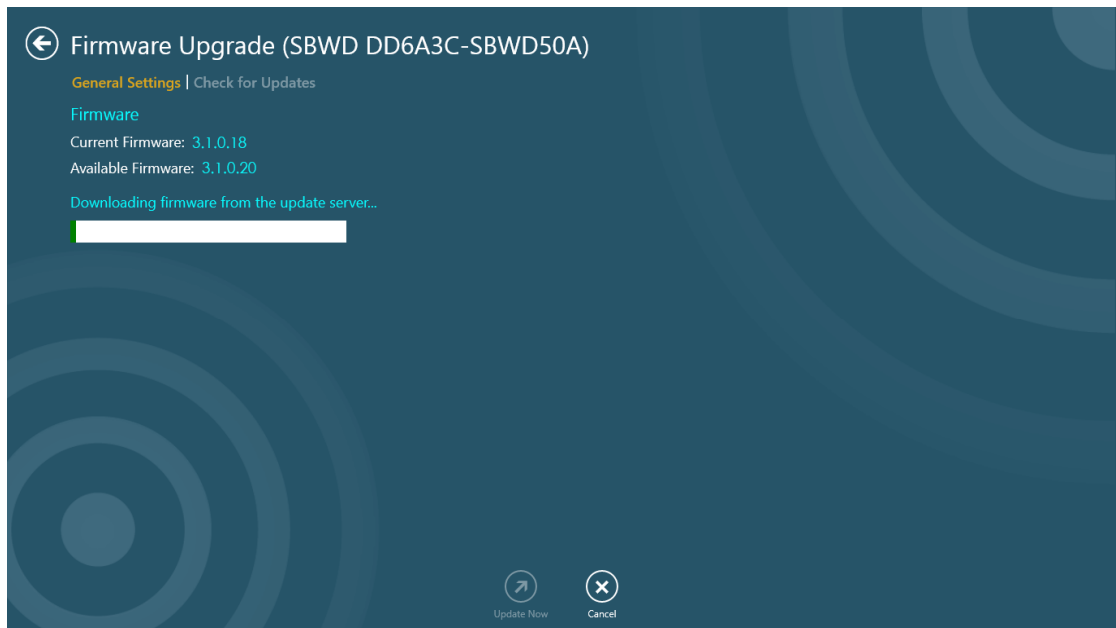


3. If there is new firmware available, it will appear on the **Firmware Upgrade** page. If no new firmware is detected or the detection fails, you can click the **Check Again** button to check again.



4. Click **Update Now** to download the new firmware and wirelessly upgrade your receiver.





Note: If you don't want to upgrade the Receiver for some reason, click **Cancel** to abort.

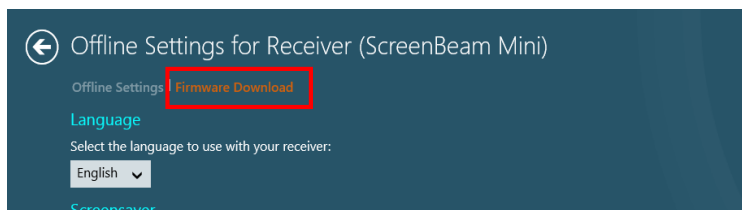
5. The receiver will upgrade its firmware automatically, and then reboot. When the receiver returns to the **Ready to Connect** Screen, your receiver has been upgraded.
6. The Utility returns to the mode selection screen.

Note: Do NOT power off your receiver during the upgrade process. The upgrade will take some time. Please be patient.

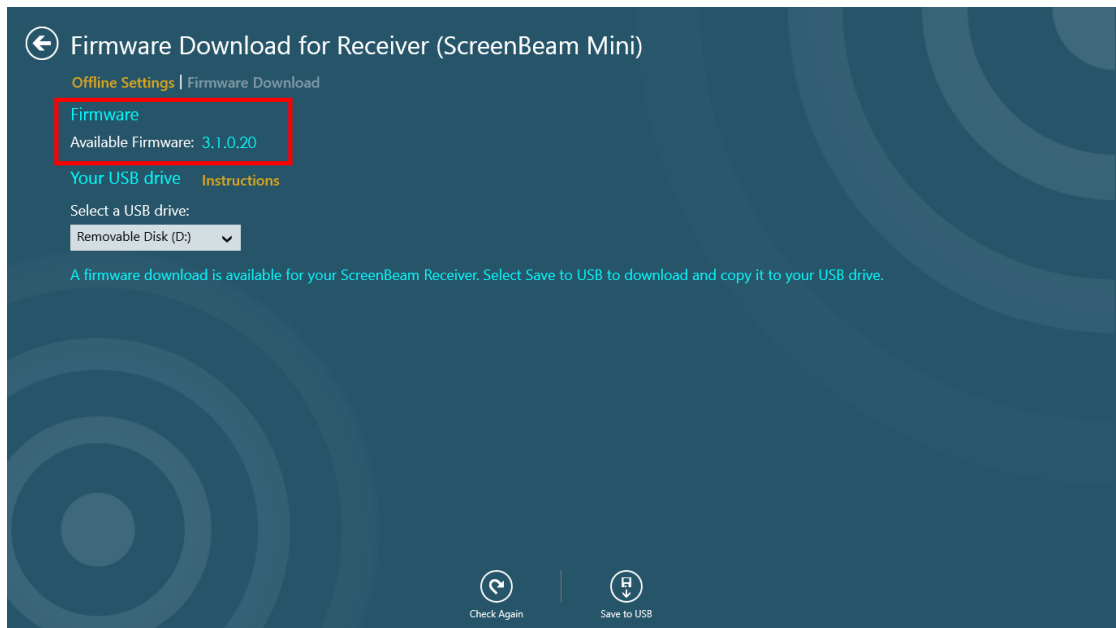
## USB Mode

Follow the procedure below to upgrade your receiver by using a USB flash drive:

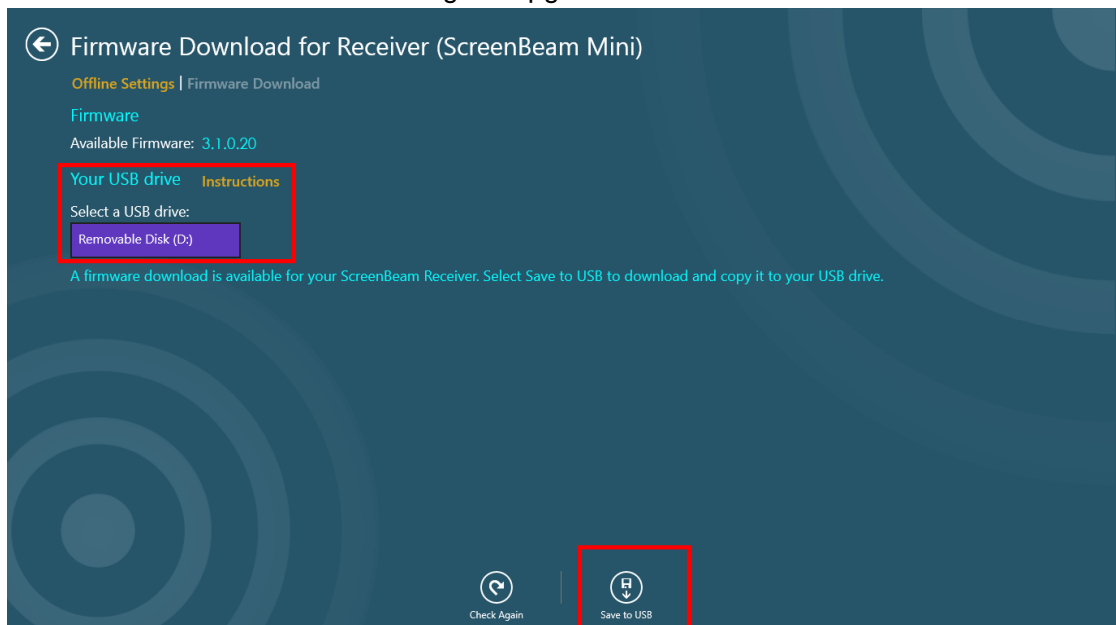
1. Make sure you have an Internet connection.
2. Click **Firmware Download**.



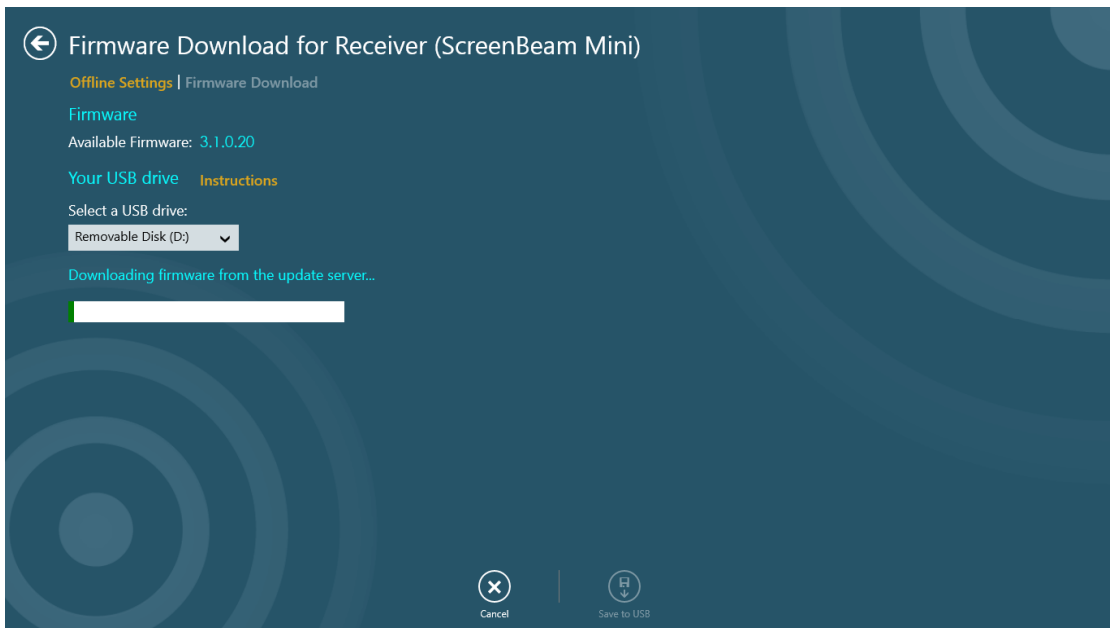
3. If there is new firmware available, it will appear on the **Firmware Download** page. If no new firmware is detected or the detection fails, you can click the **Check Again** button to check again.



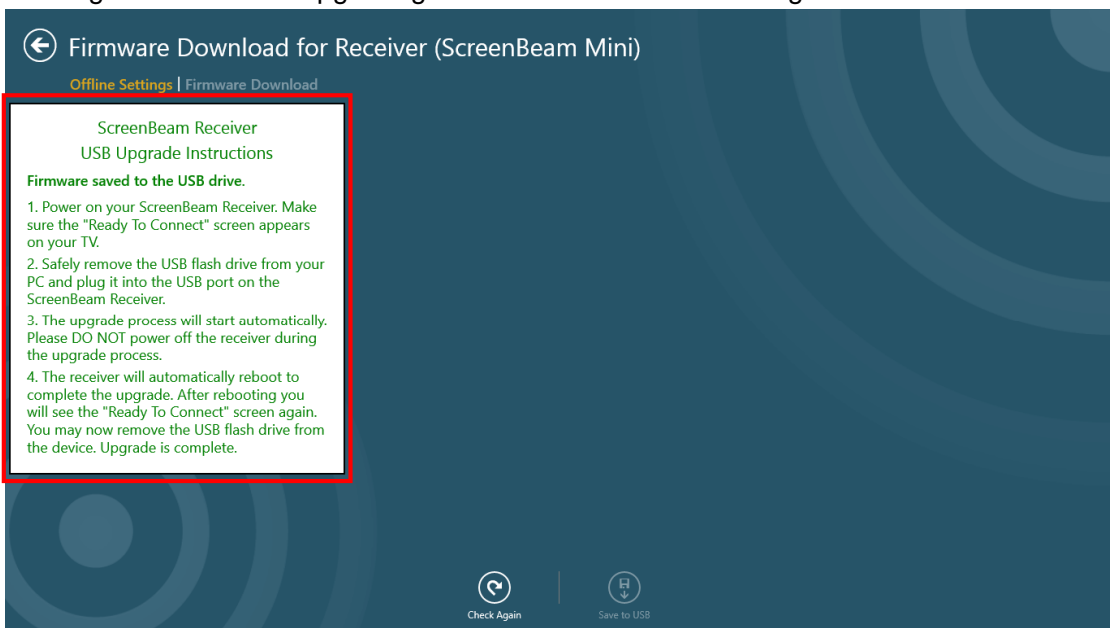
4. Select the USB flash drive for saving the upgrade file.



5. Click **Save to USB** to download the upgrade file to your USB flash drive.



6. After the upgrade file has been saved to your USB flash drive, a message box pops up, showing instructions for upgrading ScreenBeam Receivers using the USB flash drive.



7. Follow the onscreen instructions to complete the upgrade. If no message box pops up, follow the instructions from **Step 8** to **Step 11** to complete the upgrade.
8. Power on your Receiver. Make sure the **“Ready To Connect”** screen appears on your TV.
9. Safely remove the USB flash drive from your PC and connect it to the female connector of the USB cable.
10. The Receiver starts to upgrade firmware automatically. Please DO NOT power off the Receiver or remove the USB flash drive during the upgrade process.
11. The Receiver reboots to complete the upgrade, and the **“Ready To Connect”** screen appears again. Upgrade completes. You may now remove the USB flash drive from the Receiver.

## Manual Firmware Upgrade

Follow the procedure below to manually upgrade your receiver:

1. Download and save the new ScreenBeam Mini firmware to your local disk. Check new firmware from Actiontec's website ([www.actiontec.com](http://www.actiontec.com)).
2. Extract the zip file. You will find one "autorun" folder and one "install.img" file in the extracted file folder.
3. Insert a USB flash drive to your laptop/PC.
4. Copy the "autorun" folder and the "install.img" file to the root directory of the USB flash drive. Note: Do not use a portable hard drive. You should use a formatted FAT/FAT32 USB flash drive only.
5. Power on your Receiver. Make sure the **"Ready To Connect"** screen appears on your TV.

**Note:** You must disconnect your device (laptop, ultrabook, smartphone or tablet) from the receiver before upgrading your receiver.

6. Safely remove your USB flash drive from your PC, and plug it into the female connector of the USB cable.
7. The Receiver starts to upgrade its firmware automatically. Firmware upgrade status messages appear on your TV.

**Warning!** Do not power off the Receiver or remove the USB flash drive while the upgrade is in progress. Otherwise, firmware upgrade fails.

8. The Receiver reboots to complete the upgrade, and the **"Ready To Connect"** screen appears again.
9. Upgrade completes. You may now remove the USB flash drive from the Receiver.

# Appendix I. Troubleshooting and FAQs

This chapter describes some problems you may encounter using the Receiver, and possible solutions to those problems. Also included are frequently asked questions (FAQs), and answers to those questions.

## Troubleshooting

### **I'm not seeing anything on my HDTV screen after powering on the Receiver.**

Check the cable connections and make sure the TV Input setting is the same as the HDMI port to which the Receiver is connected.

### **I am trying to connect to the ScreenBeam Mini Receiver but fails. There is a prompt says "The connection attempt failed because your PC or mobile device is currently connecting to a 5GHz wireless access point. ...".**

The ScreenBeam Mini Wireless Display Receiver works in 2.4 GHz band only. You most likely have had your device connected to a 5 GHz access point (AP). You must disconnect your device from the 5 GHz AP, and connect it to a 2.4 GHz AP. Then, you can retry connecting your device to the Receiver.

### **After upgrading from Windows 8 to Windows 8.1, I can no longer connect to ScreenBeam receiver or I'm having problems with my connection.**

Make sure you've followed Intel's instructions after the upgrade. Refer to Intel's WiDi website (Shortcut URL: <http://www.actiontec.com/widi81>) for more information.

### **Intel WiDi does not work after upgrading to Windows 8.1 and I can't connect to ScreenBeam Mini.**

Windows 8.1 provides native Miracast feature. Previous Intel WiDi systems upgraded to Windows 8.1 must use the **Project** feature. To connect with ScreenBeam Mini receiver: Go to **Charms > Devices > Project > Add a wireless display > Connect to ScreenBeam Mini receiver**.

### **In some instances, I can't connect to the Receiver from WiDi after installing antivirus software.**

This is also a known issue with Intel WiDi. To solve the problem, add Intel WiDi to the antivirus-approved whitelist of applications, and then reconnect.

### **I'm seeing artifacts and experiencing a choppy, juddering video stream.**

In noisy Wi-Fi environments, audio and video freezes may be observed while playing video

content, and longer than expected latency may occur when streaming. To ensure you have an optimal Wi-Fi environment:

- If your Receiver is directly plugged into the HDMI port on the back of your HDTV, reconnect the Receiver to the HDTV with the HDMI cable provided and place the Receiver in front of your HDTV and in direct line of sight with your device.
- Disconnect and reconnect the Receiver.
- If the source device is connected to a wireless router, restart the router, or change the wireless channel on your wireless router/AP. Refer to the wireless router's user manual for more information.

**I'm seeing choppiness and brief pauses while watching Internet video on my Miracast™ device.**

Wireless interference may cause Internet video playback to be choppy. If this occurs, try the following:

- Disconnect the device from the Receiver. Make sure the Internet connection is good and that the video playing on the phone is smooth.
- Clear the YouTube cache and try playing the video again.

**I'm seeing choppiness and brief pauses while watching local video on my Miracast™ device.**

Wireless interference may cause the video playback to be choppy. If this occurs, try the following:

- Make sure you are in the same room as the Receiver is.
- Set the media player to use the H/W decoder, if available.
- Reboot the Miracast™ device and Receiver and connect again.
- Avoid moving the Miracast™ device around too much.
- Change the wireless channel on your wireless router/access point.

**NVIDIA Shield does not see ScreenBeam Mini receiver or may see the Receiver as "unavailable" or "busy" even after a rescan.**

Exit out of the NVIDIA's Miracast settings window and go back.

**My Windows 8.1 displays to the TV but the four edges are cut off (overscan).**

This is expected with some system's supported display resolution. You can adjust Windows screen resolution settings to fit the PC's screen on your TV display.

**When I connect to an access point or wireless router with an active WiDi session, the WiDi connection drops.**

This is a known issue with Intel WiDi. It happens with either 3.5.41.0 or 4.0.1.8 on both Windows 7 or 8.

Re-connect the WiDi session or connect to the AP first before starting a WiDi session.

**I encounter connection failure with ScreenBeam Mini and my device can't connect to it any more.**

- Reboot ScreenBeam Mini and try connection again. Or, reboot your device (laptop/Ultrabook/tablet/smartphone) and try connection again.
- Reboot both the ScreenBeam Mini and your device and try connection again.
- If you are using a Windows 8.1 operating system, go to **Change PC settings > PC and Devices > Devices > Projectors**, remove the profile of ScreenBeam Mini from your device (PC/laptop/Ultrabook), and try connection again.

**I can't connect to the Receiver with ScreenBeam Configuration Utility on my device. The Utility can't find the Receiver.**

In Windows 8.1, you must connect your device to the Receiver at least one time. In doing so, the profile of the Receiver is saved to your device. Then the Utility on your device can connect to the Receiver.

In Windows 7/8, you must connect your device to the Receiver with Intel WiDi first, and then Utility on your device can connect to the Receiver.

**In Windows 8.1, I can't adjust the screen size with the ScreenBeam Configuration Utility. I can't find the screen size adjustment option.**

The screen size adjustment option is not available if your device doesn't connect to the receiver. You must connect your device to the Receiver first, and then launch the Utility and configure the receiver.

**My audio changes and sounds a little dull when I play music or video.**

ScreenBeam Mini supports the LPCM audio format only. LPCM is a lossless format for encoding audio data. However, some devices do not provide support for LPCM audio, so the sound changes.

You can also try upgrading the operating system of your device.

## FAQs

**Can my device connect to ScreenBeam Mini?**

To connect to ScreenBeam Mini, your device must be Intel WiDi compatible or Wi-Fi Miracast-capable.

For a system to support Intel WiDi 3.5 (or later), it should have most if not all Intel chipsets (Processor, Graphic Card, and Wireless chipset). Here are some tips on the types of PC system that can support Intel WiDi.

- If your system is an Ultrabook (4th Gen Intel Core processor), it's most likely to support and have Intel WiDi 4.x preinstalled.
- If your system is an Ultrabook (3rd Gen Intel Core processor or older), it should have the required chipsets to support Intel WiDi. Update your drivers and download the Intel WiDi software at: <http://www.intel.com/go/wirelessdisplayupdate>.
- If your system is a Laptop or a Notebook, it may support Intel WiDi if it meets the

following Processor, Graphics, and Wireless chipset requirements:

- **Processor.** One of the following processors is required:
    - 2nd generation Intel® Core™ i3/i5/i7 Mobile Processor
    - 3rd Generation Intel® Core™ i3/i5/i7 Mobile and Desktop Processor
    - 4th Generation Intel® Core™ i3/i5/i7 Mobile and Desktop Processor
  - **Graphics.** One of the following graphics solutions is required:
    - Intel® Iris™ Pro Graphics 5200
    - Intel® Iris™ Graphics 5100
    - Intel® HD Graphics 5000
    - Intel® HD Graphics 4600
    - Intel® HD Graphics 4400
    - Intel® HD Graphics 4200
    - Intel® HD Graphics 4000
    - Intel® HD Graphics 3000 (mobile)
    - Intel® HD Graphics 2500
    - Intel® HD Graphics 2000 (mobile)
  - **Wireless Adapter.** One of the following wireless adapters is required:
    - Intel® Centrino® Wireless-N 1000, 1030, 2200, or 2230
    - Intel® Centrino® Wireless-N 2200 for Desktop
    - Intel® Centrino® Advanced-N 6200, 6205, 6230, or 6235
    - Intel® Centrino® Advanced-N 6205 for Desktop
    - Intel® Centrino® Wireless-N + WiMAX 6150
    - Intel® Centrino® Advanced-N + WiMAX 6250
    - Intel® Centrino® Ultimate-N 6300
    - Intel® Dual Band Wireless-N 7260
    - Intel® Dual Band Wireless-AC 7260
    - Intel® Dual Band Wireless-AC 7260 for Desktop
    - Intel® Dual Band Wireless-AC 3160
    - Intel® Wireless-N 7260
    - Broadcom BCM43228
    - Broadcom BCM43241
    - Broadcom BCM4352
  - **Operating System.** One of the following operating systems is required:
    - Microsoft Windows 7
    - Microsoft Windows 8
    - Microsoft Windows 8.1
- System requirements for Wi-Fi Miracast™
    - Android 4.2
    - Windows 8.1
  - ScreenBeam Mini currently is not compatible with Apple devices.



### **How can I tell if my device supports Wi-Fi Miracast?**

Look for one of the following Miracast applications on your device. Only some application names are listed below. Different manufacturers may have different names for the Miracast apps on their products. But, it should indicate similar meaning.

- Wireless display
- Wireless mirroring
- Screen mirroring
- AllShareCast (Samsung devices only)
- Cast screen

Visit ScreenBeam Mini compatibility page for the recommended Miracast devices.

### **Do I need to install drivers/apps to use the ScreenBeam Mini Receiver?**

- For **Windows 7/8**, you may need to install the Intel WiDi (3.5 or higher) application.
- For **Windows 8.1**, you only need to install the latest Windows updates.
- For **Android 4.2** or higher, no app is required.

**Note:** Your device must be Intel® WiDi-compatible or Wi-Fi Miracast™-capable.

### **How can I improve my video/audio performance?**

You can try the following methods to improve the ScreenBeam Mini's video/audio performance:

- Move your device closer to the Receiver.
- Connect the Receiver with the HDMI cable provided and place it in front of the HDTV.
- Connect your device to a wireless network that is using a cleaner wireless channel or change the wireless channel on the current wireless network, and then connect the device to the Receiver.
- Turn off the Wi-Fi devices that are not in use currently.

### **What wireless signal range can I expect with the Receiver?**

The Receiver is designed to be used in the same room with the source device. For best performance, the source device should be placed within 4.5 meters to the Receiver.

### **Do I need an existing wireless network to use the Receiver?**

No. Since the Receiver connects directly with the Intel WiDi or Miracast™-enabled device, no wireless network is needed. However, the source device needs to be connected to an Internet router or data network to view online content.

### **How can I upgrade the Receiver's firmware?**

You can upgrade the receiver's firmware by using the ScreenBeam Configuration Utility. For Windows 7 and Windows 8 systems, you can download the Utility from Actiontec's website ([www.actiontec.com](http://www.actiontec.com)). For Windows 8.1, you must use the Metro application available on the Microsoft app store (tip: search for "ScreenBeam").

### **How do I configure the receiver's general settings, including: changing language, rename the receiver, enable/disable screensaver, and idling time for screensaver?**

You can configure the receiver's general settings by using the ScreenBeam Configuration Utility. For Windows 7 and Windows 8 systems, you can download the Utility from Actiontec's website ([www.actiontec.com](http://www.actiontec.com)). For Windows 8.1, you must use the Metro application available on the Microsoft app store (tip: search for "ScreenBeam").

### **How can I adjust the display to fit properly to my TV screen?**

Use one of the following methods to adjust the screen size:

- Go to the Intel WiDi application, and then select **Settings > Picture and Sound > Adjust Cropping**. Follow the onscreen instructions to adjust the screen.
- In Windows 7/8, launch **ScreenBeam Configuration Utility**. Click the **Wireless** button, and then configure **Adjust Screen Size** in the **General** section.
- In Windows 8.1, launch **ScreenBeam Configuration Utility**. Click **Wireless Mode** to open the **General Settings** page, and then configure **Overscan settings** in the **TV screen size** section.

### **Can I extend my Windows desktop to the HDTV or Projector from my Intel WiDi device?**

Yes. After the connection to ScreenBeam Mini receiver is established, by default you should see the laptop screen mirrored to the HDTV or Projector.

To extend your Windows desktop to an HDTV or a Projector, press the Windows key and P key together, and select "**Duplicate**", "**Extend**" or "**Second screen only**" mode.

### **Where can I find more information and get support for Intel WiDi?**

For more information about Intel Wireless Display, access this page: [http://www.intel.com/p/en\\_US/support/highlights/wireless/wireless-display](http://www.intel.com/p/en_US/support/highlights/wireless/wireless-display).

### **My device can support Intel WiDi. Where can I find Intel WiDi on my device? And where can I obtain the latest Intel WiDi application and graphic drivers for my Intel WiDi device?**

In Windows, search for "Intel WiDi" and launch the application if you find it. If Intel WiDi software is not available on your system, go to <http://www.intel.com/go/wirelessdisplayupdate> and download the latest Intel WiDi software for your system. Make sure to also upgrade your system to the latest Graphics and Wireless drivers for best wireless display experience.

### **What is Wi-Fi Miracast™?**

Wi-Fi Certified Miracast™ is a groundbreaking solution for seamlessly displaying video between devices, without cables or a network connection. Users can view pictures from a smartphone on a big screen television, share a laptop screen with the conference room projector in real-time, and watch live programs from a home cable box on a tablet. Miracast™ connections are formed using Wi-Fi Certified Wi-Fi Direct™, so access to a Wi-Fi® network is not needed—the ability to connect is inside Miracast™-certified devices.

**What is Wi-Fi Direct and can I connect to the Receiver using Wi-Fi Direct?**

Wi-Fi Direct is a peer-to-peer technology that Miracast™ connections are formed in. Even though some newer Android 4.0 and Windows 8.1 devices may detect the Receiver in the Wi-Fi Direct devices scan list, they will not be able to connect to the Receiver. The device must support Miracast™ to connect with the Receiver.

**Can I connect to the Wi-Fi router and the Receiver simultaneously with my Intel WiDi laptop?**

Yes. Connect the laptop to an available Wi-Fi router first, and then connect to the Receiver. You can then view online content and beam it to the HDTV.

**Can I connect to the Wi-Fi router and the Receiver simultaneously with my Miracast™ device?**

Some Miracast™ devices cannot connect to both the Wi-Fi router and the Receiver at the same time. Refer to the device manufacturer's or carrier's user manual for more information.

**Can I connect several Intel WiDi or Miracast devices to the Receiver simultaneously?**

No. You can connect one device to the Receiver at a time.

**Can I connect to multiple ScreenBeam Mini Receivers simultaneously?**

No. You can only connect to one ScreenBeam Mini Receiver at a time.

**My TV/Projector does not have an HDMI Input. Can I still use ScreenBeam Mini?**

No, you need a TV/Projector with an HDMI port.

**Can Microsoft Surface Pro tablet output Intel WiDi?**

Originally, Microsoft Surface Pro does not support wireless display. However, it can support wireless display after you upgrade its operating system to Windows 8.1. The latest Microsoft Surface 2 and Surface Pro 2 with Windows 8.1 can support wireless display.

**Can I use the ScreenBeam Mini to access online content directly?**

No. ScreenBeam Mini does not directly connect to the Internet. You must use a source device (laptop/Ultrabook/tablet/smartphone) to wirelessly stream the online content to your Receiver.

**Can I play a video clip by connecting a USB flash drive to the ScreenBeam Mini?**

No. The USB port on the USB cable is for system configuration and firmware upgrade only.

**Can ScreenBeam Mini support VoIP?**

No, it can't.

**Does ScreenBeam Mini support NVIDIA Shield game console?**

Yes. ScreenBeam Mini supports NVIDIA Shield.

**Can I push media to the Receiver using DLNA?**

No. The Receiver is not a DLNA media receiver.

**Does the Receiver work with the Apple iPhone, iPad, or iPod?**

No. The Receiver does not support Apple devices or the AirPlay protocol.

# Appendix II. Specifications

## General

**Language:** English, French, German, Italian, Japanese, Simplified Chinese, Traditional Chinese, Russian, and Spanish

**A/V Interface:** HDMI, Type-A male connector

**Video Output:** Up to full HD 1080p (H.264)

**Audio Output:** LPCM

**Firmware Upgrade:** Yes, Wireless and USB

## Wireless

**Wireless:** IEEE 802.11 b/g/n, single-band 2.4 GHz

**Wireless Security:** WPA2, WPS PIN Pairing, AES 128-bit

**Content Protection:** HDCP 2.x

## Electrical

**Power Input:** 5 V / 500 mA, micro USB

**Power Consumption:** < 2.5 W

**LED Indicator:** Power On

**Dimensions:** 87.5 mm x 30.7 mm x 11.8 mm

**Regulatory Compliance:** FCC, UL, IC, CE, TELEC, and SRRC

**Warranty:** Localized to country of sale

## Environmental

**Operating temperature:** 0 °C to 40 °C (32 °F to 104 °F)

**Storage temperature:** 0 °C to 70 °C (32 °F to 158 °F)

**Operating humidity:** 10% to 85%, non-condensing

**Storage humidity:** 5% to 90%, non-condensing

## System Requirements

### ● General Requirements

An HDTV with one HDMI port (Type A) and one USB port (USB 2.0) available

### ● Supported Devices

- Intel WiDi laptops: Ultrabooks and laptops with Intel WiDi 3.5 or higher
- Wi-Fi Miracast capable devices: smartphones, tablets, and laptops with Wi-Fi Miracast
  - Windows 8.1 or higher
  - Android 4.2 or higher

**Note:** Specifications are subject to change without notice.

# Appendix III. Notices

## Warranty

This product has a one-year Limited Hardware Warranty and 90-day free software updates from the date of purchase.

- **Local Law**

This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

To the extent that this Limited Warranty Statement is inconsistent with local law, this Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer.

Go to <http://www.actiontec.com/products/warranty.php> for more information.

## GPL Info

For GNU General Public License (GPL) related information, go to <http://opensource.actiontec.com>.

## EU CE Declaration of Conformity

To obtain the complete Declaration of Conformity form in softcopy, go to the Actiontec Electronics Declarations of Conformity EU/EEA website at

<http://international.actiontec.com/support/doc>.

The symbol below is placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.



## Technical Support

Go to <http://international.actiontec.com/support> for product support, updates, and more information including:

- Firmware updates
- Troubleshooting
- Registration
- FAQs

### Technical Support Phone Number

United States: 1-888-436-0657