

ScreenBeamTM Pro

Enterprise Edition

Model# SBWD950A

Installation Guide

This Installation Guide will walk you through the easy steps to set up your **ScreenBeam Pro Wireless Display Receiver - Enterprise Edition**. During this process, we'll show you how to

- A** **Install the Receiver**
- B¹** **Connect Using Windows 8.1 or Higher**
- B²** **Connect Using Intel WiDi App (Gen 5)**
- B³** **Connect Using WiFi Miracast-enabled Device**
-  **Switch Display Modes**
-  **Device Management**

Meeting ScreenBeam Pro



Ethernet: connects to ScreenBeam Central Management System via Ethernet for receiver management

HDMI Out: connects to HDTV/projector with an HDMI port for video and audio output

Power: for power supply

Reset: resets system to defaults

LED Indicator: indicates power supply status

USB: for configuring CMS connection data, firmware update, and USB control

VGA Out: connects to HDTV/projector with a VGA port for video output

VGA In: VGA input for VGA bypass

Welcome!

Thank you for your purchase of a **ScreenBeam Pro Wireless Display Receiver - Enterprise Edition** (hereinafter referred to as **the Receiver**). The Receiver connects to your Intel WiDi or Miracast-capable device wirelessly, and displays the device's screen on your HDTV.

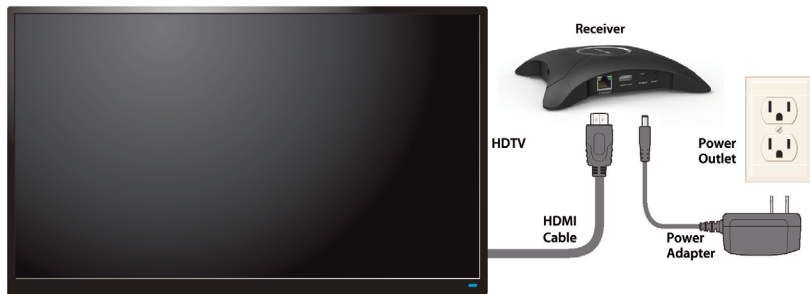
A Install the Receiver

Step 1 Get the **Receiver**, **power adapter**, and **HDMI cable** or **VGA cable** from the Receiver's box.

Step 2 Plug one end of the HDMI/VGA cable into the **HDMI/VGA Out** port on the Receiver, and the other end into an available HDMI/VGA port on the HDTV/Projector.

Step 3 Plug the connector of the power cord into the **Power** port of the Receiver, and the AC adapter into a power outlet.

Step 4 Turn on your TV and switch the input source until you see the **Ready To Connect** screen.



Step 5 (Optional) VGA bypass connection is shown below:

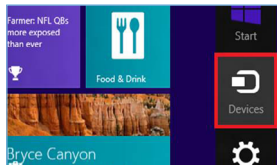


The Receiver is now connected to your HDTV. Proceed to one of the next three sections of this Guide (depending on the device you are using to connect to the Receiver) to finish the connection procedure.

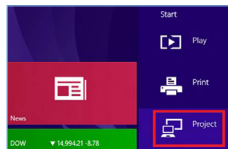
- For Windows 8.1 devices, please proceed to section **B1**;
- For Windows 7/8 devices, please proceed to section **B2**;
- For Android devices, please proceed to section **B3**.

B¹ Connect Using Windows 8.1 or Higher

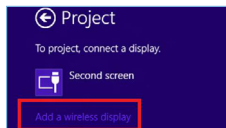
Step 1 From the Windows desktop, navigate to the **Charms** menu and select **Devices**. You can also use the shortcut keys,  + **K**.



Step 2 From the **Charms** menu, click the **Project** icon.



Step 3 From the **Project** screen, select **Add a wireless display**.



Step 4 Select the **ScreenBeam Receiver** from the list.



Step 5 Enter the PIN displayed on the television screen, then connect and display.



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 updates.

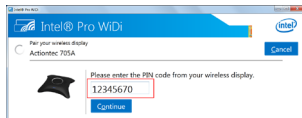
B² Connect Using Intel WiDi App (Gen 5)

Step 1 Find the Intel Wireless Display application on the device and launch it. To find the application, go to **Windows Search** on your device and search for “Intel WiDi” in your apps.

Step 2 The device scans for available receivers. Select your receiver on the list to connect to the receiver.

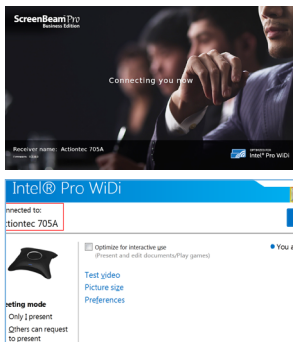


Step 3 A PIN and the host name of the connecting device are displayed. Enter the PIN in the PIN entry box on the WiDi device, and click **Continue**.



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

Step 5 Your device will connect to the receiver, and the device's screen will be displayed on the HDTV.



Note: Connection using Intel WiDi (4.x.x.x) is available when the receiver's AGO feature is disabled. Connection procedure is similar.

B³ Connect Using Miracast-enabled Device

You can connect to the Receiver from a Miracast-enabled Android device, such as a smartphone, tablet, or game console (find the wireless display feature in **Settings**). Also, the device should be running the latest software for best performance.

Step 1 On a Miracast-enabled Android device, locate and open the **Wireless Display Application**.

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

Step 2 The Wireless Display Application scans for available receivers. Select your receiver from the list.

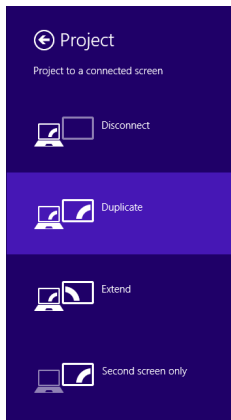
Step 3 Enter the PIN displayed on the TV screen if required, and then connect.

Switch Display Modes

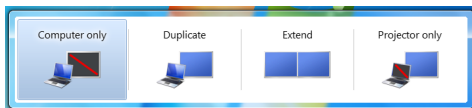
The Receiver supports three display modes when connected with a compatible wireless display application (Intel WiDi or Windows 8.1 Project, for example).

In Windows, press the **Windows** logo + **P** keys simultaneously ( + **P**) to launch the display options and select the desired display mode from the options.

Windows 8.1



Windows 7



▶ Device Management

The receiver's local management console provides the ability to manage the receiver's settings.

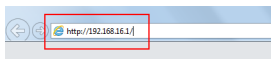
Log into the IT Management Console

When AGO is enabled (it is enabled by default), follow the procedure below to log into the IT Management Console:

Step 1 Connect your device to the receiver.

Note: You must connect your device to the receiver. Otherwise, you cannot access the URL in Step 2.

Step 2 Access the URL address (**http://192.168.16.1**) with a web browser on your device.



Step 3 The web server login interface appears. Type the username and password in the **Username** and **Password** boxes and click the **Login** button.

A screenshot of a web server login interface. It features two input fields: "Username" and "Password". Below these fields is a blue button labeled "Login". A red rectangular box highlights the "Username" and "Password" input fields.

▶ Device Management (continued)

Log into the IT Management Console (continued)

Note:

- By default, the Username is “Administrator” and Password is “WiDi”.
- The username and password are case sensitive.

Setting up Network Information Display on TV Screen

Step 1 Go to the **Network Settings** tab page, and set the **Show network information on TV screen** feature to **Enable** or **Disable**.

Show network information on TV screen ☐ Enable ☒ Disable



Note: By default, this feature is disabled. In this case, the network information is not displayed.

Step 2 Click the “Apply” button to save your settings.

▶ Device Management (continued)

Setting up Managed Meetings

Step 1 Go to the **Features** tab page, and set the **Managed Meetings** feature to **Enable** or **Disable**.

* Managed Meetings ☒ Enable ☐ Disable

* Managed Meetings Port Port (range: 1024 - 65535, default: 33033)

Step 2 For better communication, you can define a port (Managed Meetings Port) for the Managed Meetings.

* Managed Meetings ☒ Enable ☐ Disable

* Managed Meetings Port Port (range: 1024 - 65535, default: 33033)

Step 3 Click the **“Apply”** button to save your settings.

The Managed Meetings function allows meeting participants to share the wireless display interactively, or allows the meeting mediator to manage the display requests from the meeting participants.

The Managed Meeting is available when AGO is enabled. And it works with Intel Pro WiDi only.

▶ Device Management (continued)

Setting up Autonomous Group Owner (AGO)

Step 1 Go to the **Network Settings** tab page, and set the **Autonomous Group Owner (AGO)** feature to **Enable** or **Disable**.

* Wireless Interface Settings:

☐ Autonomous Group Owner (AGO) ☒ Enable ☐ Disable

D3D ID Address

Enable: The receiver will become the group owner of the session. The communication channel can be defined by the receiver. And the Managed Meetings feature is available.

Disable: The communication channel will be consistent with the source device, or be determined through negotiation between the receiver and the connecting device. And the Managed Meetings feature is not available.

Step 2 Click the “**Apply**” button to save your settings.

▶ Device Management (continued)

Setting up Communication Channel

Step 1 Go to the **Network Settings** tab page, and select a desired communication channel from the **Channel Number** box.

A screenshot of a web interface showing a dropdown menu for 'Channel Number'. The dropdown is open, showing the number '11' selected. To the right of the dropdown, the text 'USA (No DFS)' is visible. The entire dropdown menu is highlighted with a red rectangular border.

You should select a channel based on your network environment. Generally, cleaner channels (where less devices work) will provide better performance. You can use Wi-Fi Analyzer to help you identify a clean channel.

Step 2 Click the “**Apply**” button to save your settings.

Setting up PIN Pairing Method

Step 1 Go to the **Features** tab page, and set the **Force PIN Pairing on First Connection** feature to **On** or **Off**.

Force PIN Pairing on First Connection ☒ On ☐ Off [Selecting Off enables](#)

PIN Generation Method ☐ Random ☒ Static [Enter begin HDT](#)

Static PIN: **12345670**

▶ Device Management (continued)

Setting up PIN Pairing Method (continued)

- Select **"Off"** to disable the PIN enforcement function. PIN entry or PBC is required when connecting your device to the receiver for the first time.
- Select **"On"** to enable the PIN enforcement function. In this case, you must enter a PIN code on the device connecting to the receiver for the first time. When this function is enabled, the system provides two PIN generation methods: **Random** and **Static**.
 - **Random:** A PIN code is generated randomly by the system and displayed on the connected HDTV/projector.
 - **Static:** Users can enter seven (7) digits in the **Static** box, then click the **"Apply"** button, and the system generates an eight (8) digit PIN and display it on the **Static PIN** field. This PIN is not displayed on the connected HDTV/projector.

Step 2 Click the **"Apply"** button to save your settings.

▶ Device Management (continued)

Managing HDMI/VGA Port Output

Step 1 Go to the **Features** tab page, and select the desired option in the **HDMI/VGA Port Power management** drop-down box. There are three options: **Always On**, **Screensaver**, and **HDMI Off**.

The screenshot shows a settings interface for 'HDMI/VGA Port Power management'. A red box highlights the dropdown menu which contains three options: 'Always On' (selected), 'Screensaver', and 'Display Off'. To the right of the dropdown is a 'Wait' field with the value '5' and a label 'seconds (an integer, from 5 - 9999) before displaying screensaver or turning off the HDMI port'. Below the dropdown is a 'TV Screen Size (Overscan Settings)' section with a radio button for 'One Touch Play (HDMI-CEC)' set to 'On'. At the bottom right is a checkbox labeled 'Allow source device to override overscan value' which is unchecked.

HDMI/VGA Port Power management: Always On ▼
Always On
Screensaver
Display Off

TV Screen Size (Overscan Settings)
One Touch Play (HDMI-CEC) ● On ● Off

Wait: 5 seconds (an integer, from 5 - 9999) before displaying screensaver or turning off the HDMI port
☐ Allow source device to override overscan value

- **Always On:** Selecting this option, the HDMI output is always on.
- **Screensaver:** Selecting this option, the system will run the screensaver after the defined idle time expires. Users can define the idle time (5-9999 seconds) in the **Wait** time box.
- **HDMI Off:** Selecting this option, the HDMI output will be turned off after the defined idle time expires. Users can define the idle time (5-9999 seconds) in the **Wait** time box.

Step 2 Click the **“Apply”** button to save your settings.

▶ Device Management (continued)

Setting up the Receiver's TCP/IP Settings

Step 1 Go to the **TCP/IP Setting** section in the **Remote Management** tab page, and set the **IP Policy** to **Auto** or **Static**.

- **Auto:** The receiver will be assigned an IP address by the DHCP server.
- **Static:** You can define the IP address, subnet mask, and default gateway for the receiver. If you select Static, you need to define a DNS server, too.

TCP/IP Settings:

IP Policy ☒ Auto ☐ Static

IP Address

192

168

3

3

Subnet Mask

255

255

255

0

Default Gateway

192

168

3

1

Step 2 Click the **“Apply”** button to save your settings.

▶ Device Management (continued)

Setting up Wireless Connection Properties

Step 1 Go to the **Wireless Connection Property Settings** section in the **Remote Management** tab page, and select a desired **Security Type** and provide correct information for relevant items.

Wireless Connection Property Settings:

Network Name

Security Type ▼

Status [ScreenBeam CMS WLAN Adapter ready](#)

[Connect](#)

Note: Available security types are Open, Shared, WPA-PSK[T-KIP], WPA2-PSK[AES], WPA-PSK[TKIP]+WPA2-PSK[AES], PEAP/MSCHAPV2, and EAP-TLS.

Step 2 Click the **Connect** button, and then the adapter will connect to the wireless router (AP).

Device Management (continued)

Defining a DNS Server for the Receiver

Step 1 Go to the **TCP/IP Setting** section on the **Remote Management** tab page, and set the **DNS Policy** to **Auto** or **Static**.

- **Auto:** The receiver will be assigned a DNS server automatically.
- **Static:** You can define a DNS server for the receiver.

DNS Policy ☒ Auto ☐ Static

Preferred DNS Server 192 . 168 . 9 . 2

Alternated DNS Server 192 . 168 . 9 . 1

Step 2 Click the **"Apply"** button to save your settings.

▶ Device Management (continued)

Defining a ScreenBeam CMS for the Receiver

Step 1 Go to the **Central Management System Settings** section on the **Remote Management** tab page, and define the **CMS Host** and the **CMS Port**.

- **CMS Host:** It is the IP address or the FQDN/hostname/domain name/alias name (if you have properly configured the DNS server and the DHCP server) of the server that hosts the ScreenBeam CMS. It supports a domain with six labels at most.
- **CMS Port:** It is the port number for CMS communication.

Central Management System Settings:

CMS Host

Enter IP, domain or hostname

CMS Port

Enter a port number, from 5000 - 65535(D)

Step 2 Click the **“Apply”** button to save your settings.

FCC Information and Copyright

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates,

uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference

to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does

cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is

encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IC warning

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter