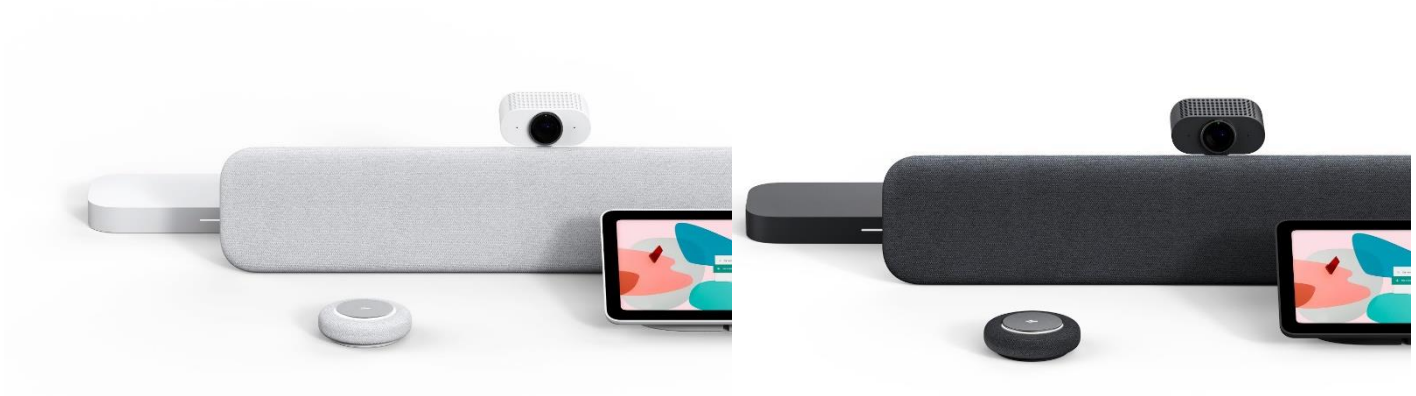# Series One Room Kits

Setup Guide

Version 1.0

11/19/2020

Note: The instructions contained in this document are meant to be guidelines for a basic installation. More detailed information and additional resources can be found here:
https://support.google.com/meethardware/?hl=en#topic=4487243

Google Meet Series One Room Kits from Lenovo
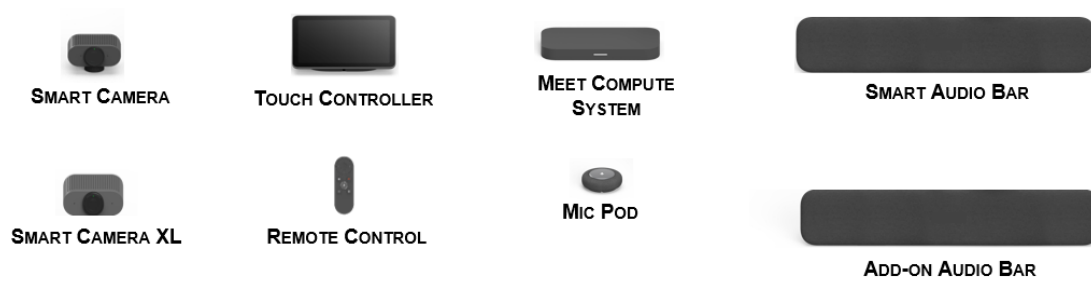
Pre-Deployment

Google Meet, part of Google Workspace

Google Meet is part of Google Workspace (formerly G Suite). The licenses for Meet rooms is separate from a user license. Additional licenses can be arranged via your Google Workspace administrator.

Overview

Series One Devices

Kits are comprised of a combination of 8 different devices. Every kit ships with the same compute box (no variance in specs), and a Smart Audio Bar. The additional components vary based on the kit.

SMART CAMERA   TOUCH CONTROLLER   MEET COMPUTE SYSTEM   SMART AUDIO BAR

SMART CAMERA XL   REMOTE CONTROL   MIC POD   ADD-ON AUDIO BAR

A few items of note:
- The **Smart Audio Bar** is the same in all three size kits. The Large kit has both a Smart Audio Bar and an Add-on Audio Bar. The Add-on is dependent on the primary Smart Audio Bar for connectivity. The Add-on will not function on its own.
- The Small kit and Medium kit use the same **Smart Camera**. The Large kit uses **Smart Camera XL**. The primary differences are in zoom length and field of view. See the Datasheet for more information.
- The **Touch Controller** can either be placed on top of a table or credenza, or if turned 180° the screen will reorient so it can be mounted to the wall.
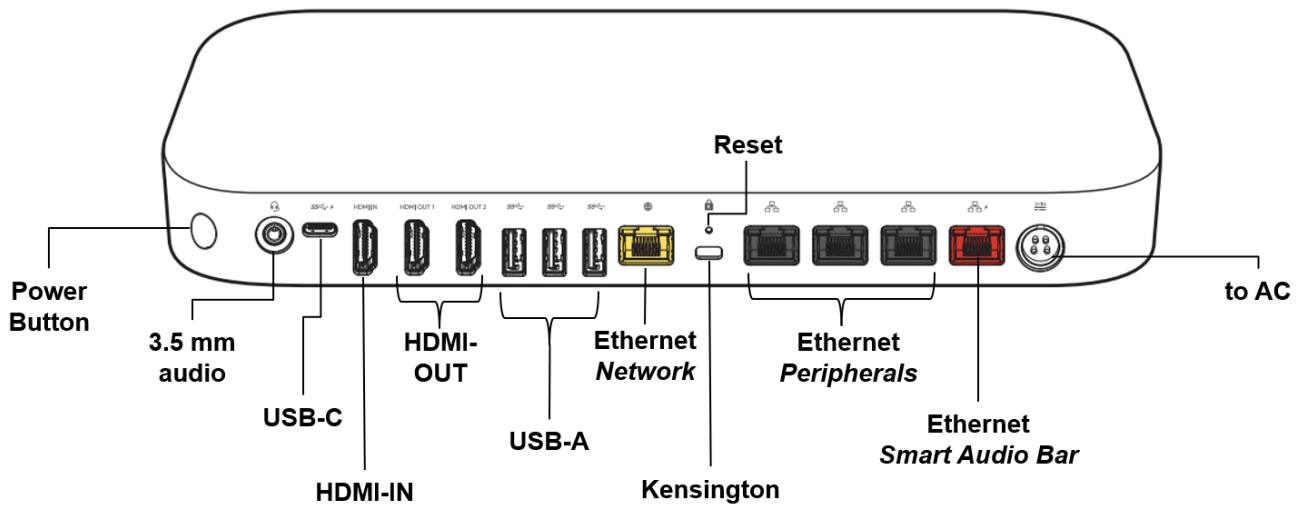
Google Meet Series One Room Kits from Lenovo

Wiring Diagrams

Wiring diagrams for all three size kits can be found in the Appendix of this document.

Port Diagram

Mounts and Stands

The **Smart Camera** and **Smart Camera XL** ship with a mounting mechanism. It's comprised of a steel dome with a threaded screw that attaches to the bottom of the camera. The dome is then seated in the base via a strong magnet. This same magnet holds the Camera + dome + base assembly to the top of the Smart Audio Bar. **Please note:** We advise using caution when connecting the steel dome to the magnetic base to prevent skin being pinched.

The Smart Cameras can also be set up using standard photography mounts and tripods via the ¼" 20 UNC thread on the underside of the camera.
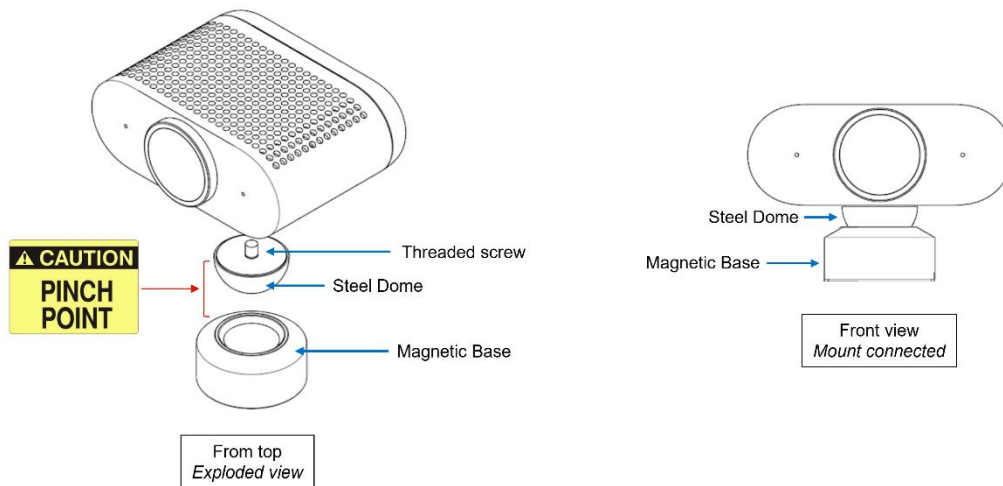
The bottom of the Series One **Compute** is magnetized. It can be mounted using one of two heavyweight metal options, both of which are included with each kit:
- Upright L shaped stand
- Flat metal plate with VESA mount holes

The most common installations include:
- Compute in stand atop a credenza or conference table
- Compute in flat metal plate under conference table
- Compute in flat metal plate behind front-of-room display

L Stand   VESA mount
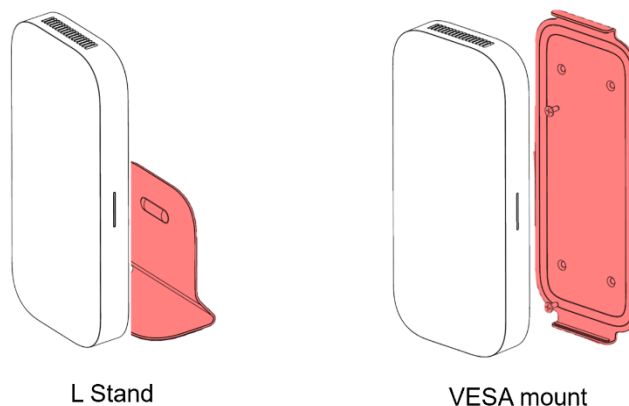
The **Microphone Pod** is magnetized. Each mic pod comes with a mounting plate that can be affixed to a surface, then the mic pod sits atop it.

Remote Control

Remote controls are included with the Small kit. The front-of-room display will show the meetings for the day. If a remote is in use, customers simply interact with the front-of-room via QWERTY keyboard or (flip side) directional buttons.
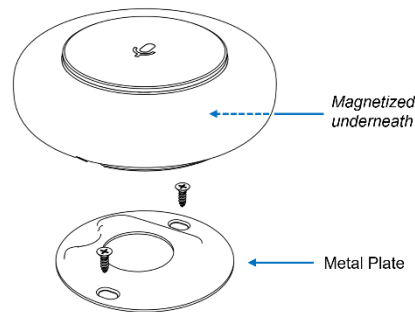
The remote control system is comprised of:
- Charging base w/ non-detachable cord that terminates at a USB-A plug
- Remote control – dual sided
- USB-A dongle

The charging base is not meant to plug into the kit's compute. One *can* do this--it will just draw power (not transmitting any data). More commonly, the base should be plugged using a customer-supplied charging brick/charging station.

The remote makes a connection to the Meet hardware by way of a USB dongle. To connect the remote, plug the dongle into one of the USB-A ports on the compute. **Note:** the remote does not function without the dongle.

First-time Setup

Series One kits arrive to the customer as one branded box. Within the overpack are devices in smaller boxes w/ standard safety disclosure documents and a simplified illustration-only setup guide for the individual devices. Each connection cable, mount, stand and even the screws and anchors needed for wall installation are in the boxes. There is also a small plastic pouch in each overpack box.

Plastic Pouch with Warranty Card and Stickers

Inside a small plastic bag, customers will find labels for each of the components in their kit. Labels are provided for ease of locating serial numbers of the individual devices. Place these labels onto the devices, or store them somewhere secure so they can be referenced later.

Unbox

Remove all pieces from their boxes, taking care to place the smaller mounts, brackets and screw bags near the corresponding device.

Plug in

Because this system leverages Power Over Ethernet, there are only ethernet cables connecting the peripherals (Smart Audio Bar, Smart Camera, Mic pod(s) and Touch Controller) to the compute

Share Content (Share Screen)

The preferred method for sharing content is to join the Meet meeting from another device and share as a participant into the call. If that option is not feasible, there is one HDMI-In port on the left side of the device, between USB-C and HDMI-Out ports. See port diagram here.

User Data and Privacy

How to Reset Back to First Time Setup

To reset the compute back to first time setup/out of box experience, two steps are required:

1. **Wipe device (**AKA paperclip reset)
   a. Turn off the Chromebox, attach a keyboard
   b. Put a paperclip (or pushpin) into the recovery button hole.
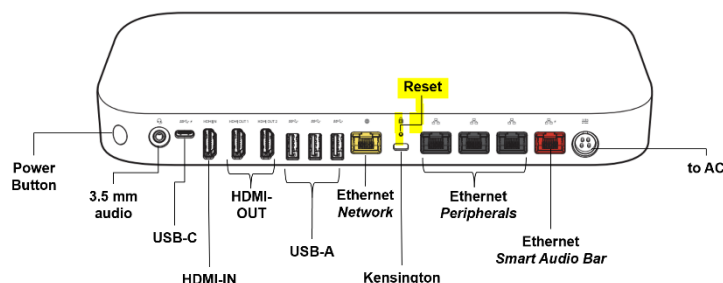
c. Press down the recovery button with a paperclip while turning on the device.
d. Press Ctrl+D.
e. Press the recovery button with the paperclip again.
f. The device restarts and displays a red exclamation point.
g. Press Ctrl+D.

The Chromebox restarts and starts the transition to Developer mode. This clears all local data and takes approximately 10 minutes. Note: If Forced re-enrollment is enabled for the device, you'll see a note that Developer mode is blocked. This shortens the wipe process, and still allows for re-enrollment when the device automatically restarts in Verified mode.

h. At the startup screen, press the space bar, and then press Enter to restart the device and return to Verified mode.

2. **Re-enroll device** (from admin console)
Deprovision and set a device to pending (Deprovisioning a device revokes the Google meeting room hardware license for the device.)

a. Select the device to Deprovision.
b. Select Deprovision.
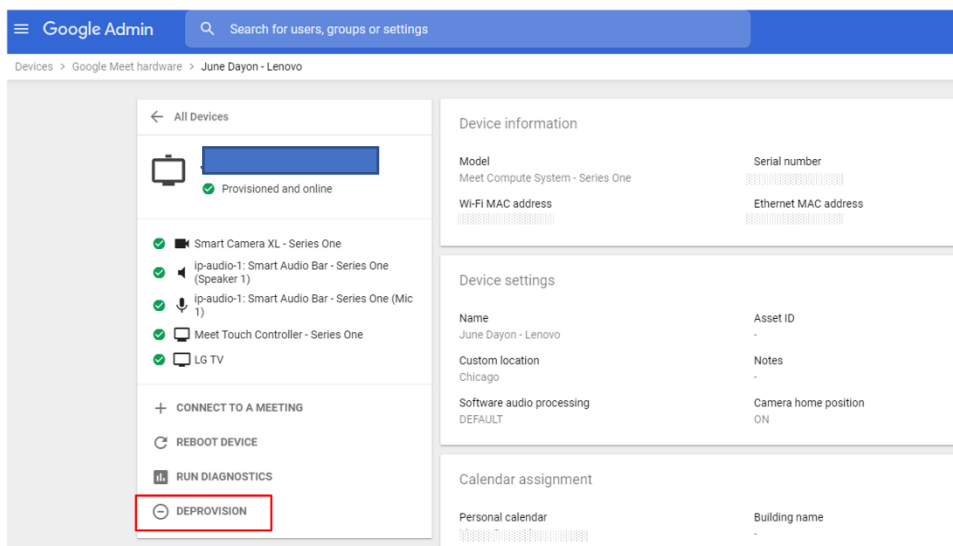
c. Confirm that you want to deprovision the device.
Before you re-enroll a deprovisioned device, make sure the device is in Pending state.
d. From admin console, verify the device's state. If it shows as Unprovisioned, select the device and click Set to Pending.
To re-enroll a Chromebox or Chromebase for meetings or Google Meet hardware:
e. Turn on your device w/ keyboard attached.
f. Wait for the setup screen to appear but do not complete the screen.
g. Press Ctrl+Alt+H to enter Chromebox for meetings mode.
h. Complete the steps to enroll a device.

Series One Management

Series One devices, like all Google Meet Hardware, are managed via the Google Workspace admin console.

Good to Know

Smart Audio Bars

- The add-on Audio Bar doesn't function on its own; it is dependent on the Smart Audio Bar
- To identify which Audio Bar is which, look at the ports on the backside—the Smart Audio Bar (primary) has 3 ethernet ports while the add-on has only 1.

Cables

If using cables other than those provided with the kit, ensure they adhere to these standards:

CAT5e UTP cable can be used for all cables apart from the compute box to Smart Audio Bar, which needs to be CAT5e STP. For lengths over 5m Google recommend a minimum of 26AWG thickness. For cables made specifically for the room, we advise they are certified to CAT5e using a Fluke or similar tester https://www.fluke.com/en-us/products/network-cable-testers/copper
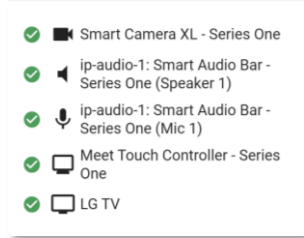
Deviating from Kit Standards

You may find that some non-kit peripherals function with your system. While this may be true one day, note that unsupported peripherals are not tested against the OS build and there is no guarantee that it will continue to work.

Finding Help

The Google Meet Hardware Help site is where Google themselves go when looking for answers. Everything you'd need to become familiar with the service can be found on these pages. It is updated frequently, so referencing it is the most accurate way to find the latest information.

https://support.google.com/meethardware/?hl=en#topic=4487243

Revised FAQ

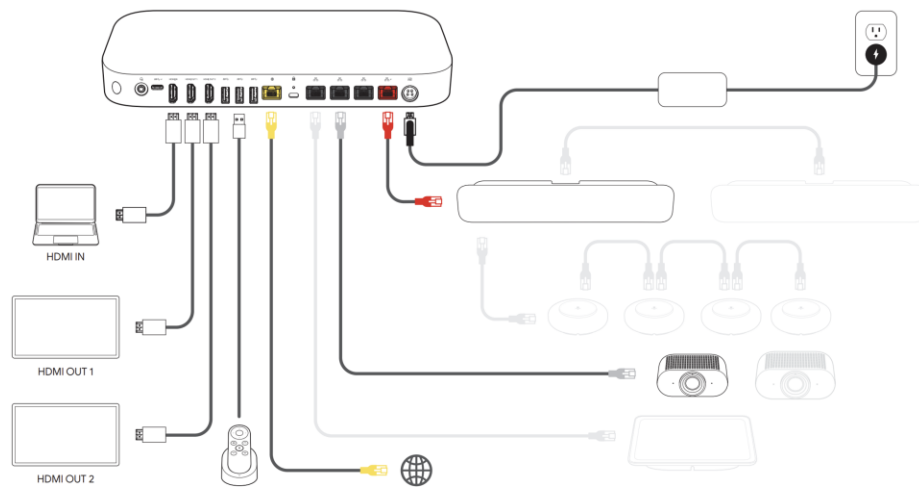| Question	Answer
My mic pod is plugged in, but I only see "ip-audio-1-Smart Audio Bar – Series One (Mic 1)" for a microphone. (This view is from the admin console. Similar settings are on Touch Controller)	The system is "reading" the microphones built into the Smart Audio Bar. Your microphones are still functioning, but the other mics are being read first. * Note: Google is aware of this, and are working on a way to surface the Mic Pod in Med/Large configurations * 11/2020
I just plugged in a new component (camera, touch panel, etc) but my system isn't recognizing the new hardware.	Give it a minute. The Meet hardware could be performing firmware, bios and software updates. If needed, reboot the system to see if the device is picked up/sensed by system.

Version History

Version	Date	Description	Author
1.0	November 19, 2020	Initial version	J Dayon
2.0			

Appendix
Wiring Diagrams

Small Kit Wiring
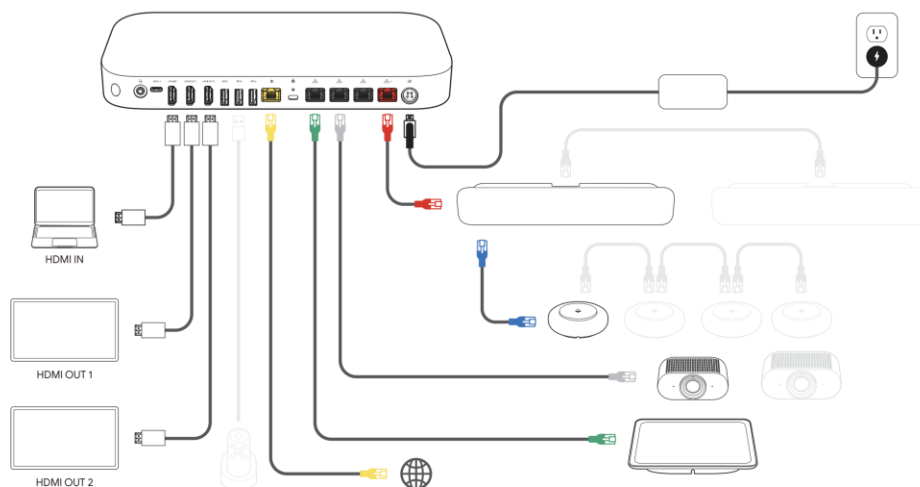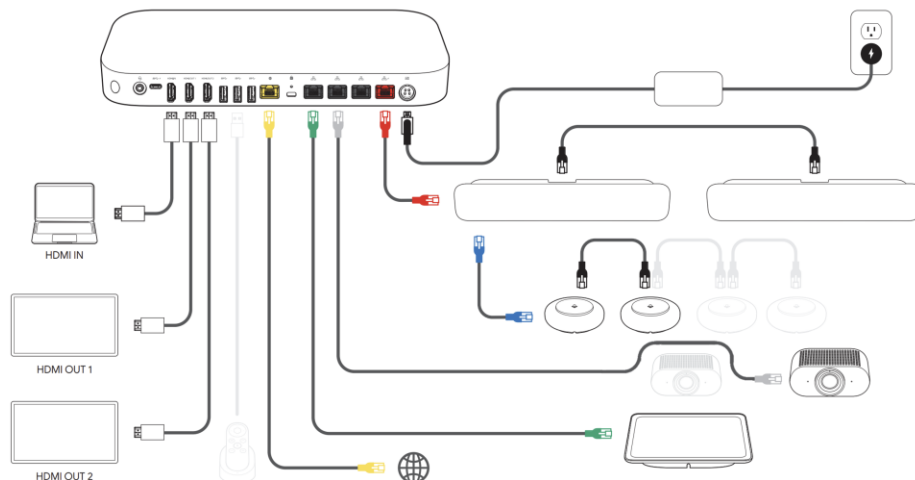
HDMI IN

HDMI OUT 1

HDMI OUT 2

15

Medium Kit Wiring

HDMI IN

HDMI OUT 1

HDMI OUT 2

16

Large Kit Wiring

HDMI IN

HDMI OUT 1

HDMI OUT 2

17

Datasheet

Full datasheet lives here

Google Meet | Lenovo

compute system

MOUNTING OPTIONS
Wall mount and table stand

CPU
Intel i7-8550U

MEMORY
4GB RAM

STORAGE
128GB SSD

WIRELESS DATA NETWORK
WiFi (802.11 AC) 2.4GHz/5GHz
Bluetooth 4.2, Ethernet (PoE)

PORTS
2x HDMI 1.4 output with CEC
1x HDMI 1.4 input video port
5x RJ45 Ethernet ports
3x Type-A and 1x Type-C USB ports
1x headphone jack w/ mic support (3.5 mm)

DIMENSIONS (L X W X H)
135 x 284 x 29 mm

smart camera

smart camera

IMAGE
12 MP 1/2.3" CMOS Sensor
Up to 1080p @ 30 fps
f/2.8 aperture

OPTICS
Ultra-wide angle glass optics
120˚ horizontal field of view

CONNECTION
Ethernet (PoE)

DIMENSIONS (L X W X H)
84 x 107 x 42 mm

smart camera xl (included in large kits only)

IMAGE
20.30 MP 1" CMOS Sensor
Up to 1080p @ 30 fps
f/2.9 aperture

OPTICS
Wide angle glass optics
95˚ horizontal field of view

CONNECTION
Ethernet (PoE)

DIMENSIONS (L X W X H)
84 x 122 x 52 mm

smart audio bar

smart audio bar

SPEAKER
20W RMS power
80Hz-24kHz frequency response

MICROPHONE
8 element, linear beamforming array
100Hz-24kHz pickup

AUDIO PERFORMANCE
AEC, ANC, and TrueVoice™ multi-channel noise cancellation

CONNECTIONS
1x USB-C with USB 2.0 UAC
1x stereo analog RCA output (for assistive listening devices)
1x Ethernet (PoE)
2x RJ45 (daisy chain output data and power)

RANGE
Optimal pickup range of up to 4m

DIMENSIONS (L X W X H)
95 x 705 x 133 mm

add-on audio bar (included in large kits only)

SPEAKER
20W RMS power
80Hz-24kHz frequency response

MICROPHONE
8 element, linear beamforming array
100Hz-24kHz pickup

RANGE
Optimal pickup range of up to 4m

DIMENSIONS (L X W X H)
95 x 705 x 133 mm

Google Meet Series One Room Kits from Lenovo

Google Meet | Lenovo

mic pod

(included in medium and large kits only)

MICROPHONE
8 element, circular beamforming array
100Hz-24kHz pickup

CONNECTIONS
1x Daisy Chain input port for data and power (up to 4 mic pods)
1x Daisy Chain output port for data and power (up to 4 mic pods)

RANGE
Optimal pickup range of up to 2m

DIMENSIONS (L X W X H)
95 x 95 x 30 mm

controller

touch controller
(included in medium and large kits only)

DISPLAY
10.1" anti-smudge touchscreen
Color sensor
Orientation sensor

RESOLUTION
1280 x 800 x 3(RGB) LCD
with Optically Bonded multi-touch screen

CONNECTION
1x 10Gb PoE connector

DIMENSIONS (L X W X H)
164 x 245 x 91 mm

remote control
(included in small kits only)

REMOTE
2.4 RF remote

KEYPAD
10 keys (Navi Key, End Key, and Upper Keys)
QWERTY key: 38 keys

BATTERY
Rechargeable lithium ion with USB-powered docking station

DIMENSIONS (L X W X H)
130 x 45 x 14 mm

optional services

Lenovo's Smart Office Professional Services offer personalized, end-to-end support to help you make the most of your technology investment.

ASSESS
Lenovo is here to help identify any issues that could sidetrack your deployment by providing a detailed assessment of potential red flags and a follow-up report.

DEPLOY
From virtual deployment installation to integration assistance, Lenovo ensures your devices function optimally in your office environment.

MAINTAIN
Our easy-to-follow do's and don't's, remote check-ins, and assistance with ongoing security patches and updates take the stress out of updates and device changes.

TRAIN
Lenovo helps instruct all your audiences—IT and AV support teams, end users, and executives—on how to fully take advantage of your new technology.

ONSITE
Lenovo provides white glove treatment through a dedicated, on-site specialist who can complete physical set-up, installation, configuration, and device troubleshooting.

Lenovo