

INSTALLATION GUIDE

ThinkSmart Core Gen 2 with Huddly C1

Physical connection, bring-up, validation, and BYOM/BYOD options

Document type	Field installation SOP
Applies to	ThinkSmart Core Gen 2 + Lenovo IP Controller + Huddly C1
Prepared for	Customer Solutions Engineering / AV deployment teams
Revision	1.0 September 14, 2026

Purpose

Use this guide to cable a standalone Huddly C1 videobar to a ThinkSmart Core Gen 2 room system, connect the IP Controller and display path, select the appropriate laptop connection method, and complete a practical validation check.

This document is a connection and installation guide. Tenant provisioning, resource-account configuration, Teams Rooms or Zoom Rooms sign-in, firmware policy, and advanced Huddly feature configuration are outside this guide.

Knowledgebase Article

1. Installation

The normal room path uses the Huddly C1 as the camera, microphone, and speaker device connected to ThinkSmart Core Gen 2. The Core connects to the room display(s), corporate LAN, and Lenovo IP Controller. An optional laptop cable can be connected either through Core Gen 2 BYOM or through the Huddly C1 BYOD port, depending on the use case.

Function	From	To	Cable	Purpose / note
Room AV	Huddly C1 meeting-room-compute USB-C	ThinkSmart Core Gen 2 USB-A	USB-A to USB-C cable	Carries C1 camera, microphone, and speaker to room compute.
Display	ThinkSmart Core Gen 2 HDMI OUT	Front-of-room display HDMI IN	HDMI cable	One or two displays, as supported by the room design.
Network	ThinkSmart Core Gen 2 RJ45	Corporate LAN	Ethernet	Provides the room compute network path.
Controller	Lenovo IP Controller	Link box / Core connection path	PoE Cat5e; HDMI; USB-A to USB-B	Use the controller kit cabling and link box labels.
Power	Huddly C1 24V DC input	C1 power supply	Included power supply	Do not substitute an unapproved power source.
Optional laptop	Core Gen 2 BYOM USB-C	User laptop	3 m Core G2 BYOM cable	Preferred when display touchback is required.
Optional laptop	Huddly C1 BYOD USB-C	User laptop USB-C	5 m directional fiber USB-C cable	Useful as a backup path or when 3 m is insufficient.

IMPORTANT CABLE DISTINCTION

Do not connect both laptop-mode cables for the same user session. Choose the Core Gen 2 BYOM path or the Huddly C1 BYOD path based on the operating requirement.

2. Required equipment and cables

- ThinkSmart Core Gen 2 with its power adapter and cable-management components
- Lenovo IP Controller, link box/transcoder, PoE cabling, and controller interconnect cables supplied with the controller kit
- Huddly C1 videobar with 24V DC power supply
- USB-A to USB-C cable for C1-to-Core room AV connection. The Lenovo connection drawing identifies this cable as not included

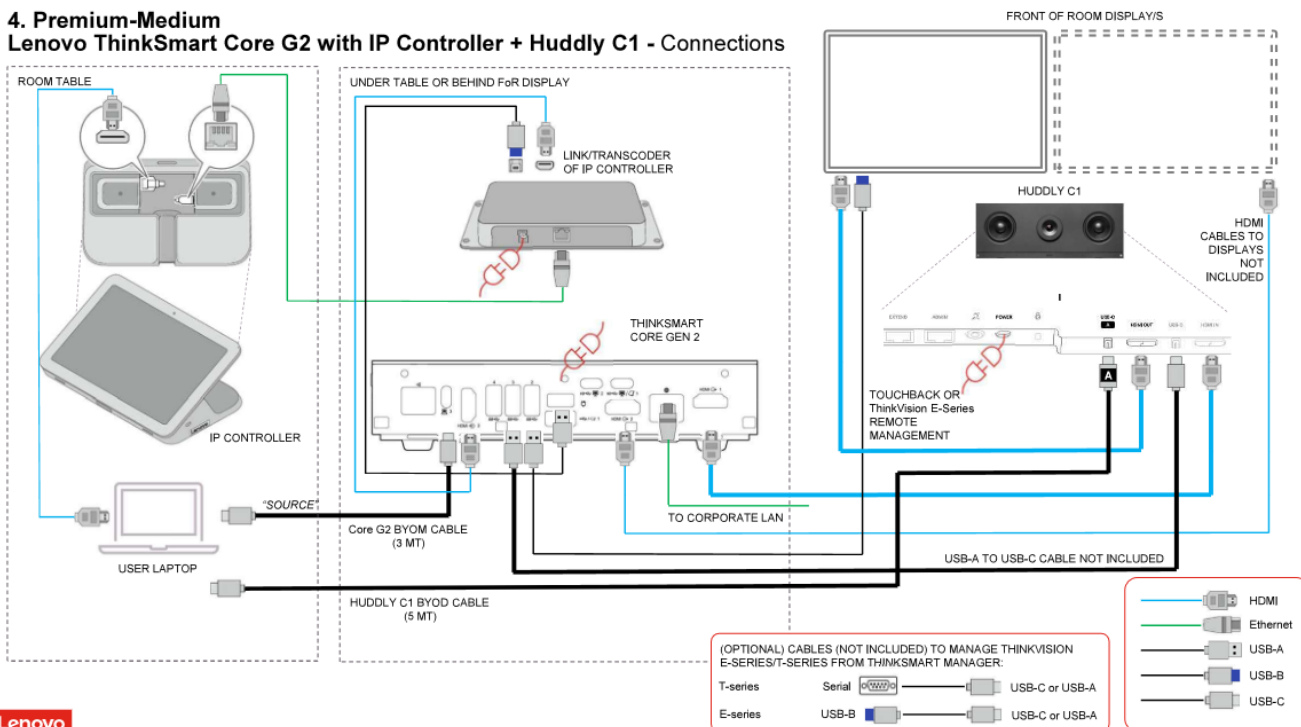
Knowledgebase Article

- HDMI cable(s) for the front-of-room display(s). The Lenovo connection drawing identifies display cables as not included
- C1 software can be acquired: <https://support.huddly.com/huddly-app-installation-guide/>
- Ethernet cable from Core Gen 2 to the corporate LAN
- Optional: Core Gen 2 3 m BYOM cable
- Optional: Huddly C1 5 m directional fiber USB-C BYOD cable
- Basic installation tools, approved mounting hardware, cable labels, and strain relief appropriate for the room

BEFORE INSTALLATION

Confirm the room design, display count, mounting surface, outlet availability, LAN availability, and cable routes. Follow local electrical, accessibility, and building requirements. These are installer best-practice checks, not product-specific configuration steps.

4. Premium-Medium Lenovo ThinkSmart Core G2 with IP Controller + Huddly C1 - Connections



Knowledgebase Article

3. Physical installation and connection

1

Stage and inspect the equipment

Unpack the Core Gen 2, IP Controller kit, Huddly C1, power supplies, and planned cables. Check that connectors and cables are undamaged.

- Keep power disconnected while making the physical connections.
- Identify the C1 meeting-room-compute USB-C port separately from the C1 BYOD USB-C port.
- Label both ends of every field-installed cable before routing it.

2

Mount and place the Huddly C1

Install the C1 at the front of the room using the approved mount and the room design. Keep the camera view clear and route cables without loading the connectors.

- Use the room layout and desired framing area to choose the final position.
- Provide service access to power, USB, HDMI, Ethernet, and the optional Extend port.

3

Install the ThinkSmart Core Gen 2

Place the Core under the table or behind the front-of-room display, consistent with the Lenovo wiring diagram and the approved room design.

- Leave access to HDMI OUT, RJ45, USB-A, USB-C/BYOM, power, and controller connection points.
- Use the Core cable-management assembly and approved strain relief.

4

Connect the Huddly C1 to Core Gen 2

Connect the C1 meeting-room-compute USB-C port to a USB-A port on Core Gen 2 using the USB-A to USB-C cable.

- This is the primary room AV connection for the C1 camera, microphone array, and speakers.
- Do not use the C1 BYOD port for the permanent room-compute connection.

5

Connect the front-of-room display(s)

Connect Core Gen 2 HDMI OUT to the HDMI input on each front-of-room display required by the design.

- Use the correct Core HDMI output assignment for the selected single- or dual-display layout.
- If an interactive display is part of the room design, complete its approved touch connection separately.

6

Connect the Lenovo IP Controller

Connect the IP Controller to its link box/transcoder using PoE Cat5e. Connect the link box to Core Gen 2 using the HDMI and USB-A to USB-B paths shown on the controller kit and Lenovo wiring diagram.

- Follow the physical port labels on the controller and link box.
- Do not treat the controller invitee or PoE path as the Core corporate LAN connection.

Knowledgebase Article

7

Connect the Core network

Connect the Core Gen 2 RJ45 port to the corporate LAN.

- Use the network segment approved for the room system.
- The Huddly C1 Ethernet “Extend” port is for Crew add-on camera expansion, not the Core corporate LAN path.

8

Connect power

Connect the Huddly C1 to its 24V DC power supply, then connect Core Gen 2, the display(s), and controller infrastructure to their approved power sources.

- Seat every connector fully and apply strain relief before energizing the system.
- Power on displays and peripherals, then power on the room compute.

4. Choose the laptop connection method

The room can expose its AV resources to a user laptop through one of two paths. Select the path that matches the intended behavior and cable reach.

Option	Use it when	Connection
Core Gen 2 BYOM	The room has an interactive display and laptop touchback is required; or IT wants BYOM operation managed through the room system without false MTR/Zoom Room alarms.	Connect the 3 m Core Gen 2 BYOM USB-C cable from the Core BYOM port to the user laptop.
Huddly C1 BYOD	A direct backup is required when the native MTR or Zoom Rooms app is unavailable, or the 3 m Core cable is not long enough.	Connect the 5 m directional fiber USB-C BYOD cable from the C1 BYOD port to the user laptop. Observe the cable direction markings.

5. First boot and room validation

Complete these checks after cabling. Record the result for each item so the installation can be reproduced and supported later.

	Check	Acceptance criterion	Pass
1	Power and status	Core Gen 2, C1, IP Controller, and display power on without repeated resets.	☐
2	Display path	Room UI is visible on the intended front-of-room display(s) with the correct layout.	☐
3	Controller	The Lenovo IP Controller displays the room interface and responds to touch.	☐
4	Camera	The room application lists and previews Huddly C1 video.	☐
5	Microphone	The room application receives microphone input from the Huddly C1.	☐
6	Speaker	Test audio plays through the Huddly C1 speakers at an appropriate level.	☐
7	Network	The room compute connects to the approved corporate network.	☐
8	Native meeting	Place a test call. Confirm local camera, microphone, speaker, and remote send/receive operation.	☐
9	Selected laptop mode	Connect a laptop through the chosen BYOM or BYOD path and verify the expected peripherals.	☐
10	Cable finish	Apply labels and strain relief; confirm no cable blocks camera view, ventilation, or service access.	☐

6. Troubleshooting matrix

Symptom	Checks / corrective action
C1 is not detected by the room application	Confirm the C1 power supply is connected; verify the permanent room connection uses the C1 meeting-room-compute USB-C port; reseal the USB-A-to-USB-C cable at both ends; verify the selected Core USB port and cable with a known-good test.
Camera works but microphone or speaker is missing	In the room application, confirm the Huddly C1 is selected for camera, microphone, and speaker. Reseat the same room-compute USB connection and repeat the device check.
No image on front-of-room display	Verify display power and input selection; confirm the HDMI cable is connected from a Core Gen 2 HDMI OUT to the display HDMI IN; test the cable and input.
IP Controller is blank or offline	Verify the PoE Cat5e connection to the controller/link box; confirm the link box has the documented HDMI and USB-A-to-USB-B connections to Core Gen 2; reseal and inspect the cables.
Laptop does not see room devices	Confirm the user connected to the intended Core BYOM or C1 BYOD port; disconnect the unused laptop path; for the 5 m C1 cable, confirm the directional ends are oriented correctly.
Laptop connects but touchback is unavailable	Use the Core Gen 2 BYOM path when interactive-display touchback is required, and verify the display's approved touch connection.
Room app is unavailable but a meeting must continue	Use the optional Huddly C1 BYOD path as the documented backup, then select C1 camera, microphone, and speaker on the laptop.
Cable reach is insufficient	Use the documented 5 m Huddly C1 BYOD cable when the 3 m Core Gen 2 BYOM cable is not long enough. Do not add unvalidated extenders to the permanent room AV connection.

7. As-built installation record

Room / site	
Installer	
Installation date	
Core Gen 2 serial number	
Huddly C1 serial number	
IP Controller serial number	
Display model(s)	
Core network port / VLAN	
Laptop mode selected	
Cable labels / route notes	

8. Source documents and technical notes

This guide consolidates the connection details from the three documents provided and Lenovo internal reference material. Product labels and shipped cable contents can change by SKU or region, so the physical device labels and current kit documentation remain authoritative.

- [Huddly C1 product / setup document provided by the requester](#)
- [SmartCollab ThinkSmart / Huddly reference document 1](#)
- [SmartCollab ThinkSmart / Huddly reference document 2](#)

Documented technical facts used in this guide

- Huddly C1 provides separate USB-C connections for room compute and BYOD. The room-compute connection exposes the built-in camera as UVC video and the speaker/microphone system as UAC audio.
- The Huddly C1 BYOD USB-C path supports its camera, speakers, microphone array, DisplayPort video input, and 65 W USB Power Delivery.
- Huddly C1 power input is 24V DC. Its “Extend” Gigabit Ethernet port is identified for Huddly Crew add-on cameras.
- ThinkSmart Core Gen 2 provides HDMI ingest, two HDMI outputs, RJ45 Ethernet, USB-A and USB-C ports, USB-C ingest, and removable cable management.
- The Lenovo small-room connection guide shows the IP Controller on PoE Cat5e through a link box, with HDMI and USB-A-to-USB-B connection paths to Core Gen 2.
- The Lenovo comparison recommends Core Gen 2 BYOM where interactive-display touchback is needed and Huddly C1 BYOD as a backup or where the 3 m Core cable does not reach.