



Avaya 1010/1020 Installation Guide

Preparing for Installation

As you prepare to install Avaya 1010/1020, consider the physical conditions of the room, compatibility with displays, and your network configuration and settings. Related documentation is available from <http://www.avaya.com/support>.

Before You Install

If you are not using DHCP, you may need guidance from your network administrator to complete the initial configuration. You will need to manually set an IP address, subnet mask, and default gateway for your Avaya system.

Network Bandwidth

Poor audio and video quality may result from insufficient bandwidth on your network. Avaya recommends that your network be capable of at least 1 Mb/s for a high definition video call. During video calls with lower bandwidths, Avaya systems automatically select the best resolution that can be achieved with the available bandwidth.

Room Configuration

The size, shape, layout, and occupancy of the room dictate where you place your video conferencing components. For example, in a small office installation place the Avaya Video Camera 100 at one end or corner of the room. In a multi-user conference room, place the Avaya Video MicPod 1000 at the center of the group of participants.

You can lock the Avaya codec with a secure loop to prevent physical removal of the device.

WARNING Avoid routing cables from the codec across foot-traffic areas. Tripping on the cables can cause both personal injury and permanent damage to the connectors in the cables and the codec itself.

The lighting in your environment affects image quality. The optimal lighting for Avaya systems is 300 to 500 LUX. If light levels are too low, consider adding artificial lighting. Indirect light from shaded sources or reflected light from pale walls often produces excellent results. Avoid the following:

- direct sunlight on the subject matter, the background, or the camera lens
- direct illumination of the subject matter and camera lens
- colored lighting
- harsh side lighting or strong light from above

Avaya 1010/1020 Components

Your Avaya 1010/1020 package contains the following components:

- One of the following cameras and cables:
 - Avaya Video Camera 100 and a 2.9 meter (9.5 foot) cable. Contact Avaya for optional 7.5 meter (24.6 foot) or 15 meter (49.2 foot) cables.
 - Avaya Video Camera 200 and a 7.5 meter (24.6 foot) cable. Contact Avaya for the optional 15 meter (49.2 foot) cable. This option requires the additional audio component.
 - Avaya Video MicPod 1000.
- Avaya 1010/1020 codec and power supply
- Avaya remote control, including three AAA batteries
- One ferrite
- Quick reference card
- Documentation CD
- Standard cable kit

Installing Avaya 1010/1020

Before you install an Avaya video communications system, read the *Avaya Safety and Regulatory Notices* for important safety information. The document is available on the product CD-ROM and on <http://www.avaya.com/support>.




WARNING Exercise care when connecting cables to the codec. Face the back of the codec or ensure that all connectors are visible when connecting a cable to the codec.

To install your Avaya 1010/1020 system, remove all components from the product packaging and place them in the desired positions in your conference room or office.


WARNING Do not place anything on top of, below or adjacent to the codec that can obstruct air flow around the unit or generate heat. Doing so can cause the system to overheat and reboot. Prolonged overheating can result in damage to the codec. Ensure that the room that houses the codec is properly ventilated and temperature controlled.


Refer to the Avaya quick reference card included with your system for a visual depiction of the proper setup. The numbers that appear on the quick reference card correspond to the following steps:



1. Open the battery compartment on the back of the remote control.
 - a. Before inserting the batteries, stretch each of the two straps across the outer battery slot closest to the battery.

- b. Insert the two outer batteries, negative end (-) first against the spring, and press the positive (+) end into place, thus trapping the cloth straps beneath the batteries.
 - c. Lay the longer cloth strap over both batteries and insert the center battery's negative end against the spring to trap the longer cloth strap beneath it. Press the positive end of the battery into place.
 - d. Lay the ends of the cloth straps over the center battery and install the cover.
2. Complete one of the following options to install the camera and audio components:
 - a. To install Avaya Video Camera 100 as both your camera and audio component, insert the camera cable into the port on the rear of the camera and plug the opposite end into the camera  port on the codec.
 - b. To install Avaya Video Camera 200 as your camera component and Avaya Video MicPod 1000 as your audio input device, complete the following steps:
 - Insert the camera cable into the port on the rear of the Avaya Video Camera 200 and plug the opposite end into the camera  port on the codec.
 - Insert the end of the cable from the Avaya Video MicPod 1000 into the microphone  port on the codec. Optionally, you can add an Avaya Video MicPod 1000 extension cable (not included) to the Avaya Video MicPod 1000. The extension cable is 15 meters, 49.2 feet and Avaya recommends using no more than one extension cable. Refer to [Configuring Dual Avaya Video MicPod 1000s](#) for the dual Avaya Video MicPod 1000 option.

WARNING Avaya recommends that you use the cable strain relief clip included in the Avaya Video MicPod 1000 product box as described in [Attaching the Avaya Video MicPod 1000 Strain Relief Clip](#).

3. Insert the video display cable into the port on the rear of your display and the opposite end into the HD Display **HD**  port on the codec. Insert the display power cord into a power outlet on the wall.

NOTE If you plan to use external speakers not built into the display, connect the speakers to the port marked with the line out symbol  on the back of the codec.

4. Insert the network cable into the network port marked with the LAN symbol  on the back of the codec. Attach the ferrite to the network cable within 10 centimeters (four inches) of the codec. Insert the opposite end of the network cable into a network port.
5. Insert the cord from the power adapter into the power outlet marked **DC 19V**  on the back of the codec. Insert one end of the power cord into the power adapter and the opposite end into a power outlet on the wall.

The Avaya system starts and illuminates a blue LED on the front of the codec. The system status bar at the bottom of the screen indicates system and network status. When the system is booting, status also appears at the top of the **REDIAL** list to indicate the current state of the system. See [Status Icons](#) for more information about the state of the system as it boots or as conditions change.

The camera initializes the first time it is connected to a codec. This process may take several minutes.

WARNING Do not disturb or disconnect the devices during this time as you may damage the system.

6. An **Initial Configuration** screen prompts you to configure the system. Refer to the *Avaya 1010/1020 User and Administrator Guide* to complete the initial configuration.

If the initial configuration screen does not appear and the display is blank, refer to [Troubleshooting Installation Issues](#).

Placement Behind a Firewall

Refer to the *Avaya 1010/1020 User and Administrator Guide* for information about configuring the system for firewall traversal.

Supported Display Types and Resolutions

Avaya 1010/1020 can connect to 720p HD displays through an HDMI cable. Supported display resolutions include the following:

- 720p
- 768p

NOTE Avaya 1010/1020 automatically sets the **Display Resolution** preference in **Administrator Preferences : Appearance : Displays** to *Auto* if you select an option for this preference that the connected display does not support.

Optional Peripherals

You can connect the following optional peripherals to enhance your Avaya system:

Peripheral	Usage
Audio Out (Line Out)	For use with external line level output speakers that are not built into display 1 or with a headset (left plus right). Warning: Excessive sound pressure from earphones and headphones can cause hearing loss.
USB	For use with audio over USB devices and USB to serial adapters.


Configuring Dual Avaya Video MicPod 1000s

In a dual Avaya Video MicPod 1000 configuration, you use a combination of two Avaya Video MicPod 1000s, one splitter cable, and extension cables in large rooms for maximum omnidirectional audio coverage.

You cannot use multiple splitters to connect to more than two Avaya Video MicPod 1000s; however, you can use variations on three configurations of extension cables:

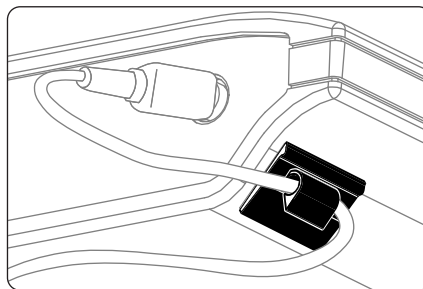
- If you connect the male end of the splitter directly to the codec, you can use none, or one extension cable to connect an Avaya Video MicPod 1000 to each of the female ends of the splitter.
- If you use one extension cable to connect the codec to the splitter, you can use none, or one extension cable to connect an Avaya Video MicPod 1000 to each of the female ends of the splitter.
- If you use two extension cables to connect the codec to the splitter, you must connect both Avaya Video MicPod 1000s directly to the female ends of the splitter.

WARNING Avaya recommends that you use the cable strain relief clip included in the Avaya Video MicPod 1000 product box as described in [Attaching the Avaya Video MicPod 1000 Strain Relief Clip](#) to avoid personal injury or damage to the unit.

Avaya 1010/1020 detects any cable attached to its microphone input as an Avaya Video MicPod 1000. If an Avaya Video MicPod 1000 is not attached to the extension or splitter cable and the microphone input is selected as the active microphone, no audio is available. The  indicator does not appear in the status bar and the **Active Microphone** field in the **System Information** page reports *Microphone In* as the active microphone.

Attaching the Avaya Video MicPod 1000 Strain Relief Clip

Before attaching the strain relief clip to the codec, ensure the codec surface is clean (free of dirt, dust oil, and other residues) and dry. The adhesive tape on the strain relief clip is intended for a single use. Attach the strain relief clip to the codec and route the Avaya Video MicPod 1000 cable through the strain relief clip as shown in the following illustration:



To obtain a replacement strain relief clip, contact Avaya.

Troubleshooting Installation Issues

Installation issues you may encounter with Avaya 1010/1020 typically involve display output issues, improperly connected cables, or network bandwidth or connectivity. For more information about troubleshooting issues you may encounter with Avaya 1010/1020, refer to the *Avaya 1010/1020 User and Administrator Guide*.

Loose Cables

Improperly connected or loose cables are common causes of problems with hardware units. When investigating a system problem, first inspect all external cable connections. Ensure that connections are correct and secure, and that nothing is obstructing the cables.



No Power

To troubleshoot a power problem, complete the following steps:

1. Disconnect the power supply unit (PSU) from the codec and the AC source.
2. Plug a working appliance into the AC source to determine if the source is functioning.
3. If the AC source works, plug the PSU into the AC source, but do not connect the PSU to Avaya 1010/1020. If the green LED on the PSU illuminates, the PSU is probably functioning.
4. Disconnect the PSU from the AC source. Connect the PSU to the Avaya codec. Reconnect the PSU to the AC source. If the Avaya codec fails to boot and the green LED on the PSU dims, the codec may be the source of the problem.



IP Address Displays Invalid Value

After you complete the initial configuration, if the IP address that appears at the top of the main screen displays an invalid value, one of the following conditions may exist:

Condition	Resolution
The unit is configured to obtain an address using DHCP and no DHCP server is available. Note: The DHCP client self-assigns an address in the 169.254 class B network and the red network symbol  appears in the status bar on the main screen.	Verify that the unit is plugged into a network that has a DHCP server present.
Faulty Ethernet cable connection.	Replace the Ethernet cable with a high quality cable.
The unit is configured to use a static IP address, but no IP address has been entered.	Identify and enter the necessary IP information.
Network connection is unavailable. A red network symbol  appears in the status bar on the main screen.	Inspect your network connection.

Camera Issues

Video from the camera appears in a small window on the main screen of the user interface above the **REDIAL** list. If no video from the camera appears, do the following:











- Ensure that the camera is properly connected to the Avaya codec as described in [Installing Avaya 1010/1020](#). Only Avaya Video Camera 100 and Avaya Video Camera 200 are supported with Avaya 1010/1020.
- Verify that the blue LED on the front of the camera is lit and not blinking.
- From the main screen of the user interface, press  on the Avaya remote control to access the **System Menu**. Press  to access page 2 of the **System Information** page. Ensure that the status of the camera is **Ready**.

Improving a Dim Image

Adjust the **HD Camera Brightness** preference in **User** (or **Administrator**) **Preferences : Diagnostics : High Definition Camera**. You can also add a light source to improve the subject's illumination. Read more at [Room Configuration](#).

Status Icons

The following table identifies the icons that can appear in the system status bar.

Icon	Condition
	Indicates that the communication subsystem is initializing. If this icon reappears after the system has booted, a problem has occurred. Reboot the system.
	Indicates that the system is initializing. When the system is initializing, functionality on the main screen is disabled and no entries appear in the REDIAL list. This icon also appears when a new device is connected to the system after the system boots and disappears when the device is ready. If the icon persists, a problem has occurred and rebooting the system is necessary.
	Indicates that the system does not have an active microphone. Check the device's connections and then check the option you selected for the Active Microphone preference.
Network Status   	Identifies the network status, as follows: connected (green indicator) in progress (yellow indicator) disconnected (red indicator)
 	Indicates the status of the registration process with the SIP server. The yellow SIP icon appears when your Avaya system is trying to register with the SIP server. If the registration fails, the red SIP icon appears.
System Overheating  	The yellow indicator warns you when the system temperature is above normal operating temperature. The codec adjusts fan speed automatically to cool itself. The red indicator warns that the system is overheated and approaching the maximum allowed operating temperature and will automatically reboot after reaching it. Warning: Temperatures that require the codec to reboot can permanently damage codec components. Ensure the room that houses the codec is properly ventilated and temperature controlled.

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