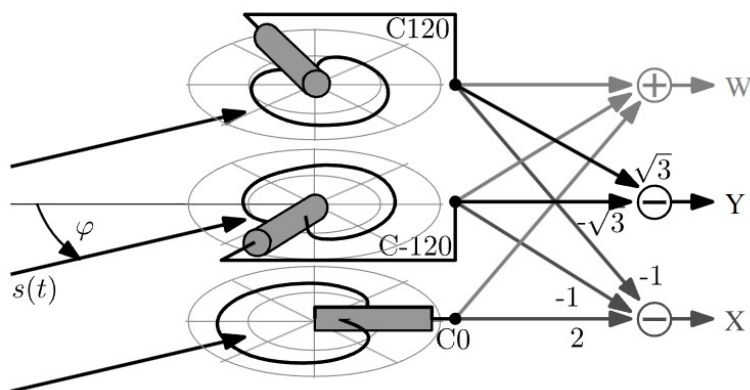


2D FOA with 3 Cardiois



This is the minimal setup to get at a First Order Ambisonics microphone array for recordings in two dimensions. (X, Y)

Do you have a four-track handheld recorder and want to record someone talking while capturing the surrounding ambience? This is a good solution, but it has its pitfalls.



As you can see on the left, the routing is a bit tricky but not rocket science.

This will record nice surrounding ambience with a quite smooth, enveloping background. Noises can't be sharply localized, which is a plus in this case.

One can do the routing in any modern DAW and from there you can use the regular ambisonics ways.



We show a light stand here, but you can also use a regular microphone stand. You can also use a light and inexpensive camera tripod, but make sure you have an adapter from a 1/4" to a 3/8" thread.

Adjust the stand to a comfortable height, then screw the red ball onto it.

As you can see here, the three 8 cm pipes are screwed into the red ball.

Make sure that, when viewed from the top, it looks like a "Y." It does not yet meet the 120° requirement. You'll see how to fix that in a minute.





Now, we will attach the three rapid adapters. We screw the 2 cm, 3/8" extension onto one adapter and angle the other adapter slightly to the side, as shown.



Now, screw the microphone clamps onto the rapid adapters and secure them in the position shown.

You may already have a 120° angle between them. (A quick, rough approach.)



It's the same status viewed from a different angle.

As you can see, the front rapid adapter is angled about 20°. Don't put too much effort into it; we will fix it once the microphones have been mounted



Now that the microphones have been set up, it's time to adjust the angles to 120°.

Ensure that the microphones do not touch each other and that the diaphragms are on the same vertical line. In other words, they should be coincident.



Here a four channel multicore splitter has been connected. You may use regular microphone cables as well, it doesn't matter.



This is the whole gear needed to build this array. It fits into a small backpack very easily.

Make sure you have extra batteries with you, when you are out in the middle of nowhere.

Have fun and make some amazing recordings.

This tutorial is provided by the ambisonic.studio team.
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You use it completely at your **own** risk.

We would love to hear your feedback and ideas on how to improve things.



