

ScreenBeam iOS-over-LAN (Beta) User Guide

Version: Beta

Table of Contents

| Part I | Introduction |
|----------|---|
| 1.1 | Features3 |
| 1.2 | System Requirements3 |
| 1.3 | Related Documents4 |
| Part II | Setting up Receiver5 |
| Part III | Preparing the Infrastructure Network6 |
| 3.1 | Ethernet Network6 |
| 3.2 | Wireless Network |
| 3.3 | Connecting Receiver to Infrastructure Network6 |
| 3.4 | Connecting iOS Device to Infrastructure Network7 |
| Part IV | Installing ScreenBeam IOS Beta App8 |
| 4.1 | Beta App download8 |
| Part V | Connecting ScreenBeam IOS app to Receiver9 |
| 5.1 | Setting up Screen Recording9 |
| 5.2 | Connecting ScreenBeam IOS app to ScreenBeam 96011 |
| 5.3 | Disconnecting ScreenBeam IOS app from ScreenBeam Receiver15 |
| Part VI | Browsing Files17 |
| Appendix | (I FAQ |

Part I Introduction

Actiontec's ScreenBeam iOS app supports wireless display over LAN with Apple iOS devices. Together with ScreenBeam 960, the ScreenBeam IOS app expands Apple iOS devices' capability to wireless display to TVs that are not Airplay-capable.

1.1 Features

Key features include:

- Supports various Apple iOS devices
- Wireless display to TVs that are not Airplay-capable

1.2 System Requirements

Minimum and recommended system requirements for installing and running the ScreenBeam IOS app are listed below:

Minimum

- OS: Apple iOS 11.0 (or higher)
- CPU: Apple A8 or better
- WiFi: 802.11AC
- RAM: 1GB or higher
- Available storage: 100MB

Recommended

- OS: Apple iOS 11.0 (or higher)
- CPU: Apple A19 or better
- WiFi: 802.11AC
- RAM: 2GB or higher
- Available storage: 100MB

ScreenBeam Receiver

ScreenBeam 960 receiver with firmware 9.15.38.0 (or higher)

Other

HDTV/projector with available HDMI or VGA port Ethernet or Wi-Fi with Non-DFS 5 GHz channel(s)

1.3 Related Documents

To better understand the deployment of ScreenBeam, we recommend you read the following documents:

- ScreenBeam 960 Configuration Guide
- ScreenBeam Central Management System user guide

Note: ScreenBeam Central Management System (CMS) is not required for ScreenBeam IOS solution, but it is highly recommended for managing ScreenBeam receivers. For more detail or support, go to the address below:

https://www.screenbeam.com/products/screenbeam-cms/.

Part II Setting up Receiver

Confirm that the support for ScreenBeam IOS app is enabled on your receiver. IOS app

- 1. Start CMS, and open "Receiver Settings".
- 2. Go to the "Features" tab and confirm that "Mac OS or Windows 7" is set to "Enable" in the "Wireless display over LAN" section.

| 🗞 Receiver Settings | | | × | | |
|--|---|--|------|--|--|
| Actiontec 7FDC | | | | | |
| Device Configuration Features Netwo | rk Settings (Local Managemer | t) Remote Management | | | |
| Wireless display ove | r LAN | | Î | | |
| Wireless display over LAN allows dient de connected to the network via Ethernet (re | vices to project over the local ecommended) or via Wireless. | network connection. ScreenBeam receiver must be | E | | |
| Windows 10: | Enable O Disable | Requires Windows 10 build 1703 (or later). | | | |
| Mac OS or Windows 7: | Enable Disable | Requires ScreenBeam MacOS or Windows 7 software. | | | |
| P2P Wireless Setting | (| | | | |
| Setting is only applicable to the P2P wirele | ess connection. | | | | |
| *× P2P Connection Mode: | ○ NGO ● AGO | AGO-P2P channel is determined by ScreenBeam | | | |
| ◆ P2P Operating Channel: | 165 💌 | United States, Canada, Taiwan, India, | | | |
| * Transmit Power: | Medium | Setting will impact the broadcast range. | | | |
| | | | Ŧ | | |
| * Requires the receiver to reboot to take effect. ♦ New configuration will take effect on the next connection. ¥ Only applies to newly connected devices. Already paired devices may not see the change. | | | | | |
| | | Save | ncel | | |

Note:

• You can also set up the "Wireless display over LAN" feature in the receiver's Local Management Interface. Refer to the receiver's user manual for details on how to access the receiver's Local Management Interface.

| Device Configuration | Features | Firmware Upgrade | Local Management | Remote Management | Maintenance | Logout | | | | |
|--|----------|------------------|------------------|-------------------|-----------------------------------|---------------------|--|--|--|--|
| Wireless display over LAN | | | | | | | | | | |
| Wireless display over LAN allows client devices to project over the local network connection. ScreenBeam receiver must be connected to the network via Ethernet (recommended) or via Wireless. | | | | | | | | | | |
| | | Min | dowe 10 O Enable | Disable | Pageiras Mindous 10 build 1703 / | sr Islar) | | | | |
| | | VVIII | | C Disable | Requires windows to build 1703 (c | n later) | | | | |
| | | Mac OS or Wi | ndows 7 💿 Enable | Olisable | Requires ScreenBeam MacOS or V | Vindows 7 software. | | | | |

• We recommend you reboot your receiver though a reboot is not required.

Part III Preparing the Infrastructure Network

ScreenBeam IOS app can mirror the full screen over a wireless network and including video (except for protected content). A robust 11AC Wi-Fi is recommended for your iOS device as it is more stable and can deliver large throughput.

3.1 Ethernet Network

10/100 switch is preferred. ScreenBeam 960's Ethernet is only 10/100 so it works best with 10/100 switches or Gigabit switches that support buffering.

We highly recommend avoid connecting ScreenBeam 960 behind a VoIP conference or phone via Ethernet bypass.

3.2 Wireless Network

Assure the Wi-Fi infrastructure is configured properly to avoid wireless interferences.

Use a Wi-Fi analyzer tool to evaluate your network environment and make the necessary adjustments to achieve a clean Wi-Fi implementation. A good resource is <u>http://www.metageek.com</u>.

3.3 Connecting Receiver to Infrastructure Network

ScreenBeam receiver can be connected to your network over either ireless or wired connection. You can also deploy ScreenBeam receivers on separate VLAN, as long as the source's VLAN is routed to communicate with the receiver's VLAN.

Note:

• Do not connect ScreenBeam receivers behind a NAT'ed router.

3.4 Connecting iOS Device to Infrastructure Network

Connect your Apple iOS device to the same LAN where the receiver is connected. Make sure the iOS device gets the best signal strength from the Wi-Fi it's connected to. Make sure the iOS device and the ScreenBeam receiver can ping each other.

Part IV Installing ScreenBeam IOS Beta App

4.1 Beta App download

To download the iOS beta app, you will need to fill out the form from this link. An email from Apple Beta TestFlight will be sent with a redeem code. You will be asked to download Apple's TestFlight app from the store where the ScreenBeam beta app gets distributed.

Part V Connecting ScreenBeam IOS app to Receiver

In this chapter, we discuss the procedures for connecting ScreenBeam IOS app to ScreenBeam 960 receiver.

5.1 Setting up Screen Recording

For an iOS device, Screen Recording is required to connect ScreenBeam IOS app to a ScreenBeam receiver. We need to add Screen Recording to Control Center before using ScreenBeam IOS app to connect an iOS device to a ScreenBeam receiver. Follow the procedure below to add Screen Recording to your iOS device's Control Center.

1. Open the Settings app.



2. Go to Settings > Control Center > Customize Controls.

3. Find **Screen Recording** in the More Controls section, and tap the + button to add **Screen Recording** to the **Include** section.

| No SIM 奈 | 9:47 AM | 6 * 100% |
|------------|---------------------|-----------------|
| Control | Center Customize | |
| + 🖸 | Camera | |
| + 🖻 | Do Not Disturb Whil | e Driving |
| Ð | Flashlight | |
| () | Guided Access | |
| + 🖻 | Low Power Mode | |
| () | Magnifier | |
| + 🗹 | Notes | |
| () | Screen Recording | |
| + 🚺 | Stopwatch | |
| | Text Size | |
| + | Voice Memos | |
| • 🖻 | Wallet | |
| | | |

4. Open **Control Center** on your iOS device, and confirm that the **Screen Recording** icon is added successfully.



5.2 Connecting ScreenBeam IOS app to ScreenBeam

960

Follow the procedure below to connect your iOS device to a ScreenBeam receiver:

- 1. Make sure that Wi-Fi on the iOS device is turned on.
- 2. Confirm that the iOS device and the ScreenBeam receiver are connected to the same LAN.
- 3. Start ScreenBeam IOS app. ScreenBeam iOS app starts and scans for available ScreenBeam receivers.



Note: More receivers will be discovered if Bluetooth is enabled on your iOS device.

4. Tap a receiver in the list to connect to the receiver. A PIN entry box appears. Enter the PIN shown on TV and click **Connect** to connect to the receiver.



Note: Refer to the receiver's User Manual for details about the PIN. If the PIN is not displayed on the connected screen, you should go to your network administrator for help.

5. Your iOS device and ScreenBeam are successfully paired.



6. Open **Control Center**, and press and hold the Screen Recording icon to open the **Screen Recording** window. Select **ScreenBeam** and tap **Start Broadcast**.



7. You see your device's screen mirrored on the big screen after a short while.

5.3 Disconnecting ScreenBeam IOS app from ScreenBeam Receiver

You can disconnect your iOS device from a ScreenBeam receiver by following any one of the methods below:

• Open Control Center and tap the Screen Recording icon to stop screen mirroring.



• Tap the red status bar on the top of your iOS device's screen, and tap **Stop** on the pop-up message window.



Part VI Browsing Files

ScreenBeam IOS app provides a simple way to view your files.

1. Load files to your iOS device.

Start iTunes and go to *Device* > **File Sharing** > **Apps** > **ScreenBeam**. Tap the **Add File** ... button to add files to the ScreenBeam library. You can also load files to another folder.



2. View files.

After you have your iOS device's screen mirrored, tap the **Browse** button on the upper right corner of the ScreenBeam IOS app, navigate to the location of your files, and select a file to open.





To close the file you have opened, tap **Back** on the left of the file title bar.



Appendix I FAQ

Q: ScreenBeam connection is down after the iOS device is locked automatically. How can I maintain the connection?

A: Set the iOS device's Auto-Lock to never so that the device's screen stays on always.

Q: My iOS device and the TV output the same audio. Is there a way to stop the audio on my iOS device?

A: Set the iOS device to mute when you are using ScreenBeam IOS app to share your video on a big screen.

Q: Why do I see a black screen when mirroring iTunes, Netflix or Amazon video.

A: ScreenBeam iOS solution does not support streaming of protected content.

Q: Why do I see video tearing and mirroring is not smooth?

A: ScreenBeam iOS solution works best with A9 (or better) processor with the latest iOS updates.

Q: Why do I see occasional pixilation while mirroring even when presenting a static image or powerpoint?

A: Verify the network traffic congested and wireless environment is not interfered with.

Q: Why do I get a black screen upon connection and it takes a while to see the iOS screen or I'm seeing extreme lagging?

A: Make sure your ScreenBeam 960 receiver is updated to firmware 9.15.38.0. In addition, make sure the receiver is not connected behind a VoIP phone's Ethernet output.

Q: Does the ScreenBeam 960 support Apple AirPlay mirroring? No.

Q: Can ScreenBeam iOS app support YouTube video?

A: Yes. ScreenBeam iOS app can mirror non-protected local and online video such as YouTube's through the browser or app.

Q: What's a cool way of using the iOS device while connecting to ScreenBeam 960? A: You can launch the camera app and use it as a document camera!