How To Set Up & Equip a Video Meeting Room

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This is a practical, hands-on guide to setting up an effective video-enabled meeting space.

The following factors play a role when equipping and setting up a meeting room for video conferencing:

– Size of the meeting room
– Types of required equipment
– Room design
– Equipment setup

For a hands-on look at how to design the meeting space and tips for installing in-room equipment, read on.

Room
Design

This section covers the meeting space itself, from considering the lighting and acoustics to choosing the most appropriate furniture.

The general rule is that each element of the meeting room should be carefully selected to facilitate effective remote meetings where everyone is seen and heard, no matter their location.

1. Room Acoustics

The first and perhaps most important aspect to consider is acoustics. Meeting rooms are built to enable meaningful dialogue, which is why it's critical to ensure that their acoustic properties facilitate this.

→ Best Practice

- **Floor:** Use floor carpeting or other soft materials that are good at absorbing sound and dampen furniture noises.
- **Ceiling:** Select special acoustic tiles or hanging panels for the ceiling in order to reduce room reverberance.
- **Walls:** Consider placing acoustic absorption on the walls. Ideally, at least two adjacent walls should have panels made of an acoustic absorbent material.

→ What to Avoid

- Surfaces that reflect sound, which may compromise audio quality. This means not using hard materials like stone, glass, metal, and so on.
- Hardwood flooring or tiles, for the same reason.

2. Lighting

Meeting spaces – especially ones built for video calls – will also need to consider the lighting sources and placement.

→ Best Practice

- Install flexible ways to control in-room lighting on demand, such as blinds or curtains.
- Use "neutral white" LED lighting (4500 to 5000 Kelvin).

→ What to Avoid

- Powerful and focused sources of light (such as spotlights) placed behind meeting participants. This makes the participant harder to see, especially on the video feed for remote colleagues.

3. Room colors

While vividly colorful rooms may be great from a design perspective, they risk being a source of distraction and distortion for video calls.

→   Best Practice

- Stick to neutral colors like beige and gray to help attendees concentrate on the meeting.

- Use any bright branding elements in moderation, ideally out of the video camera's field of view.

→   What to Avoid

- Any bright primary colors (red, blue, green, and yellow). These can negatively affect how in-room participants appear on the video feed.

- Visually distracting wall decorations or patterns.

4. Furniture

Furniture plays an important role in facilitating conversations and ensuring that remote attendees can interact with in-room participants.

→   Best Practice

- Arrange tables in a semicircle, with the widest part closest to the camera—this ensures everyone in the room is visible. For medium and large rooms, a conical table is the preferred option.

- Invest in lightweight and portable chairs that can be freely moved to accommodate different types of meetings.

→   What to Avoid

- Setting up seating outside of the camera's field of view.

- Placing the table front closer than 0.7 times its width to the camera.

5. Other Considerations

Here are a few general guidelines to designing an effective video meeting space.

→   Best Practice

- Tuck wires away below the tables or use purpose-built cable concealers.

- Allow for confidential meetings by equipping the room with blinds, curtains, frosted glass, or a dedicated privacy screen.
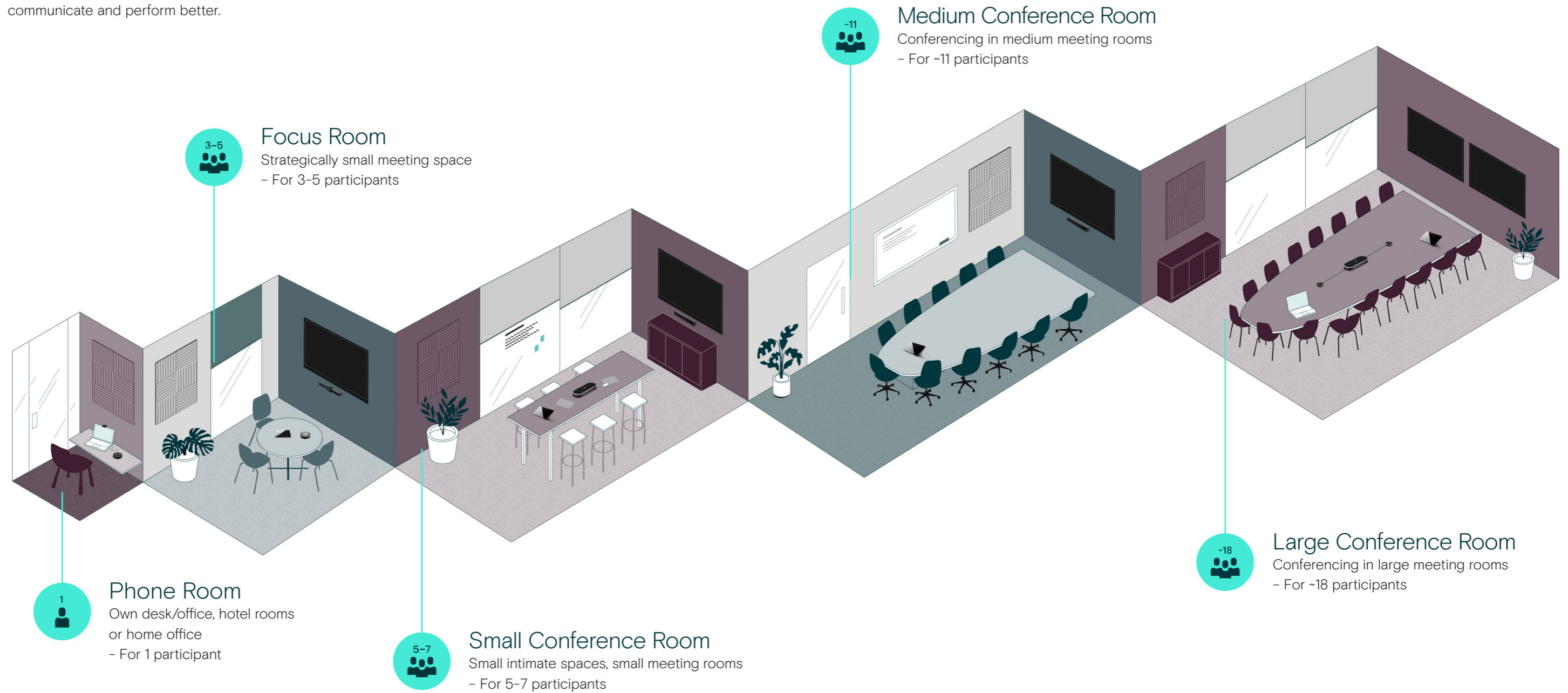
→   What to Avoid

- Visual clutter and distracting elements in the meeting room.

- Unnecessary furniture or decorations that can serve as a source of distraction for meeting participants.

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This leads to:
– Increased focus
– Reduced stress
– Improved productivity

Medium Conference Room
Conferencing in medium meeting rooms
– For ~11 participants

Focus Room
Strategically small meeting space
– For 3-5 participants

Phone Room
Own desk/office, hotel rooms or home office
– For 1 participant

Small Conference Room
Small intimate spaces, small meeting rooms
– For 5-7 participants

Large Conference Room
Conferencing in large meeting rooms
– For ~18 participants

Equipment Installation Tips

1. Camera

The conference room camera must be able to capture everyone in the room. Some considerations:

- Keep the camera at participants' eye level, pointed at the center of the room. Place it right above or below the screen, if possible.

- If the camera must be placed above or below eye level, pick a camera that can be adjusted for pan, tilt, and viewing angle.

- When placing the camera / video bar under the screen, the ideal placement is 115–120 centimeters (45–47 inches) from the floor to the camera lens.

- When placing the camera / video bar above the screen, keep it below 180 centimeters (71 inches) from the floor to avoid the bird's-eye view.

- Select a camera with the right field of view (FOV) that can capture the entire room and its participants.

Simplify the setup process with a compact, all-in-one conference camera with built-in speakers, like EPOS EXPAND Vision 5.

< 180 cm (71 inches)

115–120 cm (45–47 inches)
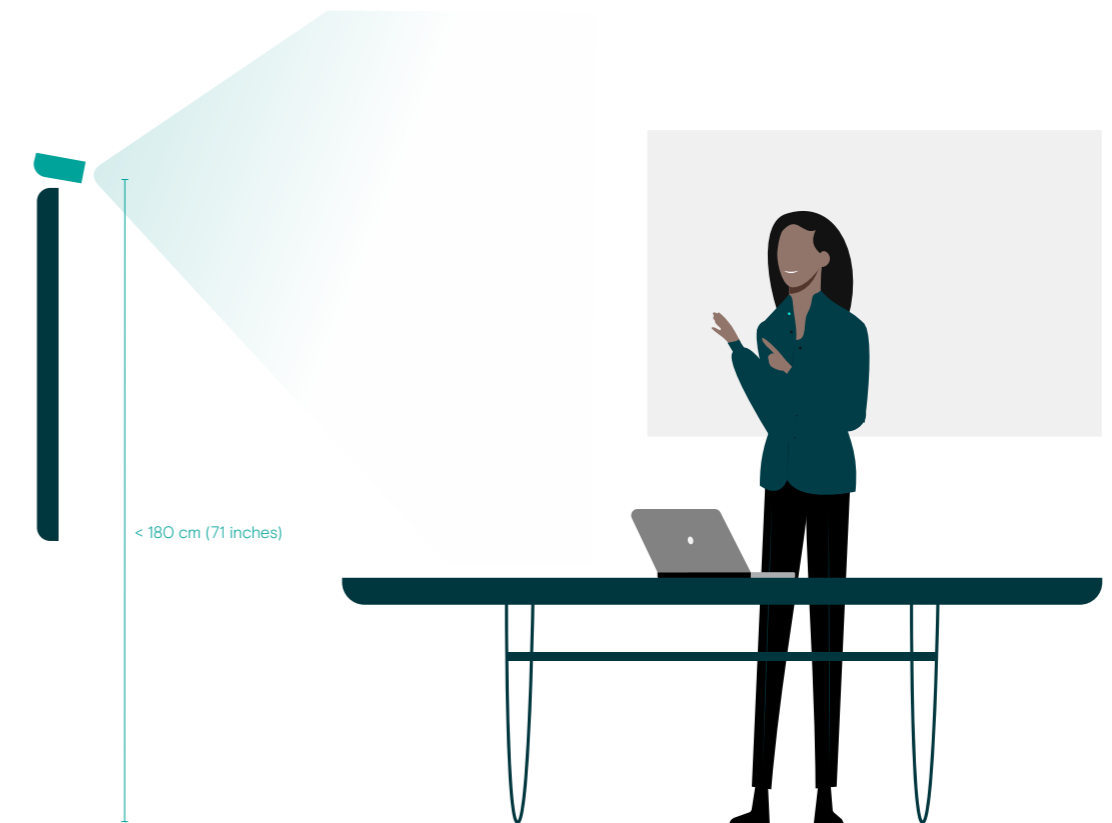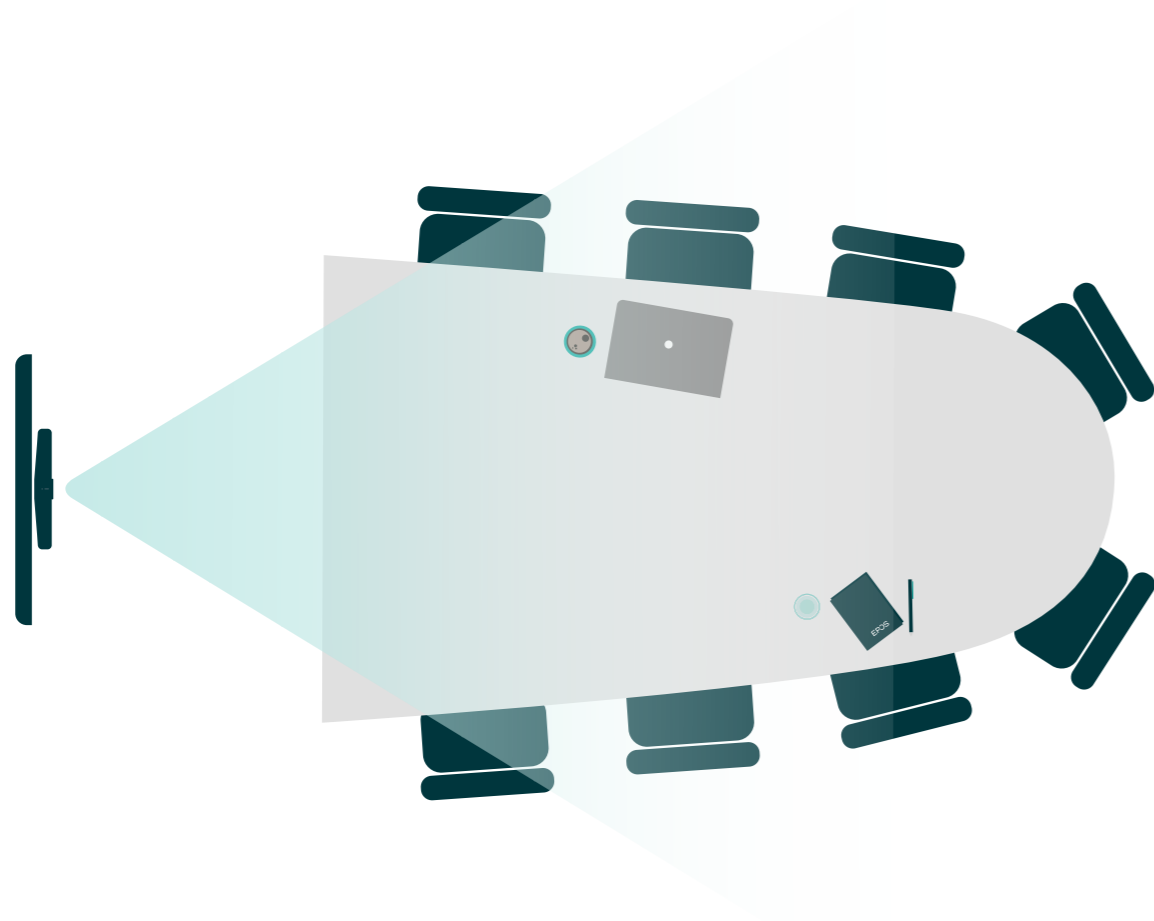
2. Display

Picking the right screen and positioning it appropriately is critical to ensuring effective remote meetings.

- **Number of displays:** If possible, it will be an advantage to set up two separate screens — one for shared content and one for the video feed from remote attendees. For focus rooms and smaller meeting rooms, a single display is usually sufficient.

- **Display size:** This depends largely on the size of the room. As a rule of thumb, the furthest seated participant should be easily able to see fine details like text. The recommended viewing distance is between one and four times the diagonal length of the monitor.

- **Display placement:** Mount the monitor around the eye level of seated participants. This is typically between 116-127 centimeters (46–50 inches) from the floor but will largely depend on the camera placement.

- **Display settings:** Ensure the lowest possible latency to facilitate real-time communication (if there's a "Game" or "PC" mode on the monitor, enable it). Screen resolution, brightness, contrast, and color saturation should be set to provide the most natural appearance of remote attendees.

3. Audio (Speakers and Microphones)

Audio is probably the most important and critical factor in video conferencing. If the audio quality is poor attendees will lose concentration and get fatigued.

- Make sure in-room microphones are capable of picking up sound from every seated participant.

- Chose voice triggered beamforming microphone systems to get the best possible ambient noise rejection.

- In larger meeting rooms best practices are to use center-of-table microphone systems e.g., speakerphones and adding expansion mics in case of very long tables.

- Make sure microphones can be easily muted from most in-room locations, when needed.

4. Compute unit

Video meetings need a compute unit to run the necessary software and process all input/output from video/audio sources. There are several options:

- **Video bar:** All-in-one video bars like the EPOS EXPAND Vision 5 come with a built-in compute unit, as well as microphones and speakers. They are the most complete option right out of the box and are easy to set up and use.

- **Dedicated compute device:** This is where a compute unit is permanently left in the meeting room and pre-connected to all of the video and audio equipment. The best location for this is near or behind the screen. Participants must connect to this compute unit in order to join remote video meetings.

- **Bring-your-own-device (BYOD):** This takes the form of a plug-and-play conferencing setup that uses a professional camera like EPOS EXPAND Vision 1M. Users can bring and connect their own laptops via e.g. a USB cable. In this case, the user's laptop also serves as the compute unit that runs any necessary conferencing software.

5. Hub/dock

Some BYOD conference rooms rely on a special hub or dock that serves as the central connection point for the video camera, speakerphone, monitors, laptops, and so on. Here are the differences:

- **Dock**: A dock—or "docking station"—is a workstation that users can click their laptop into. (Some cable converters that rely on mains power are also called "docks.") Docks are typically larger than hubs, provide power to other plugged in appliances, and have a higher number of ports or cable converters.

- **Hub:** A hub is more simple and serves mainly to expand the number of available USB ports on a connected laptop. Hubs can support a variety of USB ports which differ in terms of version (USB 2.0 vs. USB 3.0) or in terms of connection type (USB-A vs. USB-C). Some hubs also come equipped with an Ethernet port to support wired Internet connectivity.

6. Touch Controller

Meeting room controllers let users easily start their meetings and interact with in-progress meetings by e.g. sharing content on the screen.

- **Placement:** Touch controllers can be mounted on the table or on the wall using relevant mounting accessories. The key is that they should be easily reachable by all in-room participants.

- **Connectivity:** This depends on the touch controller. Some of them connect via USB to a separate compute device or video bar (see above) and may have a separate power cable and HDMI cable for sharing content. Others, like the EPOS EXPAND Control rely on a single Power over Ethernet cable for both network and source of power.

7. Scheduling Panel

These offer a quick and convenient way for employees to schedule meetings, book rooms, and see a room's availability status.

- **Placement:** Scheduling panels tend to be placed on walls outside the meeting room, close to the entrance for easy access. It's important to place them at a height that's easily reachable by most people, taking users with disabilities into account.

- **Mounting:** Professional scheduling panels, including the EPOS EXPAND Control, can be attached to most surfaces using dedicated mounts for walls and glass surfaces.

8. Cable Management

Smart cable management is an essential part of an enterprise-grade meeting room. It helps prevent cables from tangling and getting in the way, which can create distractions and negatively affect meeting participation.

Here's how to facilitate cable retention:

- Keep cables grouped and neatly organized using cable ties.
- Try not to group HDMI/USB cables with power cables in the same cable tie.
- Secure bundles of cables with the help of fixed cable tie mounts.
- Protect and conceal cables running across the walls or floor using cable raceways.

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