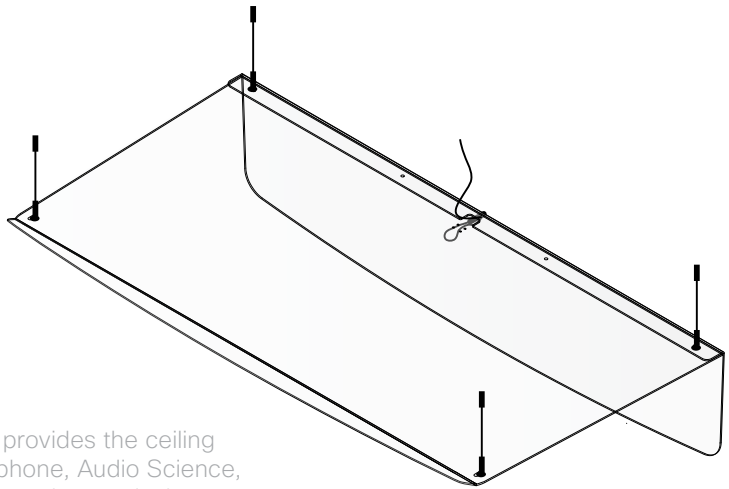




Cisco Ceiling Mic Audio Science

INSTALLATION GUIDE



Cisco provides the ceiling microphone, Audio Science, which can be used when you want to keep the table free of microphones.

Box contents

Main box contents

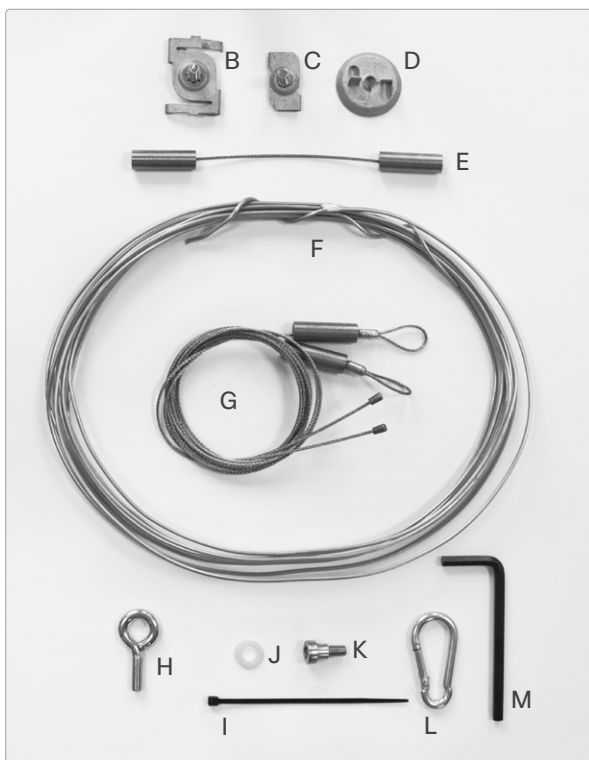
- 1 × Top deflector with microphone
- 1 × Rear deflector
- 1 × Accessories box
- 1 × Installation guide

You will need

- Step ladder
- Wire cutter (if required)

Accessories box contents

- A.** 1 × XLR microphone cable, white (not shown), l = 14.4 m
- B.** 4 × Ceiling track clip 4G16
- C.** 4 × Ceiling track clip 4J15
- D.** 8 × Ceiling clip, M6
- E.** 4 × Suspension cable, l = 110 mm, $\varnothing = 1.5$ mm
- F.** 1 × Steel wire, $\varnothing = 2$ mm
- G.** 2 × Safety cable
- H.** 4 × Eye bolt, M6 × 25 mm
- I.** 8 × Cable strips
- J.** 6 × Nylon washer
- K.** 6 × Screw, M6 × 10 mm
- L.** 4 × Carabin hook
- M.** 1 × Allen key, 5 mm
- N.** 1 × Cleaner kit with data sheet (not shown)

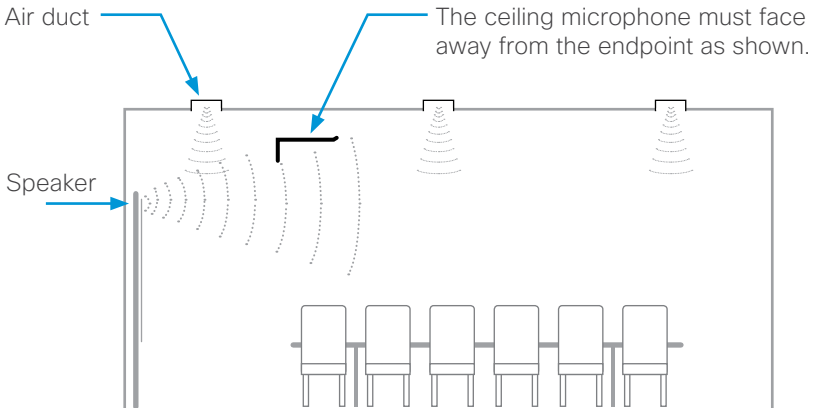


Consider before mounting

In acoustically dampened rooms, microphones can be used at the full effective range. In less dampened rooms, the spacing should be decreased.

Noise reduction

When the unit is mounted properly, the top and rear deflectors will act as shields reducing the effect of unwanted sound reaching the microphone element. Unwanted sound can come from the video system loudspeakers as well as noise from in-room ventilation systems.



Microphone pickup range

The microphone has a horizontal pickup range of about 14.1 ft. (4.3 m).

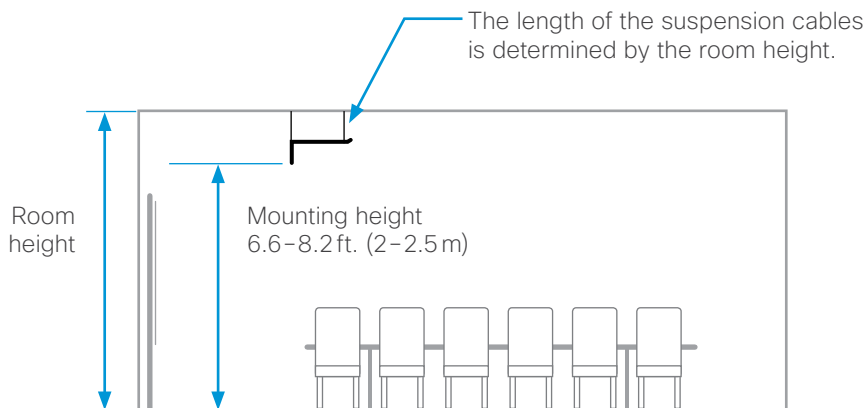
The microphone cable

The supplied microphone cable is 47.2 ft. (14.4 m). If a longer cable is required an additional cable must be ordered.

The suspension cables

The ceiling microphone should be suspended 6.6–8.2 ft. (2–2.5 m) above the floor, measured from the floor to the rear deflector.

The suspension cable supplied (E) is 0.36 ft. (110 mm). If longer cables are needed the Extension kit must be ordered. The suspension cables in the Extension kit (a, b) are 2.23/3.61 ft. (680/1110 mm). Suspension cables can be joined using the M6 ×50 mm threaded rods (h), found in the extension kit. The Extension kit is described overleaf.

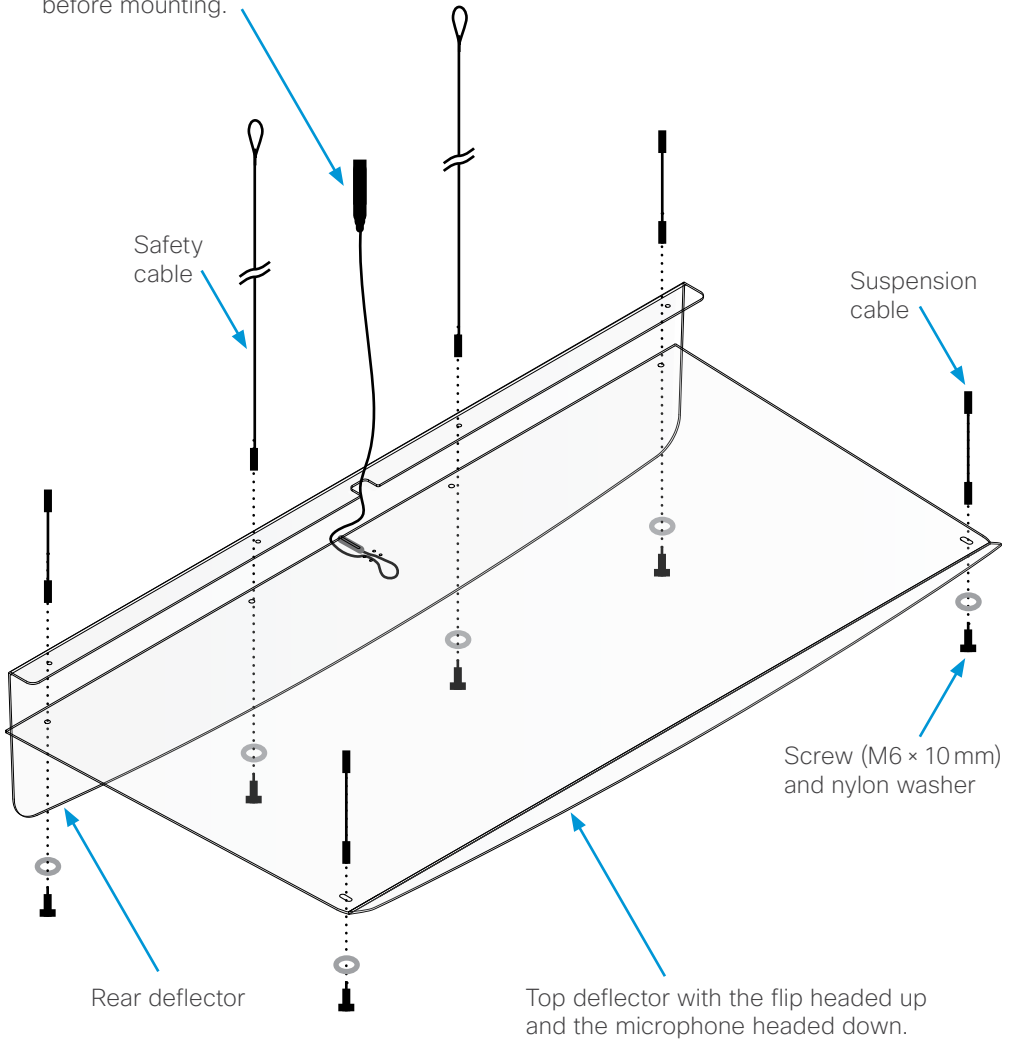


Using more than one ceiling microphone in a room

When using more than one ceiling microphone mount the unit with a spacing of 8.2–14.1 ft. (2.5–4.3 m).

Mounting the ceiling microphone – overview

Make sure the cable from the microphone is on the ceiling side of the top deflector before mounting.



Mounting the ceiling microphone




x2 Two persons will be needed when mounting this unit.

NOTE: The mounting may require one or more step ladders. Ensure that the safety is taken care of when mounting the unit.

Extension kit: The kit includes two suspension cables and hardware for other types of ceiling fixture and must be ordered separately. The Extension kit is described overleaf.

1. Take care to rest the deflectors on a horizontal surface.
2. Remove the protective paper from all surfaces of the top and rear deflectors.
3. Make sure the cable coming from the microphone comes out on the top.
4. Attach the rear deflector to the top deflector at the outer mounting holes. Use two suspension cables (E), two nylon washers (J), two shoulder screws (K) and the Allen Key (M).
5. Attach the two remaining suspension cables, nylon washers and shoulder screws to the opposite corner mounting holes of the top deflector.
6. The standard hardware included with the microphone is intended to be used on \perp shaped cross-section acoustics ceiling tracks, (standard inverted T-shaped cross-section). The horizontal part of the \perp shape should be either $\frac{9}{16}$ " (14 mm) or $\frac{15}{16}$ " (24 mm) in width.
7. Use the ceiling clips found in the accessories box. Attach the clips (B/C) in positions to match the mounting holes at each corner of the top deflector. If the grid of ceiling tracks does not match the mounting holes you may use the ceiling clip (D) and drill a hole in the acoustic ceiling tile to match the mounting hole.
 - Attaching the ceiling track clip (B/C) requires a twisting motion while applying upward pressure on the clip. The adjoining ceiling tiles may need to be pushed up to fully attach the ceiling clip.
 - Attaching the ceiling clip (D) requires some pieces from the Extension kit. Assemble the ceiling clip (D), threaded rod M6 (g/h), hex nut M6 (d) and lock washer M6 (e), led the threaded rod part of the assemble through the hole, and fasten it to the suspension cable.

8. With the assistance of another person lift the ceiling microphone assembly and attach the suspension cables to the ceiling track clips. Support the unit while the cable suspension are fastened.
9. Attach the safety cables to the ceiling microphone. Use two safety cables (G), two nylon washers (J), two shoulder screws (K) and the Allen Key (M).
NOTE: Do not attach the safety cables to electrical or other wiring.
10. Connect the safety cables to solid anchoring points in the ceiling. Use the carabin hooks (L) to fasten the safety cable.
11. Use the steel wire (F) if you need additional wire length. You may need a wire cutter (not included).
12. Allow enough slack to let the acoustic ceiling tiles slide into place, but not enough to allow the unit to hit anyone in the case of ceiling track failure.
13. Connect the microphone cable (A) to the black XLR connector coming from the microphone.
14. Led the microphone cable along one of the safety cables up to the ceiling. Use the cable strips (I) to attach the cables.
15. Led the microphone cable across the ceiling, above the acoustic ceiling tiles, and down the wall to the video system. Attach the cable to the wall in an appropriate manner.
16. Connect the microphone cable to the audio input on the codec.
17. Locate the dip switch on the black XLR connector. Turn on the microphone by moving the dip switch to the “” position.

Finishing up

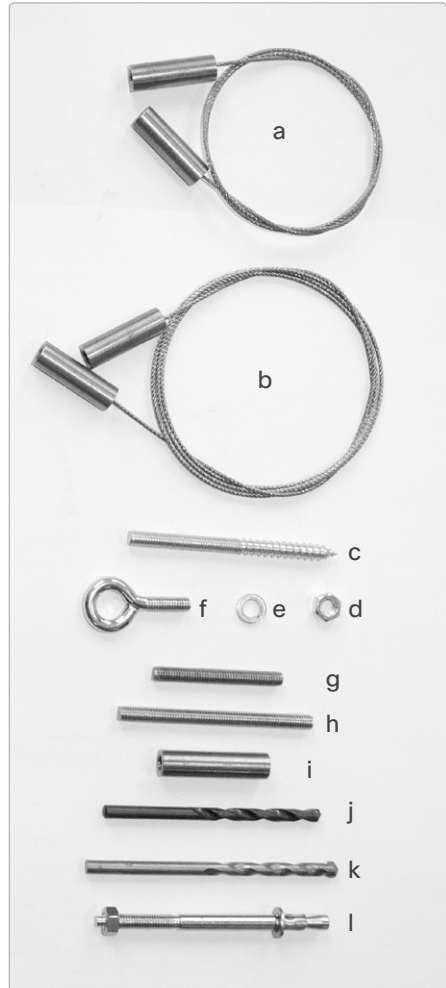
- Place the ceiling tiles back into place.
- Use the plastic cleaner (N) and a soft cloth to clean the plastic surfaces.
- The microphone is now ready for use.

Extension kit (optional)

The extension kit can be ordered separately.

Extension kit contents

- a. 6 × Suspension cable, 680 mm, $\varnothing = 1.5$ mm
- b. 6 × Suspension cable, 1100 mm, $\varnothing = 1.5$ mm
- c. 4 × Combined wood/metal screw, M6 × 80 mm
- d. 8 × Hex nut, M6
- e. 4 × Lock washer, M6
- f. 4 × Eye bolt, M6 × 25 mm
- g. 8 × Threaded rod, M6 × 75 mm
- h. 12 × Threaded rod, M6 × 50 mm
- i. 4 × Threaded tube, M6 × 42 mm, $\varnothing 10$ mm
- j. 1 × Wood drill bit, 5 mm
- k. 1 × Concrete drill bit, 6 mm
- l. 4 × Concrete anchor, M6/40-95 A4
- m. 1 × Loctite glue (not shown)



Other methods for ceiling fixture

NOTE: There will be four mounting points for the suspension cables. The safety cables will require two mounting points and should be connected to solid anchoring points in the ceiling.

Ceilings with sheetrock and wood studs

Use the M6 × 80 mm combined wood/metal screws (**c**) found in the extension kit. Drill pilot holes into wood stud where each mounting point of the ceiling microphone would be. Thread in screws so that the M6 machine threads are exposed below the ceiling.

Ceilings with sheetrock and steel trusses

Use the M6 × 50 mm (**h**) threaded rods, and the M6 hex nuts (**d**) and the split lock washer (**e**), all found in the extension kit. Drill 6 mm holes through the steel truss where each mounting point of the ceiling microphone would be. Insert the threaded rod through the steel truss. Thread on the hex nuts with split lock washers to secure rod to truss. The rod should extend below ceiling to allow exposed threads for cabling hangings to be secured to the rod.

Ceilings made of concrete

Use the M6/40–95 A4 (**l**) concrete anchors found in the extension kit. Install the anchors at the mounting points of the Ceiling Mic Audio Science. Install the anchors at where each mounting point of the ceiling microphone would be.

Using eye bolts

If using eyebolts (**f**), found in the extension kit, fasten the eyebolts to the ceiling in a manner fit for the purpose.

User documentation

For additional information, see the Cisco Ceiling Mic Audio Science User Guide on our web site: www.cisco.com/go/mic-docs

On our web site you will find an overview of the worldwide Cisco contacts.

Go to: <http://www.cisco.com/web/siteassets/contacts>

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