logitech

LOGITECH RALLY AND RALLY PLUS IMPLEMENTATION GUIDE
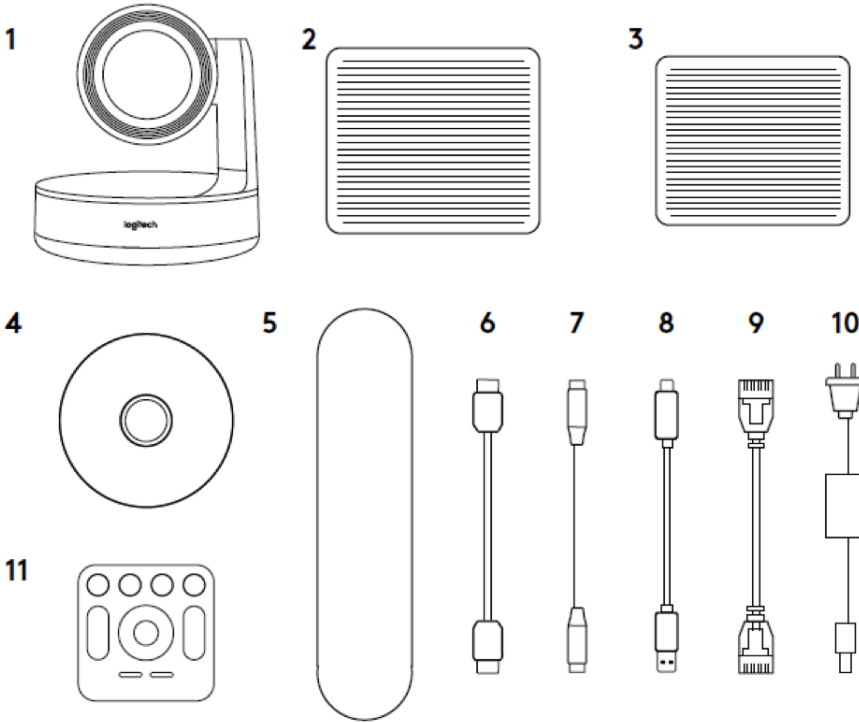
Rally greatly simplifies installation by combining camera signal, two display signals, audio and USB over a single CAT6 cable.

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7. **USB C to C Cable**
8. **USB A to B Cable**
9. **CAT6 Cable**
10. **Power Cable**
11. **Remote**

RALLY COMPONENTS
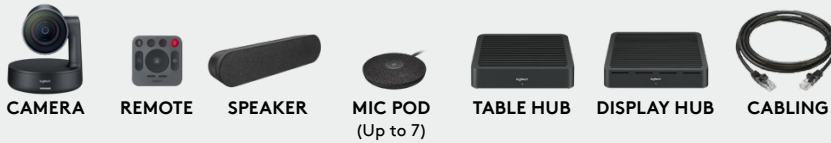
CAMERA   REMOTE   SPEAKER   MIC POD (Up to 7)   TABLE HUB   DISPLAY HUB   CABLING

*Rally includes one (1) speaker and one (1) mic pod. Rally Plus includes two (2) speakers and two (2) mic pods.

1B. RALLY PLUS: WHAT'S INCLUDED
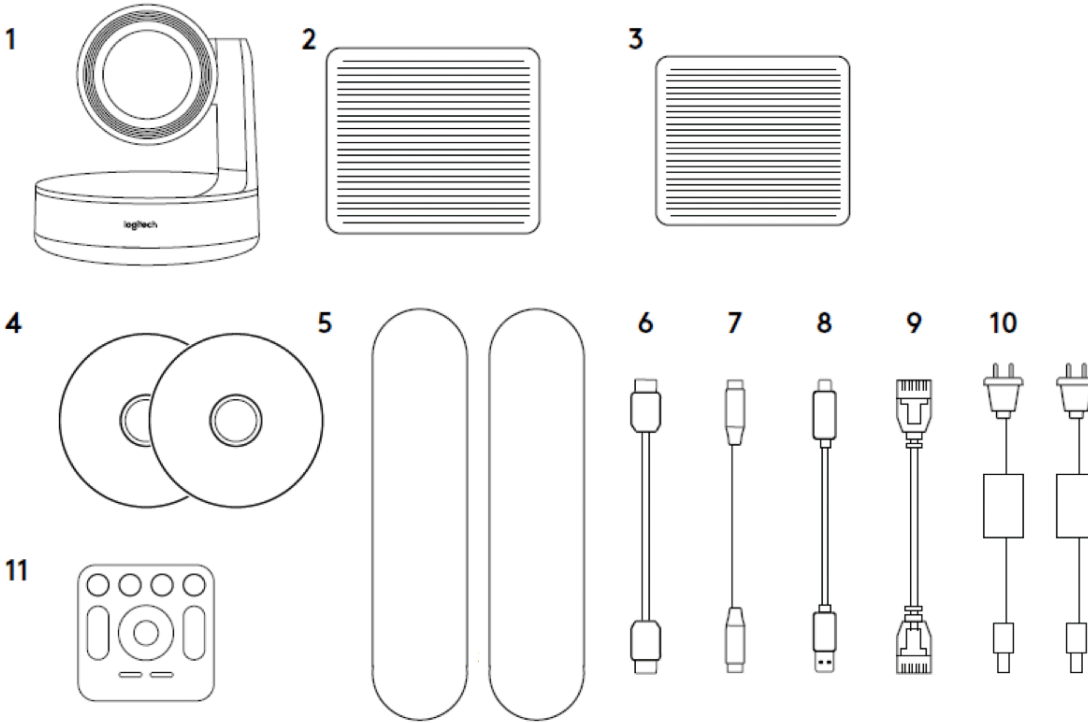
1. **Camera**
2. **Display Hub**
3. **Table Hub**
4. **Mic Pod** (x2 Rally Plus)
5. **Speaker** (x2 Rally Plus)
6. **HDMI Cable** (x2 Rally Plus)
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10. **Power Cable** (x2 Rally Plus)
11. **Remote**

RALLY PLUS COMPONENTS

| CAMERA | REMOTE | SPEAKER x2 (x2) | MIC POD x2 (Up to 7) | TABLE HUB | DISPLAY HUB | CABLING |

*Rally includes one (1) speaker and one (1) mic pod. Rally Plus includes two (2) speakers and two (2) mic pods.

2. PART DESCRIPTIONS

a. CAMERA: Fully motorized pan/tilt/zoom camera that supports up to 4K resolution. The camera can be mounted upside down; an internal sensor will automatically invert the image and remote control function.

Note: The camera must be power cycled after mounting upside down.
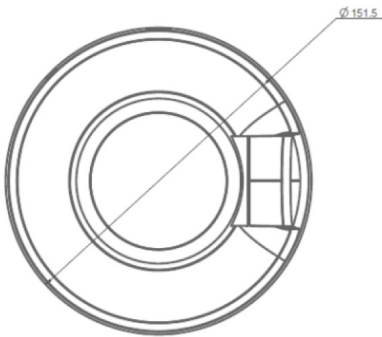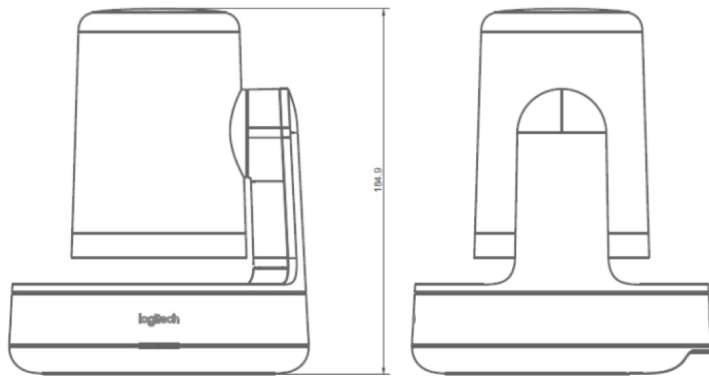
FEATURES	RALLY CAMERA SPECS
Lens type	Glass
Sensor type	4K
Focus type	Auto
Diagonal field of view (FOV)	90°
Horizontal FOV	82.1°
Vertical FOV	52.2°
Pan	±90°
Tilt	+50°/-90°
Focal length	Wide: 3.725 mm, Tele: 17.88 mm
Depth of field	60 cm to infinity in wide mode
Mount	1/4" 20TPI
Zoom	Yes; 15x HD zoom (5x optical, 3x digital)
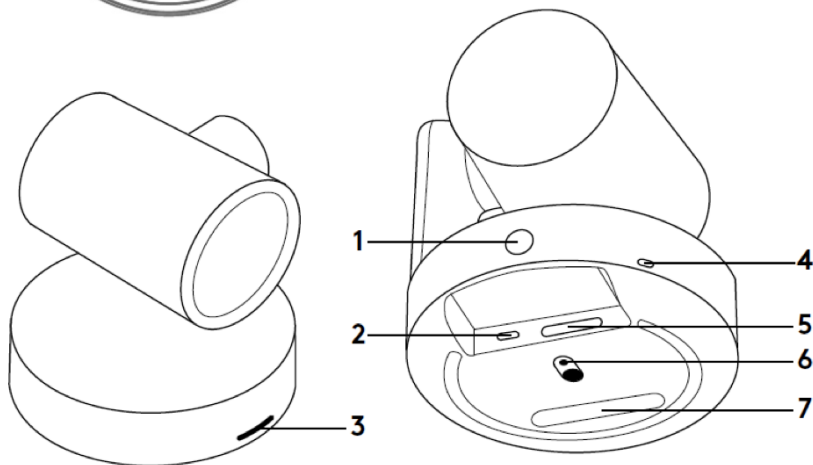
1. Remote control pairing button
2. USB
3. Status LED
4. Security slot
5. MIPI
6. Tripod thread
7. Expansion slot

b.   TABLE HUB: The Table and Display Hubs work together to convert HDMI, camera, and audio to a signal that can be passed over one CAT6a cable. The Table Hub is the connection point for the microphones and the meeting room computer at the table.
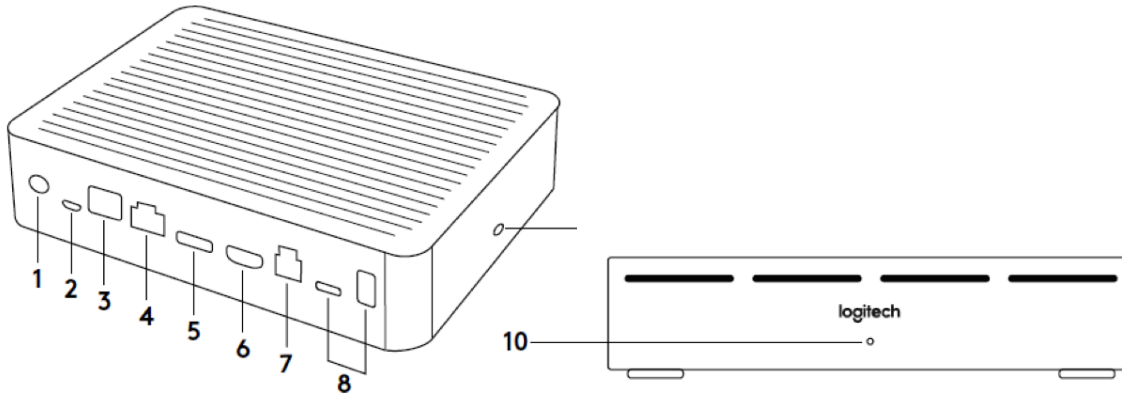
1.   Power
2.   Mic Pod
3.   Future expansion
4.   Connection to Display Hub
5.   HDMI 1 In
6.   HDMI 2 In
7.   Meeting room computer USB
8.   Future expansion
9.   Security slot
10. Power LED
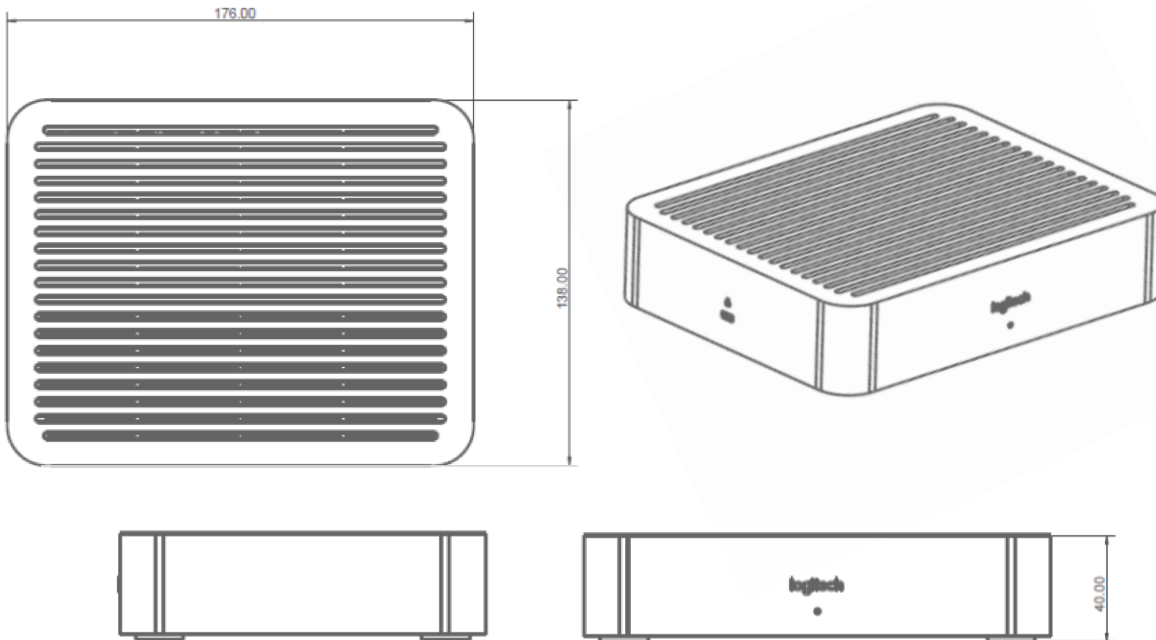
c.   DISPLAY HUB: Connection point for the speakers, HDMI to the displays (when the meeting computer is connected to the Table Hub) and the meeting room computer when located at the display. Note, the HDMI signals are a straight pass through between the hubs.
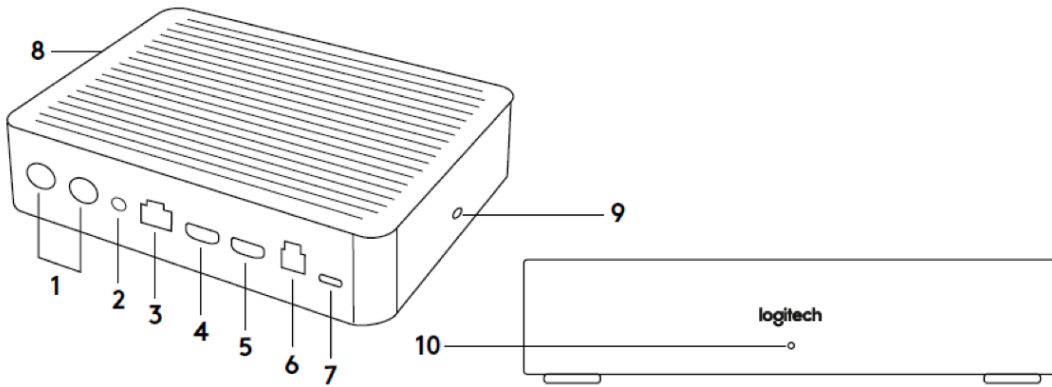
1. Speaker
2. Power
3. Connection to Table Hub
4. HDMI 1 Out
5. HDMI 2 Out
6. Meeting room computer USB
7. Camera
8. Security slot
9. Remote control pairing
10. Power LED
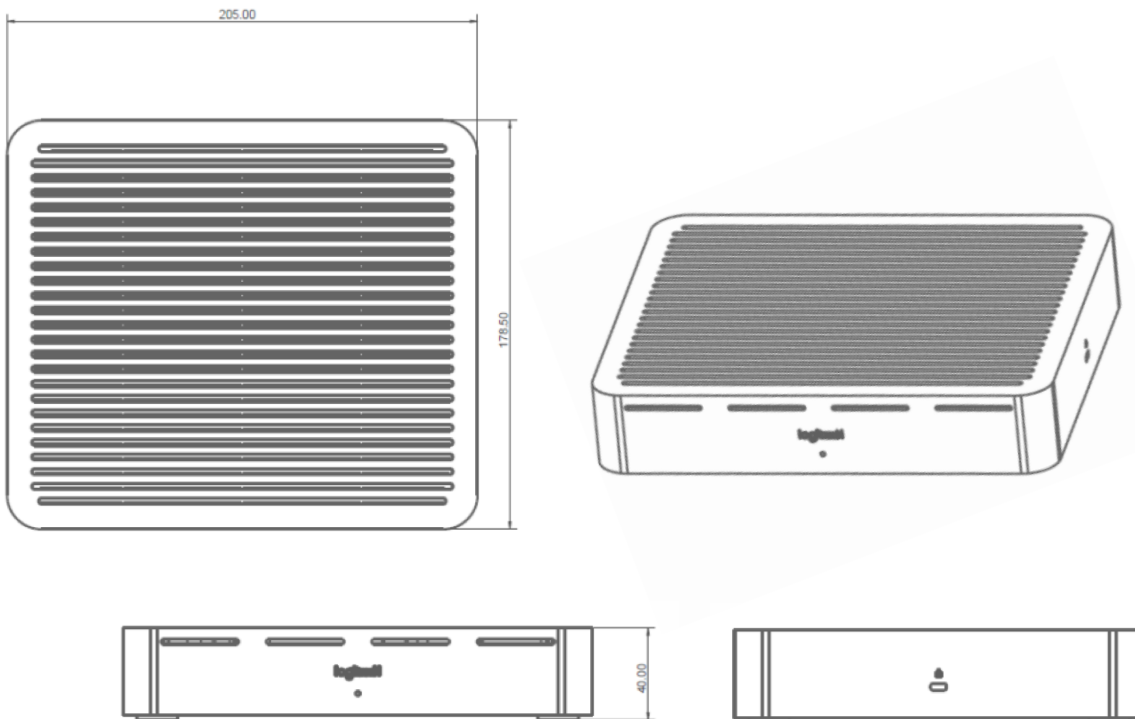
d.   MIC PODS: Each Mic Pod has an approximate pickup diameter of 15'/4.6m. The microphones can be daisy chained or connected in a trunk/branch configuration using the optional Mic Pod Hub described below. Rally supports up to seven (7) Mic Pods.
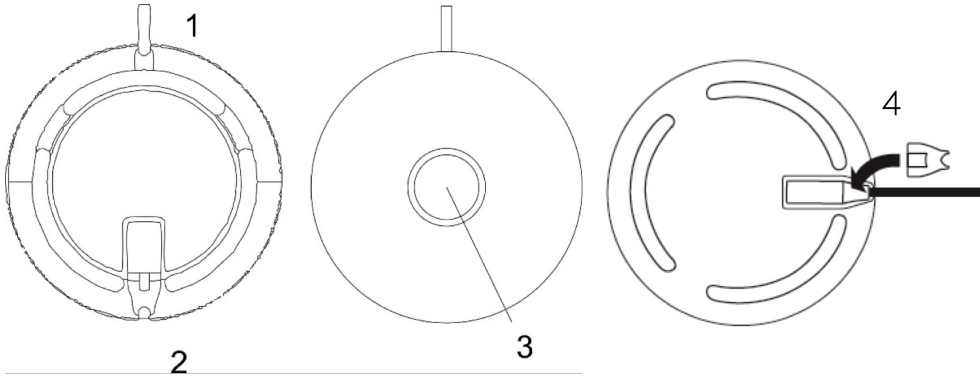
1.   Mic cable
2.   Mic Pod jack: Connection for next Mic Pod when daisy-chaining.
3.   Microphone mute button
4.   A two-piece insert covers the Mic Pod jack. Once the next Mic Pod is connected, the smaller piece can be inserted to lock the cable in place.

FEATURES	MIC POD SPECS
Pickup Range	15 ft/4.5 m diameter
Maximum Mic Pods	Daisy chain up to 7
Frequency response	90 Hz - 16 kHz
Sensitivity	>-27 dB +/- 1 dB @ 1 Pa
Microphone data rate	48 kHz
Number of participants	• Rally (one mic pod): 10 • Rally Plus (two mic pods): 16 • Rally with 7 mic pods: 46
Additional participants per Mic Pod	6
Features	• Four omnidirectional microphones forming eight acoustic beams • AEC (Acoustic Echo Cancellation) • VAD (Voice Activity Detector) • Background noise suppression • Mute button with LED status indicator • Captive 9.6 ft (2.95 m) 12-pin cable

e. SPEAKERS: The Rally speakers are ultra-low distortion designed specifically for speech and enhanced echo canceling. When the system is uses in an application that enables a microphone (such as video conferencing and recording applications) the speaker output is binaural/double mono. When used in applications with no microphone input, the speakers output stereo.

FEATURES	SPEAKER SPECS
Connection	Mini XLR cable connects to Rally Display Hub for both signal and power
Volume	95dB SPL @ 1 W, 100dB SPL @ 7.5, both +/-2dB at ½ meter
Sensitivity	95+/-2dB SLP at ½ meter
Distortion	200Hz-300Hz < 2.5%, 300Hz-10kHz < 1%@7.5W
Speaker sampling rate	48 kHz
Features	• High-performance 3" (76 mm) driver with rare-earth magnet • Patent-pending suspension system eliminates vibration-induced camera shake and audio interference

f. CABLES AND POWER SUPPLIES:

CABLE	END 1	END 2	LENGTH	COMMENT
PTZ to TV hub	USB C	USB C	2m	USB 3.1
Compute to Display or Table Hub	USB A	USB B	2m	USB 3.1
Display Hub to Table Hub	RJ45	RJ45	5m	CAT6a (max length = 50 m)
Display Hub to Speaker (x 2 in Rally Plus)	Hard wired at Speaker end	Mini XLR	2.95 m	XLR (will also support a user-supplied 3 m extension cable)
HDMI compute (x 2 in Rally Plus)	HDMI A	HDMI A	2 m	HDMI 2.0
Mic Pod	Hardwired at Mic Pod	12 pin	2.95 m	
Mic Pod Hub	Hardwired at Mic Pod Hub	12 pin	2.95 m	

POWER SUPPLIES	END 1	END 2	LENGTH	COMMENT
Table Hub	C5	DC jack plug (O.D = 5.5 mm, I.D = 2.1 mm, L = 10.6 mm +/- 0.3)	3.5 m	100-240V, 48V, 2A
Display Hub	C5	DC jack plug (O.D = 7.4 mm, I.D = 5.1 mm, L = 11.7 mm +/- 0.3)	2m	100-240V, 19V, 4.74A

g.   REMOTE CONTROL: The remote can be easily held in the hand or operated while sitting on the table. Up to five (5) remote controls can be connected to one system allowing easier access to controls in larger rooms. See the "pairing a remote control" section for instructions on how to pair additional remote controls to Rally.
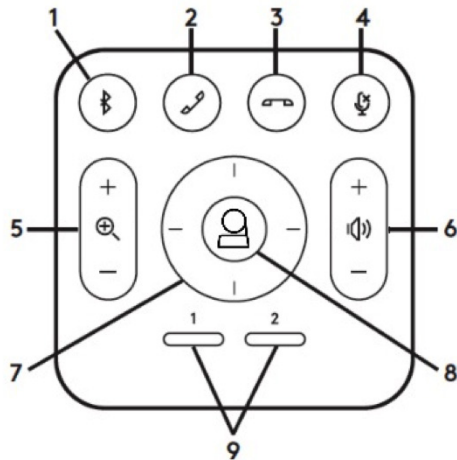
1. Bluetooth pairing
2. Call answer[1]
3. Call end[1]
4. Microphone mute
5. Zoom in/out

6. Volume up/down
7. Camera pan/tilt
8. Home/RightSight
9. Camera presets

Setting the camera presets: For preset 1 and 2, pan, tilt and zoom the camera to the desired location and press and hold one of the presets for about three (3) seconds. The LED on the camera will flash when the preset is saved. Repeat for the other preset. For the home preset, move the camera to the desired location and hold the home button for about ten (10) seconds. Again, the LED on the camera will flash when the preset is saved. At the start of a meeting, the camera will move to the home preset position. Camera presets are stored in Rally, not the meeting room computer.

RightSight (available as a software/firmware update for Windows 10 - see Logitech.com for additional availability) will automatically frame the participants in the meeting. To override RightSight, manually pan, tilt or zoom the camera. To reenable RightSight, press the home button.

1. Call answer and end buttons function in supported applications.

h. OPTIONAL ELEMENTS:

    i. Additional Mic Pods: Rally supports up to seven (7) Mic Pods.

    ii. Mic Pod Hub: Used in microphone routing configurations where most of the cabling is below the table. The Mic Pod Hub has three jacks that can be connected to a combination of Mic Pods or other Mic Pod Hubs. Rally supports up to seven (7) Mic Pod Hubs.

    iii. Mounting Kit:

        1. Speaker wall mounts (x 2 for Rally Plus)

        2. Camera wall mount

        3. Display Hub mount

        4. Table Hub mount

        5. Cable clamps x 2

        6. Screws and wall anchors

    iv. Additional remote controls: Up to five (5) remote controls can be paired to Rally. Having additional remote controls can be useful in larger rooms.

3. CONNECTING THE COMPONENTS

You have two options on where to place the computer running your meetings: the first (and recommended method in most cases) is near the display and the second is at the table. If you plan on the meeting computer at the display, please proceed to section 4. If you plan on having the meeting computer at the table, please proceed to section 5.

a. **NOTE ON COMPUTERS CONNECTED TO BOTH HUBS: Only one computer can have an active connection to Rally.**

    i. If Rally is powered on with computers connected to both the Table and Display Hubs, the computer connected to the Table Hub will be the active computer.

    ii. If a second computer is connected while Rally is powered on, the first computer connected remains the active computer.

4. MEETING COMPUTER AT TABLE

Connections when the meeting computer is at the table.
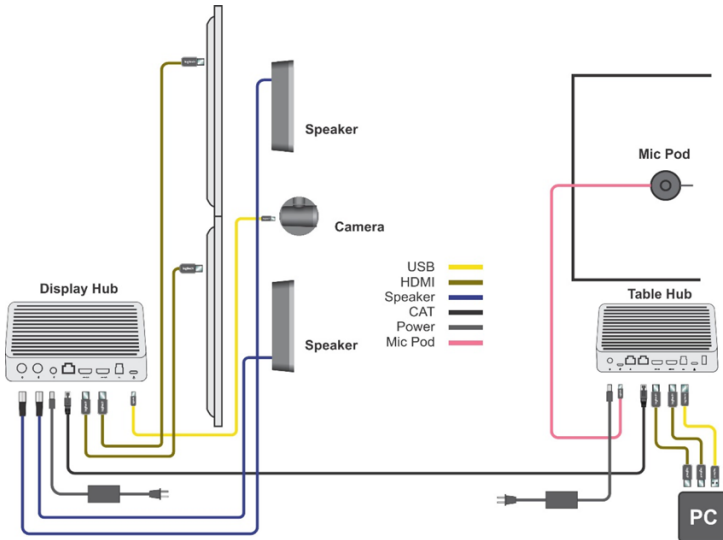
a. CONNECTING THE TABLE HUB

   i.   Connect the USB type A/type B cable between the Table Hub and meeting computer.

   ii. Connect the HDMI cable(s) between the Table Hub and computer. Note that Rally can pass through two HDMI signals from the computer to drive two displays. If using just one display, connect it to the HDMI 1 jack on the Table Hub.
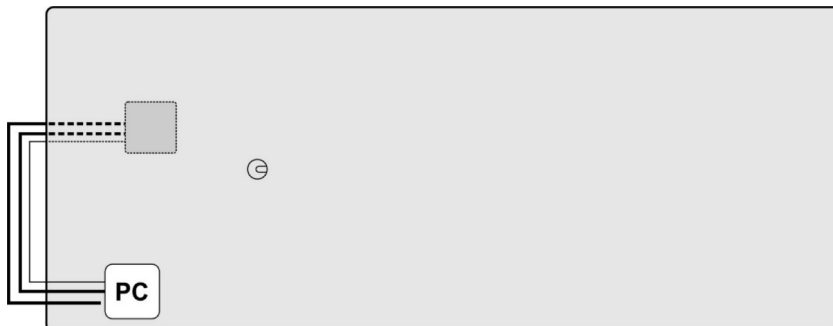
iii.   Connect the Mic Pod(s) to the Table Hub.
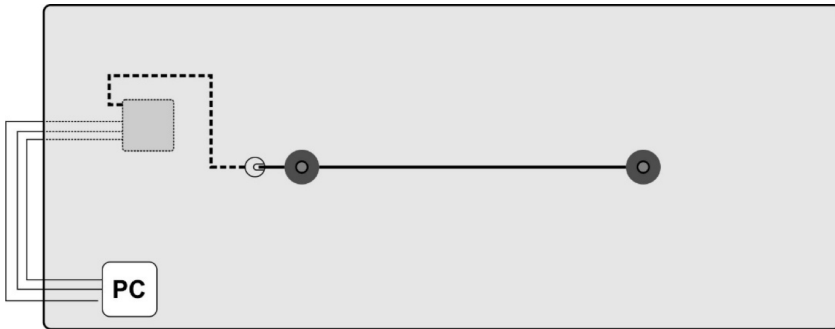
iv.   Connect the CAT6a cable to the Table Hub.
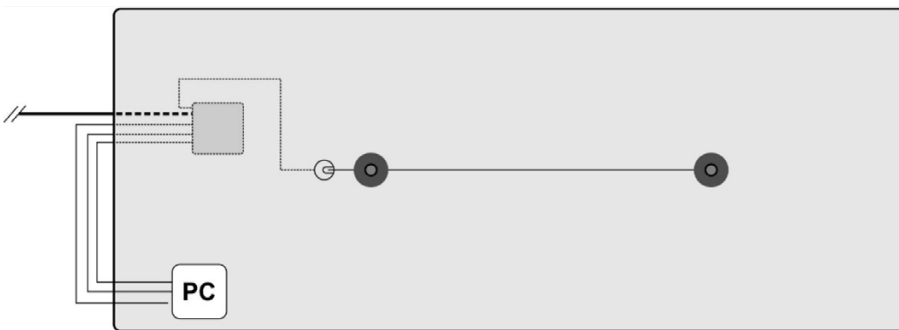
v.   Connect the power supply to the Table Hub.

b.   CONNECTING THE DISPLAY HUB

i.   Connect the speakers to the Display Hub.

ii. Connect the USB C cable between the camera and Display Hub. The camera draws more power than normally available from an USB port and so must be connected to the Display Hub. Note, the camera can optionally be mounted upside down and an internal sensor will automatically invert the image and remote control function.

iii. Connect the HDMI cable(s) between the display(s) and Display Hub. If using just one display, connect it to the HDMI 1 jack on the Display Hub.
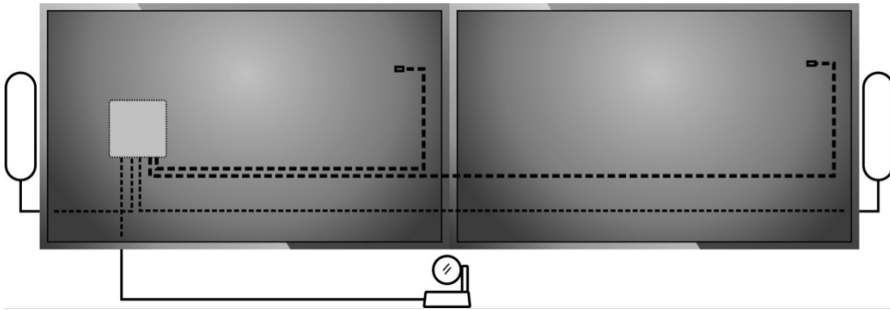
iv. Connect the CAT6 cable from the Table Hub to the Display Hub.
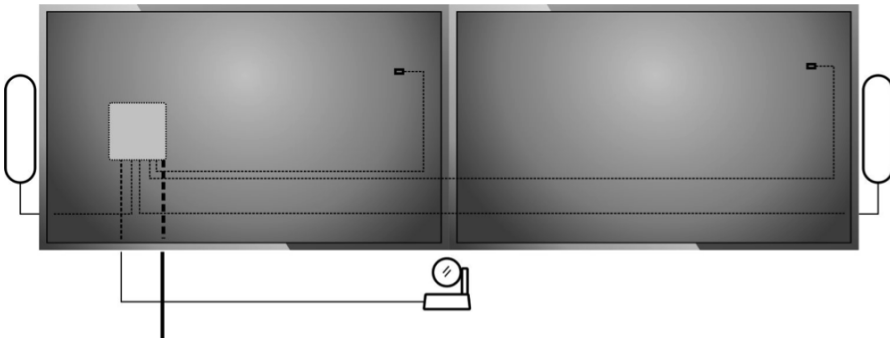
v. Connect the power supply to the Display Hub.
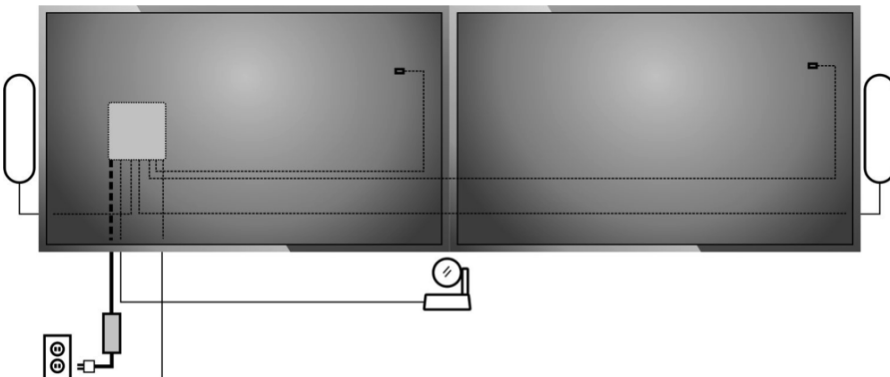
vi. NOTE REGARDING HDMI SIGNALS: Up to one 4K 60fps (YCbCr 4:2:0) on HDMI 1 or two 1080p signals (one at 1080p 60fps and one at 1080p 30fps, which is then upscaled to 60fps) can be carried between the Table Hub and Display Hub. The HDMI signals are a straight pass through between the hubs.

If a single display is connected and running in 4K resolution on HDMI 1 then HDMI 2 is disabled. To enable HDMI 2 for the second screen, the computer connected to HDMI 1 must be set at 1080p 60fps or lower resolution.

vii. Note: In Windows, there are two locations where the display resolution needs to be checked or set. Please make sure the resolution is set to 1080p in both Display settings and Advanced Display Settings as follows:

1. Go to Settings and select System, then Display.

2. Make sure the resolution is set to 1920x1080

3. Click on Advanced Display Settings

4. Make sure the Active signal resolution is also set to 1920x1080.

5. If not, then click on Display adapter properties for Display

6. Click on List All Modes and select an appropriate 1920x1080 mode that has a refresh frequency which is supported by your display

7. The Active signal resolution should now show 1920x1080. If not try a different 1920x1080 mode under List All Modes.

5. MEETING COMPUTER AT DISPLAY

Connections when the meeting computer is at the display
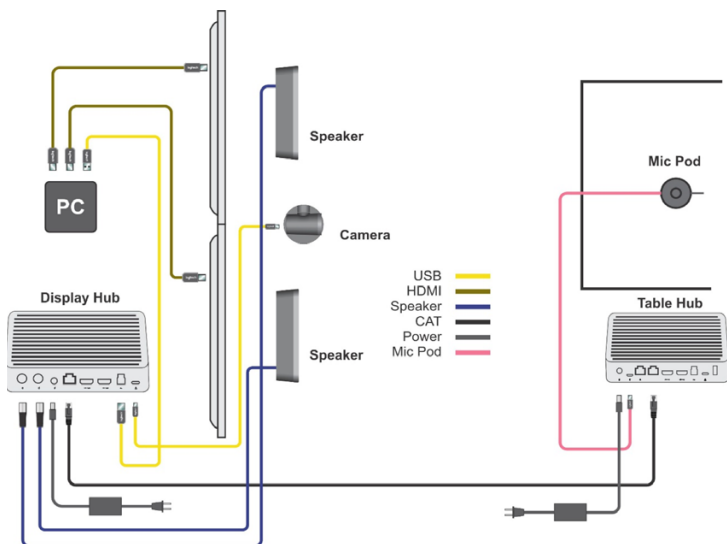
a. CONNECTING THE TABLE HUB

    i. Connect the Mic Pod(s).
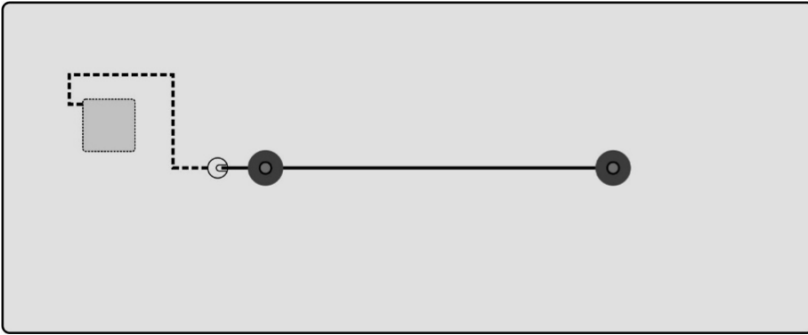
    ii. Connect the CAT6a cable to the Table Hub.
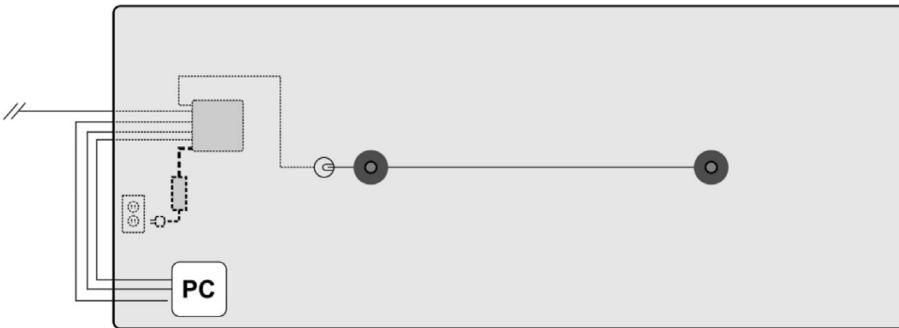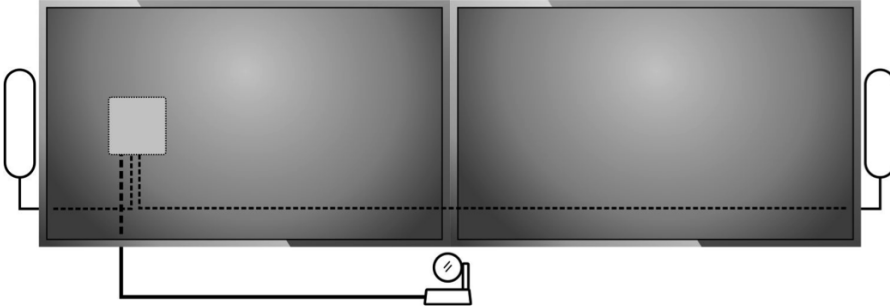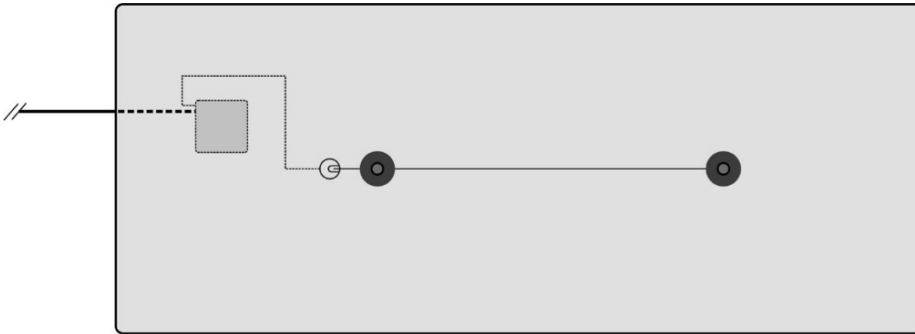

    iii. Connect the power supply to the Table Hub.
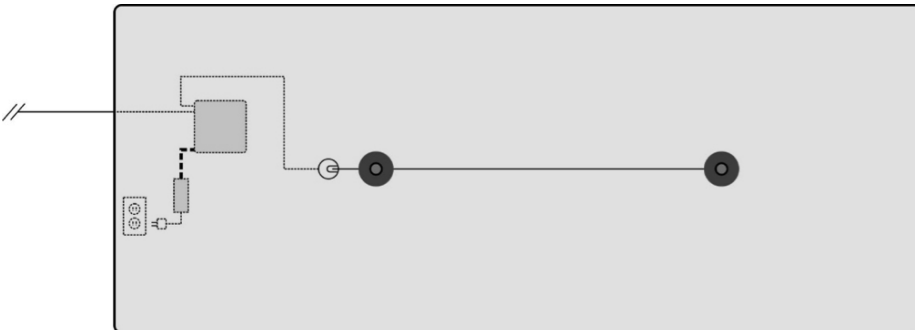
b. CONNECTING THE DISPLAY HUB

    i. Connect the HDMI cable(s) directly to the display(s). Please note that Rally can't turn on the display(s) via CEC with this configuration.
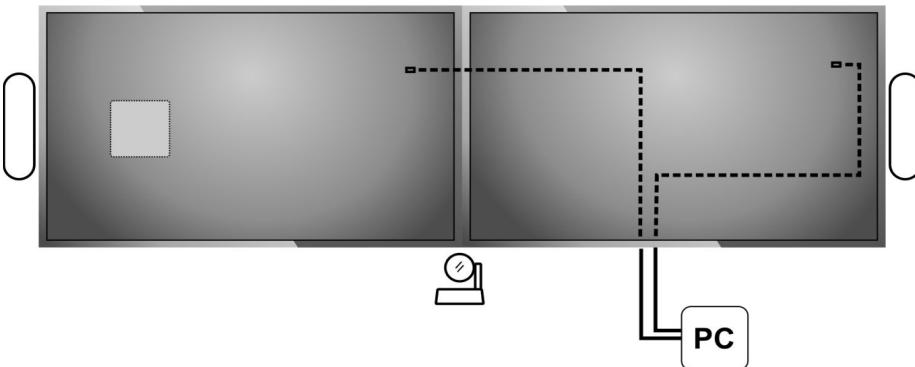
ii.   Connect the speakers to the Display Hub.
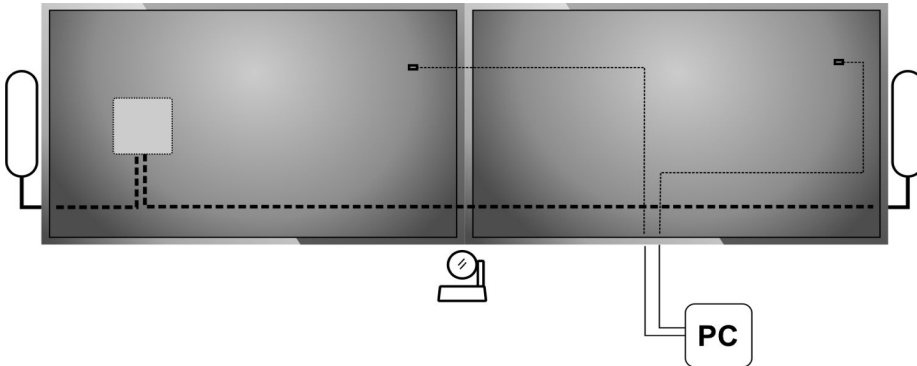
iii.   Connect the USB C cable between the camera and Display Hub. The camera draws more power than normally available from an USB port and so must be connected to the Display Hub. Note, the camera can optionally be mounted upside down and an internal sensor will automatically invert the image and remote control function. The camera must be power cycled when mounting upside down.
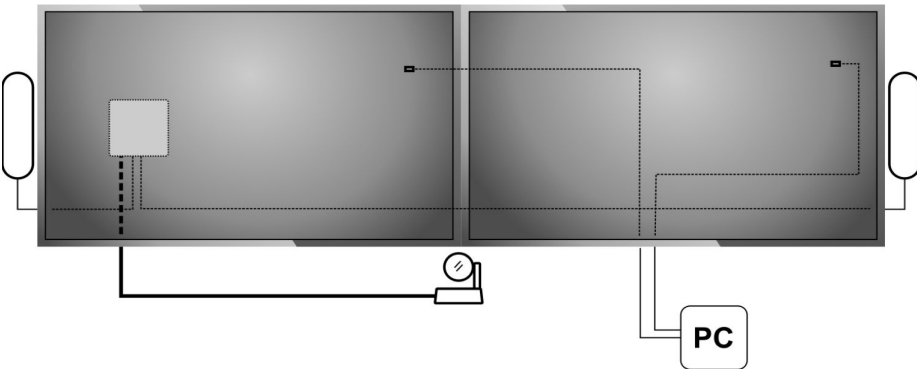

iv.   Connect the USB type A/type B cable between the Display Hub and the meeting computer.
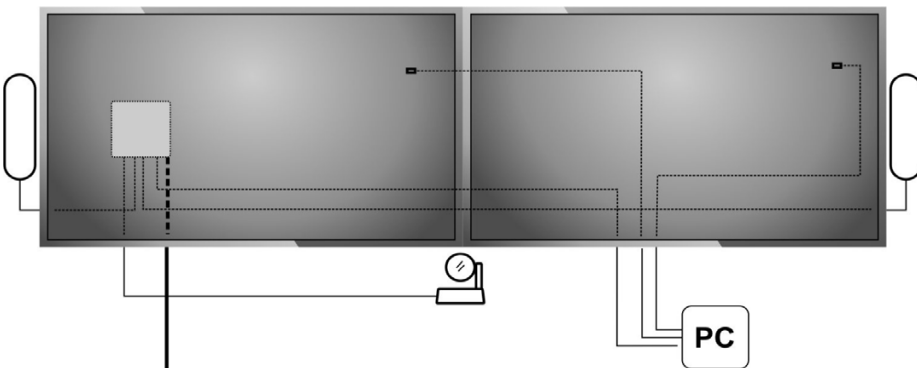
v.   Connect the CAT6 cable between the Display Hub and the Table Hub.
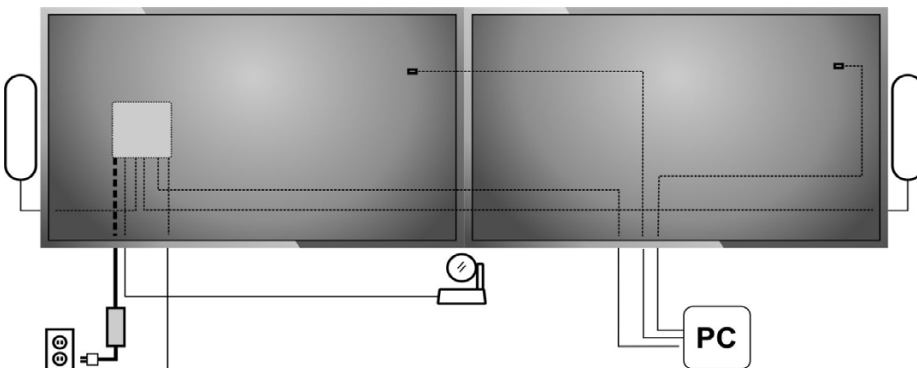
vi. Connect the power supply to the Display Hub.
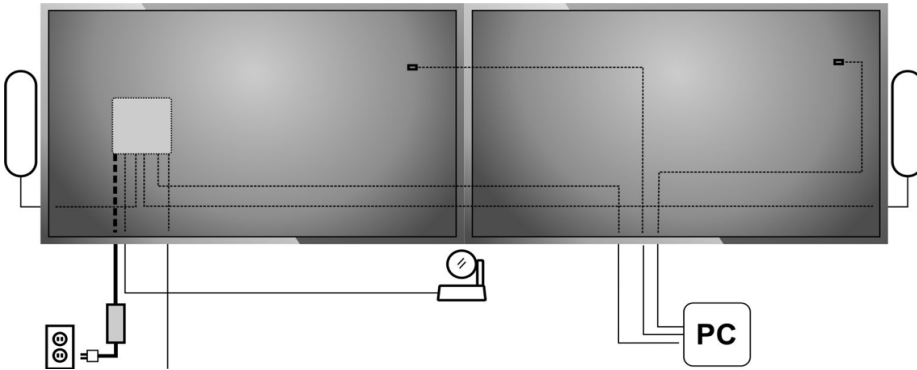
6. OPTIONAL CONNECTIONS

a. With the meeting room computer connected to the Display Hub, it's possible to share content from a second computer using the Logitech Screen Share as shown below:
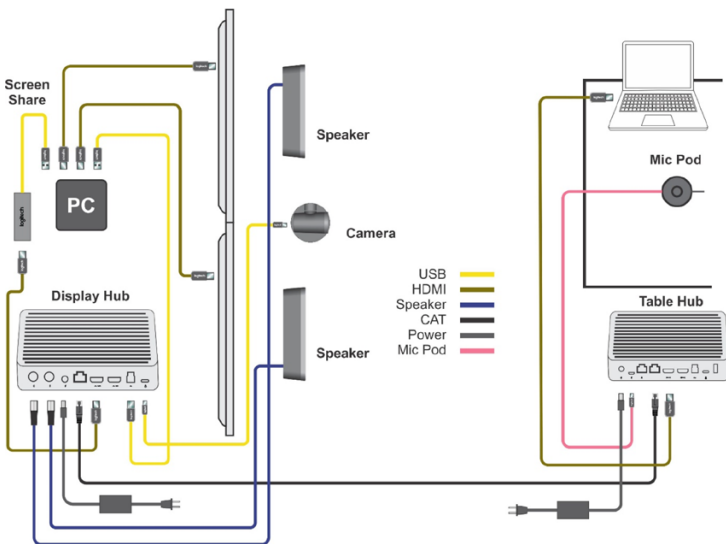
b. Using Logitech Tap with Rally, the recommended connections are as follows:
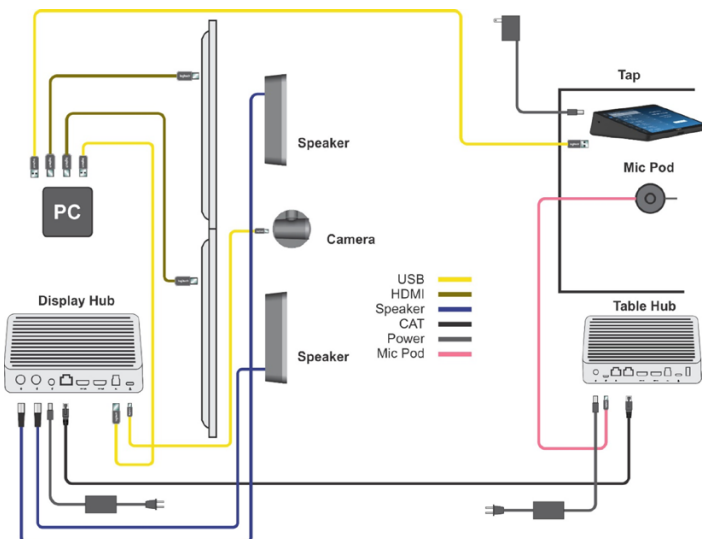
c.   When using Logitech Flex with SmartDock and Rally, the recommended connection schematic is below:
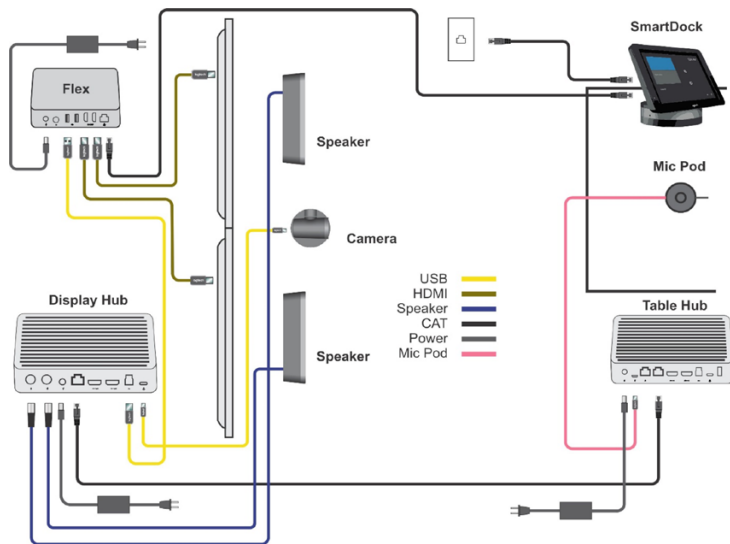
7. TESTING

a.   Each component (except for the speakers) has an LED to indicate status. If the system is connected and powered:

    i.   A solid LED indicates the part is functioning properly.

    ii.   Flashing red LED on the Mic Pods indicates the system firmware is updating.

    iii.   No LED indicates either no power or a problem.

8. GETTING 4K OUT OF THE CAMERA

a.   Rally Camera is capable of outputting 4K video. If the meeting room computer is connected to the Display Hub, the computer can receive a 4K signal from the camera. Please note that the video conferencing application must be able to support 4K to experience 4K video conferences.

b.   If the meeting room computer is connected to the Table Hub, the maximum resolution from the camera is 1080P.

9. USING

a. **MAKE RALLY THE DEFAULT DEVICE:** Ensure that Rally is chosen as the camera, speaker, and microphone in your video conferencing applications and the operating system. Please consult the conferencing application documentation for further instructions on how to do this.

  i. The camera is listed as "Logi Rally Camera."

  ii. The microphones and speakers are listed as "Logi Rally Audio."

b. **STARTING A VIDEO CALL:** After installing Rally and ensuring it is the default device in your video conferencing application, simply start the application in the normal manner and enjoy the benefits of improved audio and video.

c. **CONSUMER ELECTRONICS CONTROL (CEC):** CEC allows commands to be sent over HDMI to CEC enabled products. When the displays are connected to the Display Hub via HDMI, a signal to turn display on will be sent when:

  i. Any button on Rally remote is pressed.

  ii. Rally becomes active (video or audio signal initiated). Note, the power on signal is not sent during Bluetooth calls.

  iii. Connecting a PC to Rally.

  iv. Note that some HDMI cables may not support CEC.

  v. Please see your display documentation for further information on any steps that may be required to enable CEC.

  vi. CEC can go by different names depending on the display manufacturer. Some common names are:

    1. Anynet+ (Samsung)

    2. Aquos Link (Sharp)

    3. BRAVIA Link, BRAVIA Sync, Control for HDMI (Sony)

    4. CE-Link, Regza Link (Toshiba)

    5. E-link (AOC)

    6. EasyLink (Philips)

    7. Fun-Link (Funai, Sylvania, Emerson, Magnavox, Philips)

    8. HDMI-CEC (Hitachi)

    9. INlink (Insignia)

    10. Kuro Link (Pioneer)

    11. NetCommand for HDMI, Realink for HDMI (Mitsubishi)

    12. RIHD (Remote Interactive over HDMI) (Onkyo)

    13. RuncoLink (Runco International)

    14. SimpLink (LG)

    15. T-Link (ITT)

16. VIERA Link, HDAVI Control, EZ-Sync (Panasonic)

17. CEC (Vizio)

vii. This feature is not supported on all TVs.

d. PAIRING RALLY TO A BLUETOOTH DEVICE: You can pair a Bluetooth device to Rally for audio-only calls. Rally supports the Hands Free Profile (HFP). To pair your Bluetooth device, follow these simple steps:

i. Press and hold the Bluetooth button on the remote control until you see a flashing blue light on the camera and microphones. The flashing continues until pairing is completed.

ii. Place your mobile device in Bluetooth pairing mode and select "Logi RALLY PLUS".

iii. You are now ready to use Rally for audio calls.

Pressing the Bluetooth button on the remote after a device is paired will disconnect the Bluetooth device (it will still be "paired" but not "connected"). Pressing it again will reconnect the last paired device in range.

e. LED INDICATORS

i. Camera

1. When in an active call (either audio or video), the LED will illuminate white.

2. When the mic is muted the LED will illuminate red.

3. The LED will flash white when receiving an incoming call (in supported applications).

4. Placing the calling application on hold will cause the LED to flash red until the call is taken off hold and then returns to white.

5. Connect to/disconnect from a USB port

a. When a connection to a USB port is made: The white LED on the camera will flash three times. This is done to show the user that a connection has been made.

b. When disconnected from a USB port the white LED on the camera will extinguish.

6. The LED will flash blue while pairing to a Bluetooth device or while pairing the remote control to Rally.

ii. Mic Pods

1. Mic Pod LEDs behave the same as the camera.

2. When the mic is muted the LED will illuminate red.

3. The LED will flash white when receiving an incoming call (in supported applications.)

4. Placing the calling application on hold will cause the LED to flash red until the call is taken off hold and then returns to white.

5. Connect to/disconnect from a USB port

a. When a connection to a USB port is made: The white LED on the camera will flash three (3) times. This is done to show the user that a connection has been made.

b. When disconnected from a USB port the white LED on the camera will extinguish.

6.   The LED will flash blue while pairing to a Bluetooth device or while pairing the remote control to Rally.

f.   SLEEP MODE:

    i.   A few seconds after a video call is ended, the camera will go into sleep mode and the lens will point down to the base. This protects the lens and helps keep it clean.

g.   MAKING A CALL (IN SUPPORTED APPLICATIONS)

    i.   After ensuring that Rally, (mic and camera) are selected in the application properties, select a contact within application or dial a number from application dial pad.

h.   RECEIVING A CALL (IN SUPPORTED APPLICATIONS)

    i.   When a call is being received, the white LED will blink and the application ringer is heard on the Rally speaker. Press the call answer button on the remote control button or from the application to start the call.

    ii.   Rejecting and accepting call waiting takes place within the application.

i.   CALL WAITING (IN SUPPORTED APPLICATIONS)

    i.   If another party calls in during a call in progress:

        1.   Merging the new caller into the call in progress or putting current call on hold to talk to new caller takes place within the application.

    ii.   Rejecting and accepting call waiting takes place within the application.

j.   HOLD (IN SUPPORTED APPLICATIONS)

    i.   Putting a call on Hold is takes place within the application.

    ii.   When a call is put on hold within the application, the red LED will blink until the call is taken off hold, at which point the LED returns to white.

k.   ENDING THE CALL (IN SUPPORTED APPLICATIONS)

    i.   Pressing the call end button will end the current call.

    ii.   Calls can also be ended within the application.

l.   SETTING CAMERA PRESETS

    i.   Setting presets 1 & 2: Once the camera has been positioned and zoomed to the desired point, hold one of the preset buttons down for two seconds to set the preset. When the preset is saved the LED on the camera will flash briefly. Thereafter, pressing that preset button will move and zoom the camera to that point until set in a different location.

    ii.   Home: By default, the home button will be zero pan/tilt and 1x zoom. Whenever the camera is started it will move to the home position. To set the home preset: Once the camera has been positioned and zoomed to the desired point, hold the home button down for ten (10) seconds to set the preset. When the preset is saved the LED on the camera will flash briefly. Thereafter, when the camera starts it will move to the home position.

10. PAIRING A REMOTE CONTROL TO RALLY

Rally and the remote control are paired at the factory. . If the Table Hub, Camera or Remote are replaced, the remote must be re-paired with the system. Further, you can pair up to 5 remote controls to Rally or Rally Plus to make it easier to control the system in larger rooms. To pair a remote, do the following:

a.   Press and hold button on the back of the camera until the LED flashes blue.

b.   Press and hold the button on the side of the Display Hub until the LED flashes.

c.   Press and hold the Bluetooth button on the remote for ten (10) seconds to place it in pairing mode.

d.   Once the remote and Display Hub and camera are paired the LED will stop flashing.

e.   If the pairing fails, the LEDs will keep flashing. Start from step b and repeat.

11. ADDITIONAL INFORMATION ON OPTIONAL ELEMENTS

a.   ADDITIONAL MIC PODS: Rally supports up to seven (7) Mic Pods. By adding additional Mic Pods you can assure excellent microphone coverage in varying room sizes and table configurations.

b.   Mic Pod Hub: The Mic Pod Hub has two common uses: The first is in microphone routing configurations where the desire is to run most of the cabling below the table. The second is table configurations that may require the mics to be branched instead of daisy chained. The Mic Pod Hub has three (3) jacks that can be connected to a combination of Mic Pods or other Mic Pod Hubs.   A maximum of 7 Mic Pod Hubs can be used.

c.   Mounting Kit:

    i.   Speaker wall mounts x 2

    ii.   Camera wall mount

    iii.   Display Hub mount

    iv.   Table Hub mount

    v.   Cable clamps x 2

12. FOR MORE INFORMATION

You can find additional information on Rally including:

a.   FAQs

b.   The Camera Settings Application

c.   Software to enable functions in various applications

d.   How to order replacement parts

   More at www.Logitech.com/RALLY

PRE-CONFIGURATION AND KNOWLEDGE BEFORE CUSTOMER VISIT:

1.   It's a good idea to be familiar with the ports on each of the hubs—you may likely be asked what they are for and what they do in the Rally solution. See accompanying "Rally Hubs" document for more information and also check out the video at youtube.com/watch?v=5SFWlvqg87Q& which discusses and demonstrates the hub connectivity.

2.   If you have a demo unit, it's recommended to set it up first at home office, ensuring the device is firmware updated and sets up properly. The firmware update can take up to 10 minutes since it updates all the components (both hubs, mics, camera, etc.)

3.   When the computer is connected to the Table Hub, the HDMI pass-through can support up to one 4K 30fps screen or two 1080p 30fps screens.

4.   The Windows 10 Camera application is a simple way to demo the camera since it's installed locally and can demo in 4K (with a system capable of displaying 4K). You can find the app through **Windows 10 Start > Camera.**

TROUBLESHOOTING TIPS:

1.   Always double check all connections

2.   Run the Logitech Sync Application available from the downloads section on the Rally support page on Logitech.com.

3.   If the meeting room computer is connected to the Table Hub and the second display is blank.

   Rally is able to transmit from the Table Hub to the Display Hub either one 4K signal or two 1080p streams. So, if a computer outputting a 4K signal is connected to the Table Hub, the second signal will not be transmitted—the 2nd screen will be black. Please configure the computer to do up to 1080p on the first screen before the second screen will display.

   Note: In Windows, there are two locations where the display resolution needs to be checked or set. Please make sure the resolution is set to 1080p in both Display Settings and Advanced Display Settings as follows:

   - Go to Settings and select System, then Display

- Make sure the resolution is set to 1920x1080

- Click on Advanced Display Settings

- Make sure the Active Signal Resolution is also set to 1920x1080

- If not, then click on Display Adapter Properties for Display

- Click on List All Modes and select an appropriate 1920x1080 mode that has a refresh frequency which is supported by your display

- The Active Signal Resolution should now show 1920x1080. If not try a different 1920x1080 mode under List All Modes

4. If camera is not working properly

    - Check computer is connected properly to Table Hub (USB)

    - Check camera is properly connected to Display Hub

    - Unplug and re-plug of camera USB cable

        - If neither of these resolve the problem, escalate to Support or you can also try these processes:

    - Check computer device manager (Windows) if Rally camera is shown properly

5. If no audio from the speaker

    - Check computer is connected properly to Table Hub (USB)

    - Check speaker is properly connected to Display Hub

        - If neither of these resolve the problem, escalate to Support or you can also try these processes:

    - Check computer device manager if Rally audio device is shown properly

    - Check Sound properties in Windows and check that Rally is selected as default audio playback device

    - In Windows Sound Properties, run the speaker test

6. Mics not working

    - Check mic is properly connected to Table Hub

    - Check computer is connected properly to Table Hub (USB)

        - If neither of these resolve the problem, escalate to Support or you can also try these processes:

    - Check computer device manager (Windows) if Rally audio device is shown properly

    - Check Sound properties in Windows and check that Rally is selected as default audio device

    - In Windows Sound Properties run microphone test