

In this article we explain how you can optimize the microphone pickup for Logitech's Rally family of products in rooms of varying sizes, with different table layouts. The article includes specific guidance about the optimal placement of external mics.

TABLE OF CONTENTS

CHOOSING THE RIGHT VIDEO CONFERENCING SYSTEM FOR EACH ROOM

MIC PODS ON THE CEILING VS. MIC PODS ON THE TABLE

RALLY BAR & RALLY BAR MINI

SPEAKER MODES: DEFAULT VS. SPEAKER BOOST MODE

TYPICAL MIC POD CONFIGURATIONS

MIC POD CONFIGURATIONS FOR SPEAKER BOOST MODE

RALLY PLUS

ACCESSORIES





CHOOSING THE RIGHT VIDEO CONFERENCING SYSTEM FOR EACH ROOM

When deciding which camera system is best for a given room, it's important to consider a number of factors. A combination of camera zoom performance, speaker output volume, and mic pickup range can help guide the best choice.

Below are general guidelines* to follow when deciding on which Rally device to place where.

- **Rally Bar Mini** is ideal for small to medium sized rooms that generally seat 3 to 12 people, up to 18' x 20' (5.5 x 6m or 33 m²).
- **Rally Bar** is ideal for medium to large rooms that generally seat up to 20 people, up to 15' x 26' (4.5 m x 8 m or 36 m²).
- **Rally Plus** is optimized for larger rooms that generally seat up to 46 people, up to 28' x 40' (8.5 m x 12 m or 102 m²).

The Rally systems are quite flexible and, with additional mic pods, can accommodate rooms of larger sizes. The built-in microphones in Rally Bar and Rally Bar Mini both support a mic pickup range up to 23 ft (7 m). However, there are situations where a room would benefit from additional microphones such as U-shaped tables or especially long tables. For these situations, Rally Bar supports up to four Rally Mic Pods, and Rally Bar Mini supports up to three.*
For larger rooms, Rally Plus supports up to seven Rally Mic Pods.

* See "<u>Accessories</u>" below for recommended products when using external mic pods.

MIC PODS IN THE CEILING VS. MIC PODS ON THE TABLE

After deciding the appropriate Rally system and number of mic pods, you may also consider whether to mount mic pods on the table or on the ceiling. Both options – mounting on a table or mounting on the ceiling – provide comparable performance, as long as the mic pods are positioned and spaced relative to one another in the same configuration and the ceiling height is 10 ft or less. With higher ceilings, space the mic pods closer together. As room acoustics can vary, testing the configuration is recommended.

In most rooms, satisfactory performance can be achieved with ceiling mounted mic pods. However, in situations with atypical HVAC systems or significantly higher ceilings, several Logitech Collaboration

Partners offer ceiling mic solutions for these acoustically challenging environments.



^{*} For optimal performance, follow these guidelines or test the system in individual rooms.

RALLY BAR & RALLY BAR MINI

Rally Bar and Rally Bar Mini are the latest video conferencing room solutions from Logitech. These two video bars can be run as standalone appliances or as USB video bars connected to virtually any PC or Mac. See logitech.com/vc for more information.

SPEAKER MODES: DEFAULT VS. SPEAKER BOOST MODE

When external mic pods are connected to Rally Bar or Rally Bar Mini, they can function in one of two modes: the default speaker mode or Speaker Boost Mode.

- In the default setting, the camera's internal microphones automatically work in concert with the external mic pods.
- In **Speaker Boost Mode**, only the external mic pods function. The camera's internal microphones are turned off.

Speaker Boost Mode has a couple advantages over the default setup. It's louder, for one. By default, the camera's speaker volume is set at an appropriate level for the echo canceler. Because Speaker Boost Mode turns the internal mics off, the speaker volume can be increased by 3 decibels (dB) without creating echo.

The second advantage of Speaker Boost Mode is that voices in a video meeting will sound more consistent when they're picked up using one type of microphone (external mic pods only) rather than two (external mic pods plus internal mics within the bar).

Whether you choose to use Speaker Boost Mode or the default settings depends on the size and configuration of the room. In the rest of this article we will provide diagrams for rooms optimized with and without Speaker Boost Mode.



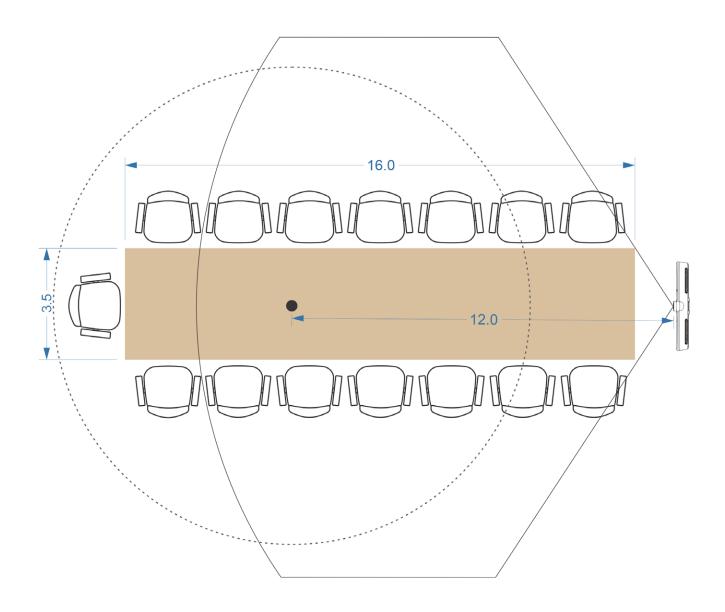


TYPICAL MIC POD CONFIGURATIONS

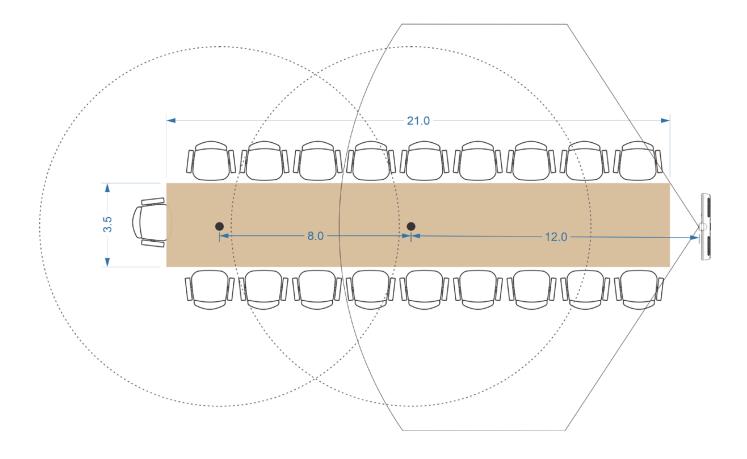
This section provides examples of mic pod placement when using a Rally conference camera in a default setup—without Speaker Boost Mode.

In the default setup, both external mic pods and internal mics are active. The internal mics pick up voices closer to the video bar, while the external mic pods pick up voices that are farther away.

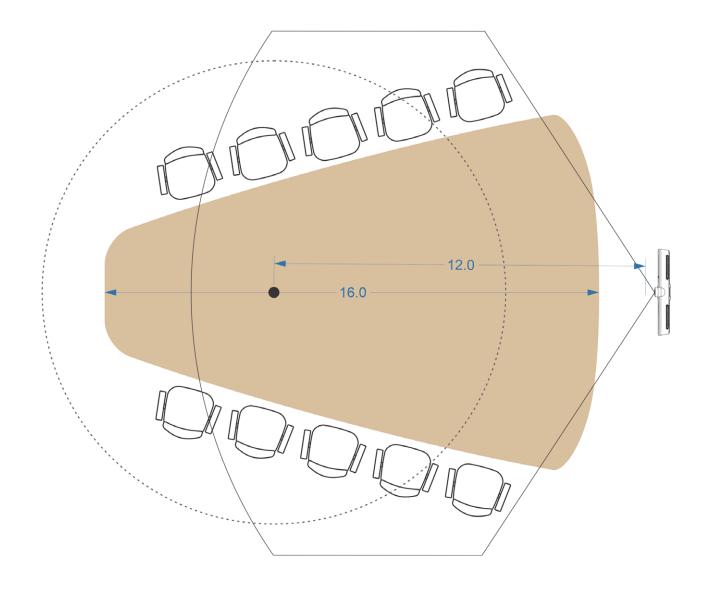
The diagram below is the most basic configuration for expanding the mic pickup range. The first mic pod should be mounted 12' (3.7 m) from the video bar to ensure sufficient mic pod range overlap. Each mic pod has a pickup range of 15' (4.6 m) diameter.



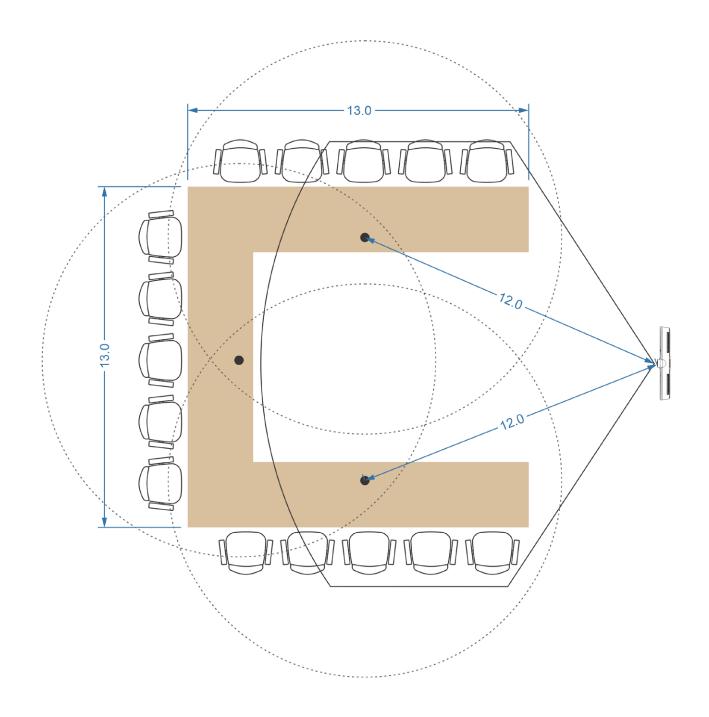
Each additional mic pod should be spaced 8 ft (2.4 m) apart as this provides the best overlapping coverage. You'll also find that this is the spacing defined by the mic pod cable length when using Rally Mic Pod Mounts.



A common configuration where two mic pods are recommended is a triangle-shaped conference table. Here the mic pods are mounted on either side of the table. This provides mic coverage not only at the table, but also to those seated along the wall or writing on a whiteboard.



For U-shaped tables or classroom configurations, three mic pods¹ are ideal, providing excellent mic coverage. Here again, the two mic pods closest to the video bar should be spaced no more than 12 ft (3.7 m) from the camera. A viable option for U-shaped tables is to run the system in Speaker Boost Mode (see below).

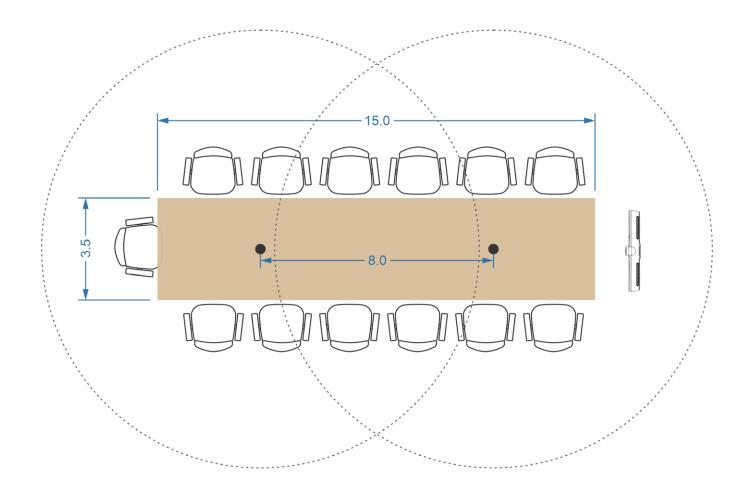


MIC POD CONFIGURATIONS FOR SPEAKER BOOST MODE

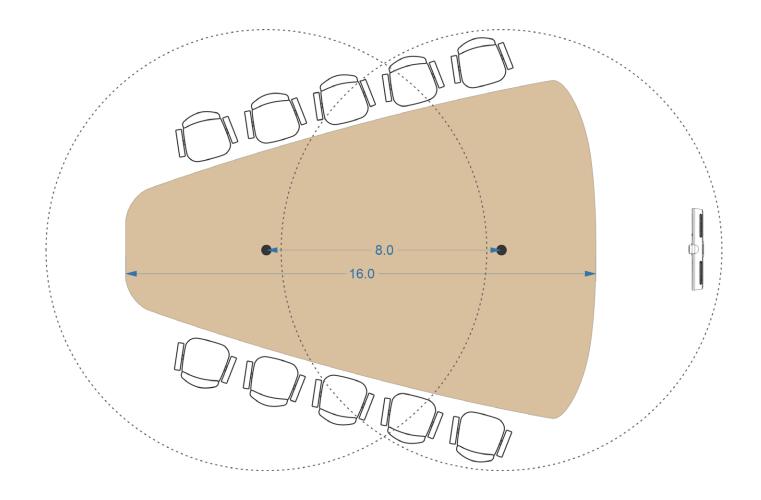
This section provides examples of mic pod placement when using a Rally conference camera in Speaker Boost Mode.

When using Speaker Boost Mode, only the external mic pods are active. So, while similar in configuration to a typical setup, now one additional mic pod is used nearer the video bar to pick up voices near the front of the room.

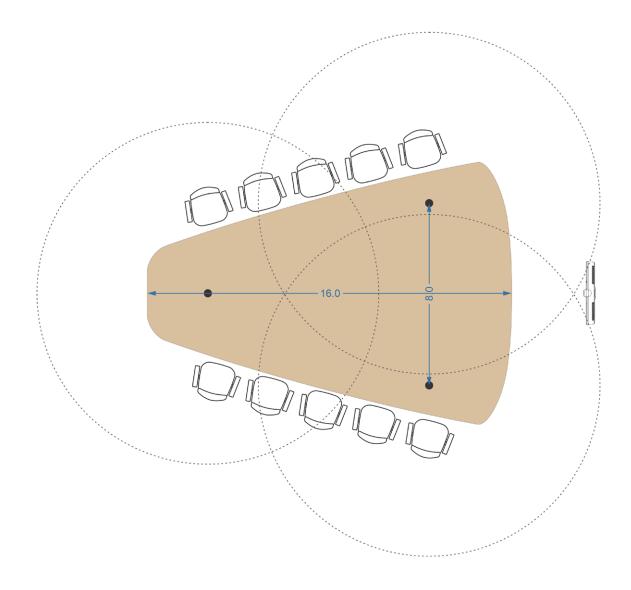
Two microphone layout:



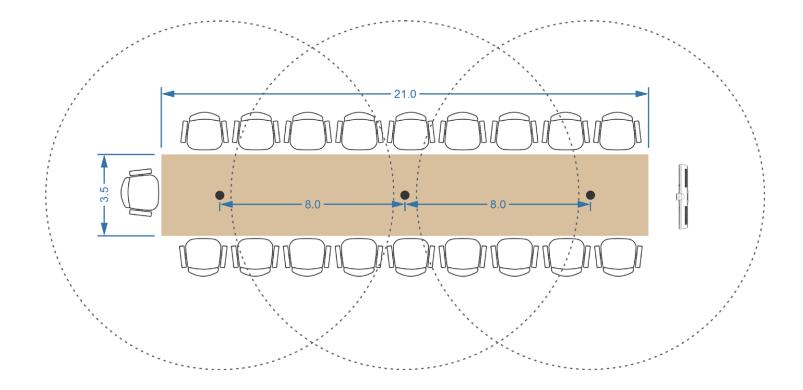
Another two microphone configuration is shown below. Again, a triangle-shaped table is used; however, in this case it's only important to pick up the voices of those seated at the table.



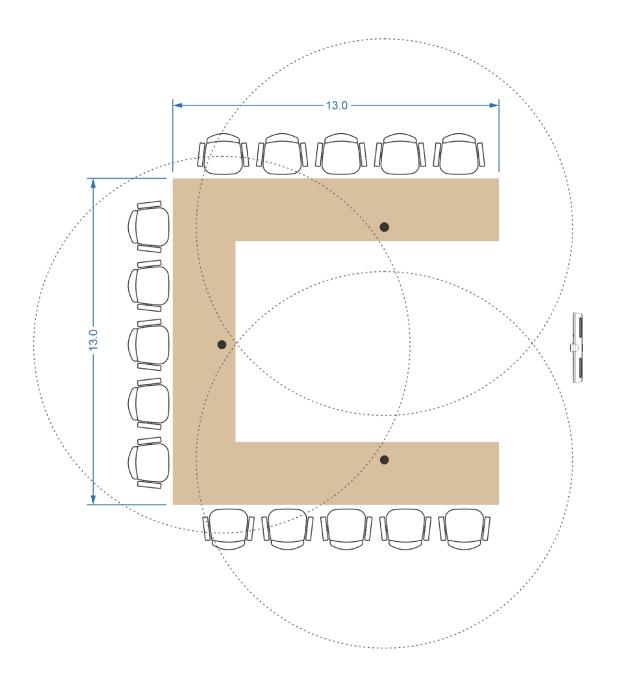
In a scenario where there are seats along the periphery of the room or whiteboards are commonly used, an alternate layout of the mic pods enhances coverage for those away from the table. In this case, a Rally Mic Pod Extension Cables is used between the first and second mic pods to allow greater spacing.



Another common configuration is three mic pods on a longer table. Again, the mic pods are spaced 8 ft (2.4 m) apart.



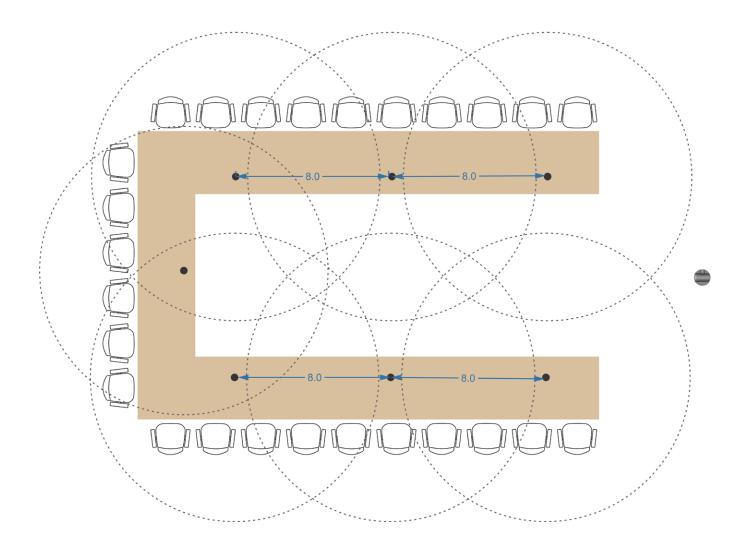
In a U-shaped table configuration, mic pods are biased towards the front of the room to ensure appropriate coverage for those seated nearest the front of the room and facing the camera. Again, the mic pods should be spaced no more than 8 ft (2.4 m) apart.



RALLY PLUS

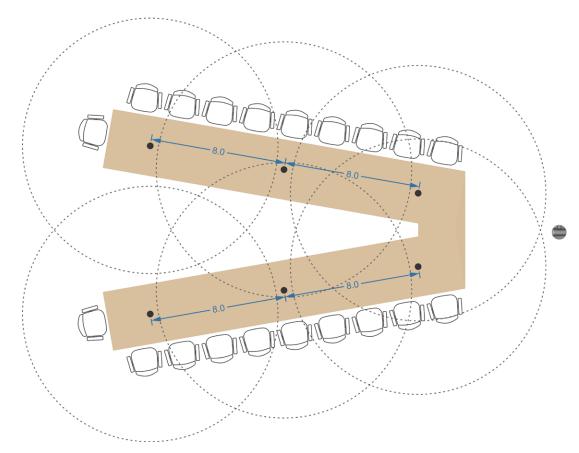
Designed for greater flexibility in larger rooms, Rally Plus supports up to seven mic pods and seven mic pod hubs. As Rally Plus uses only external mic pods, their placement replicates what's described above with Rally Bar and Rally Bar Mini in Speaker Boost Mode. Again, mic pods should be spaced a maximum of 8 ft (2.4 m) apart and consideration should be given to where people will be in the room, either at the conference table or also seated along the walls.

With up to seven mic pods, a variety of larger configurations can be supported, such as large U-shaped tables:

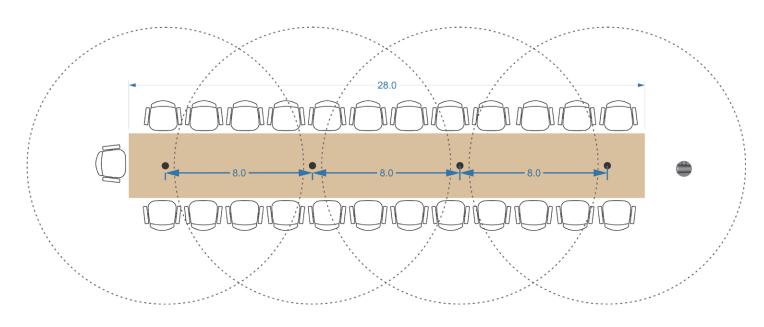




Or V-shaped tables:



Or even simply longer tables:



ACCESSORIES

There are three accessory products we recommend for any installation using external mic pods:



Rally Mic Pod Extension Cable is a 10 meter, plenum- and ECA-rated cable that allows mic pods to be placed farther away from the video bar. Up to two extension cables can be used with Rally Bar and Rally Bar Mini, and one can be used with Rally and Rally Plus.

- With Rally Bar and Rally Bar Mini, the two extension cables can be placed anywhere in the sequence of mic pods and extension cables.
- With Rally and Rally Plus the extension cable must be connected to the table hub.



Rally Mic Pod Hub includes three connectors and a 9.5 ft (2.9 m) cable that provides installers the flexibility to customize microphone placement.

Note: Rally Bar supports two Mic Pod Hubs and four Mic Pods. Rally Bar Mini supports two Mic Pod Hubs and three Mic Pods. With Rally and Rally Plus, seven Mic Pod Hubs and seven Mic Pods can be used.



Rally Mic Pod Mount secures the mic pod in a desired location on the table or ceiling while keeping the cables hidden. Available in graphite or white.

For more information about configuring any of the Rally conference cameras and sound systems, visit prosupport.logi.com

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Contact your reseller or contact us at www.logitech.com/vcsales

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¹ Rally Bar supports four Rally Mic Pods; Rally Bar Mini supports three.

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