



beam^{pro}[™]
System Requirements

About this Guide



Thank you for considering BeamPro

Thank you for your interest in purchasing the BeamPro Smart Presence™ System. We're excited to help you get going. We've created this handy guide to help ensure that your BeamPro system will have everything it needs to operate and perform without issue.

We've broken these requirements down into a few sections so you can easily review them and ensure that your location supports them. Don't worry, most locations already have these requirements taken care of.

What we will cover in this guide

We'll be going through the various components of BeamPro and what they will need to operate effectively. We've created a checklist of these requirements to help you along the way. The sections we will cover include the following items below.

Location Requirements:

- Internet Connection
- Wireless Network
- Security
- Physical Space Needs and Considerations

PC Requirements:

- Hardware Requirements
- Peripherals
- Internet Connection
- A Valid Email Address

Location Requirements



The following is a list of requirements your space needs to support in order to ensure that your BeamPro Smart Presence™ Device (SPD) operates to its fullest potential.

□ A High Speed Internet Connection (Cable, Fiber, Etc.)

- You'll need service that supports at least 2Mbps up and down, for each SPD, to ensure they can send and receive crisp audio and fluid video.
- Your connection must allow outgoing UDP and return traffic on a small range of network ports. UDP, or User Datagram Protocol, is a networking protocol, like TCP, but is better suited for the real-time communication you'll be doing while using Beam. We require network ports from 6868 to 6871 to be open in both directions on your firewall. For more information on this we recommend you talk with your local network administrator, or review our [Network Administrator's Guide](#).
- For the best performance, please make sure that your firewall can support STUN for NAT transversal. NAT, or Network Address Transversal, and STUN, or Session Traversal Utilities for NAT, are features that the Beam system needs to guard against lost connections. This allows it to create direct P2P (peer to peer) connections, the best way to make video calls. For more information on this we recommend you talk with your local network administrator, or review our [Network Administrator's Guide](#).
- Your DHCP server must provide the Beam system with a local IP address on your network.

□ A Wireless Network (Wi-Fi)

- A wireless router or system that supports 802.11 a/g/n. We recommend using 5Ghz (a/n) and channels not heavily used in your area.
- Wireless Security (Wi-Fi Password) We support the use of WEP, WPA, WPA/WPA2 Personal, and some versions of WPA/WPA2 Enterprise.

□ Physical Space Needs and Considerations

Since the BeamPro SPD is designed to be mobile, you'll need to prepare your location to ensure safe and effective operation.

- For the BeamPro Dock, you'll need an area of space on the floor that measures 2 feet by 2 feet square to allow enough space for the SPD to be parked.
- The BeamPro Dock will also require access to a grounded electrical outlet to charge the SPD when it is docked.
- BeamPro is able to navigate ADA compliant ramps and can easily operate on most surfaces. However, it cannot travel up or down stairs, and for safety, should avoid getting near stairs or steps of any kind.
- BeamPro is powerful enough to push aside objects like rolling office chairs, and open doors, but is unable to operate door handles or press buttons.

A Word On Beam's Security

The Beam system encrypts all the communication that travels through our system to ensure your sessions remain private and secure. HTTP and XMPP (for session setup) are encrypted using TLS/SSL, and session data (video and audio) is encrypted with AES-256 and HMAC-SHA1.



PC Requirements

BeamPro is controlled using our custom software. The computer system that controls the BeamPro will need to meet the requirements below to ensure that the software can run effectively.

PC Hardware Requirements

- One of the following operating systems:
 - Microsoft Windows 7 or higher
 - Macintosh OSX 10.6 or higher
- An Intel i3 2Ghz or higher processor
- At least 2 GB of RAM
- DirectX 9 compatible graphics card on Windows or an OpenGL 2.0 compatible graphics card for Mac.

Peripheral Requirements

- Wired mouse with a scroll wheel (for camera zoom controls)
- Wired keyboard
- High quality HD web-cam (we recommend the Logitech C910)
- High quality microphone and speakers (we recommend the ClearOne Chat 60 USB speakerphone system.)

□ A High Speed Internet Connection (Cable, Fiber, Etc.)

- You'll need internet service that supports at least 2Mbps up and down to ensure your system can send and receive crisp audio and fluid video.
- The Beam system requires outgoing TCP on Port 443 to connect to allow Beam's software to connect to its servers.
- Your connection must allow outgoing UDP and return traffic on a small range of network ports. UDP, or User Datagram Protocol, is a networking protocol, like TCP, but is better suited for the real-time communication you'll be doing while on Beam. We require network ports from 6868 to 6871 to be open in both directions on your firewall. For more information on this we recommend you talk with your local network administrator, or review our [Network Administrator's Guide](#).
- For the best performance, please make sure that your firewall can support STUN for NAT transversal. NAT, or Network Address Transversal, and STUN, or Session Traversal Utilities for NAT, are features that Beam needs to guard against lost connections. This allows Beam to create direct P2P (peer to peer) connections, the best way to make video calls. For more information on this we recommend you talk with your local network administrator, or review our [Network Administrator's Guide](#).

□ A Valid Email Address

- In order to use the Beam software you will need to have a valid email address. This will be your user ID when you login to the Beam software or website.

Technology Considerations

The Beam system uses the Extensible Messaging and Presence Protocol (XMPP) to establish sessions between our software and the BeamPro SPDs. XMPP, also known as Jabber, is an open standard for presence and messaging, used by many popular chat systems, such as Google Talk. (For more information about XMPP, please see <http://xmpp.org>) On top of XMPP, the Beam system uses a variant of the Jingle protocol to create a direct, encrypted peer-to-peer connection between our software and devices to efficiently send audio and video data.

Further Information

We hope you found this checklist helpful in preparing for the Beam system. If you have any additional questions please contact us. We're here to help. Please send your questions to info@suitabletech.com.

Thank you again for your interest in BeamPro, we can't wait to get you Beaming!