

# ORTF-3D



We are going to build an ORTF-3D setup. And it starts with a microphone stand and the red ball.



We start with two 10 cm pipes, mounted on the opposite sides of the red ball.

We also added a male/male 3/8" adapter for later use.



Here, we see a standard stereo bar with two microphone clamps. It's just for regular stereo recording.

This bar is mounted on a pipe-to-mic adapter.

Please note that the adapter



is mounted upside down on purpose.

This will become more obvious when we mount the other stereo bars.



A stereo bar with two microphone clamps has been installed.

Please note that one side has a silver thread adapter to increase the distance. This allows the microphones to be mounted on different layers.

Now four SDC microphones have been mounted. They must point upwards.

Each pair is an original ORTF pair with an angle of  $110^\circ$  and 17 cm distance between the capsules! The vertical angle will be fixed later on, when the other microphones have been added.



This is an adapter of CAT 6e RJ49 to four XLR female connectors.

We use this multicore adapter quite often, as it makes the system more portable. But regular microphone XLR cables will do the same job.



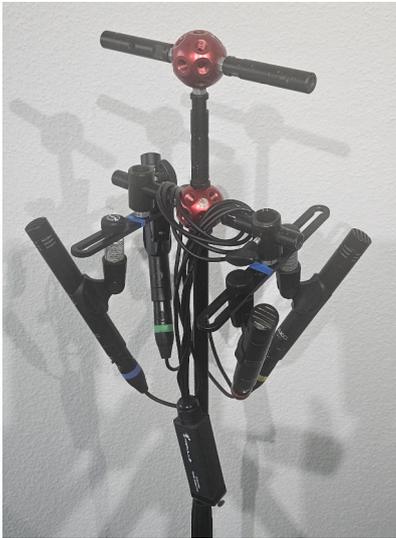
Now the cables have been mounted and the adapter was wrapped around the pipes to provide strain relief.

Later on, we will also secure the RJ 49 adapter with a cable strip so that it doesn't hang loose and bang against the stand.



This is the start of the upper layer.

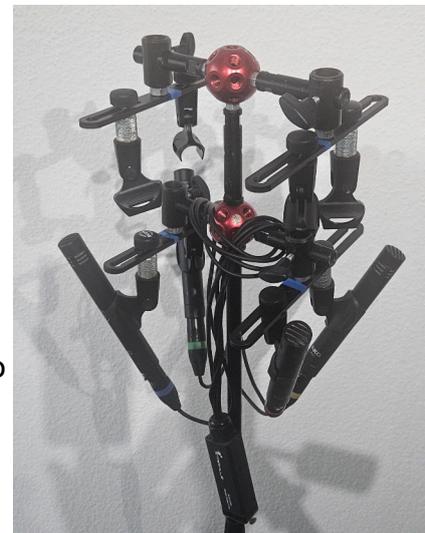
We mount a 10cm pipe on top of the male/male 3/8" adapter from the beginning. On top we mount another red ball with two 10 cm pipes on opposite sides as shown.



Now two additional stereo bars have been added with an extra thread adapter (silver) each.

Please note, that these bars are also hanging upside down on purpose.

This is the most convenient way to put the microphones into the correct position later on.



The other four microphones are mounted. They point a little bit downwards. For the time being, they should build a 90° angle to the microphone of the layer below.

Now it's time for the fine tuning.

Make sure the distance between the bars of each layer is 24 cms and the distance of the microphones of each ORTF pair is 17 cm and NOT 17,5 cm. This is a never fading misunderstanding,

even though many vendors still write this.

The angle between the microphones touching each other should be 90°. The microphones in the lower layer should point upward at a 60° angle. The microphones of the upper layer should point downward at 30°. This may seem confusing, but the lower layer captures sounds from above, and vice versa.



We highly recommend a thorough line check! EVERYTIME!