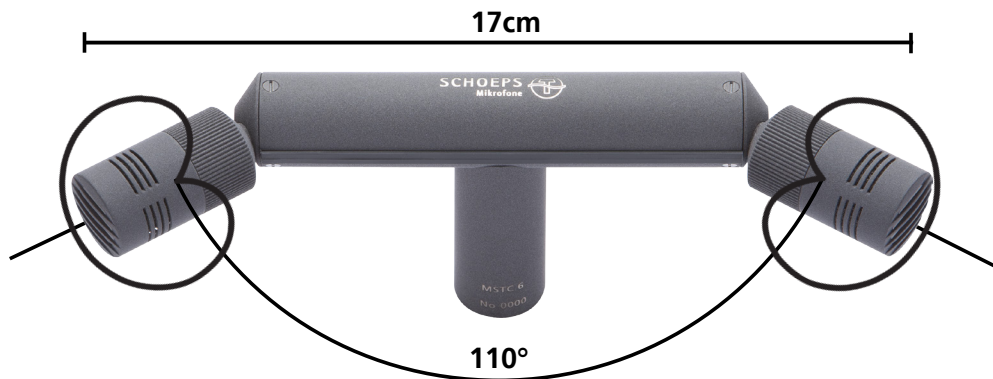


ORTF Series



The ORTF Technique

The ORTF technique is a two-channel recording technique, which uses two cardioid microphones arranged at an angle of 110° and a distance of 17cm.

It combines level and time differences at an optimal ratio. This leads to many positive characteristics of the recording:

- pleasant, open room sound
- stable and balanced directional imaging
- precise localisation of the phantom sources

With the ORTF Series we offer three ORTF-like techniques optimised for different playback formats:

- ORTF Stereo
- ORTF Surround
- ORTF-3D

“Image Assistant”

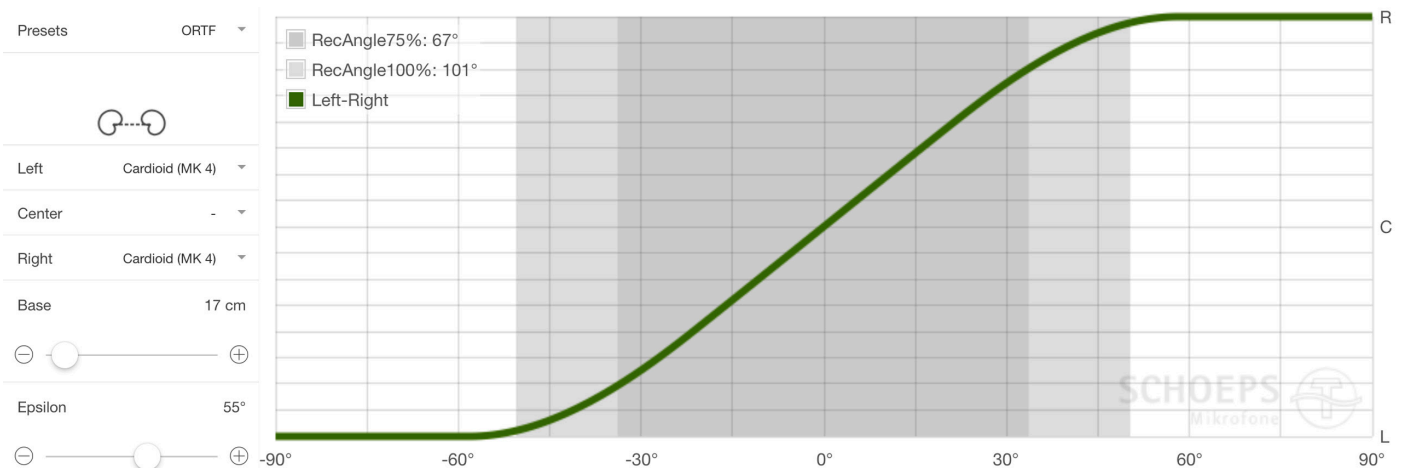
at www.ima.schoeps.de or as an iOS-App

Using this app, you can calculate the imaging characteristics of any microphone arrangement, e.g. the localisation curve and the diffuse-field correlation.

Besides the classic ORTF techniques, on principle, other similar arrangements also have those positive characteristics. It is only important that the following criteria are always met:

- The distance between the microphones must be at least 10cm.
- Diffuse signals must always be decorrelated when reproduced. This means that for each ORTF-like recording technique the angle between the microphones as well as their directivity cannot be too small.

This allows to create any two- or multi-channel recording technique with the the same principles and characteristics of the ORTF technique.



Localisation curve of the ORTF technique. Screenshot from the “Image Assistant”, preset “ORTF”.

ORTF Series

ORTF Stereo



The MSTC 64 U consists of a T-shaped two-channel microphone amplifier, to which two MK 4 (cardioid) capsules from the Colette System can be attached. Setting up is particularly quick and easy since only one microphone stand and one cable are necessary and the distance and angle between the capsules don't have to be adjusted.

When using individual CCM microphones, the STC 4 or STC 22 mounting bars can be used.

Recommended products and accessories:

| | |
|---|------------|
| ORTF Stereo Microphone MTSC 64 U | No. 148003 |
| Mounting bar ORTF for CCM STC 4 | No. 164008 |
| Mounting bar Quasi-ORTF for CCM STC 22 | No. 164007 |
| Stereo Cable KS 5 U | No. 152207 |
| Breakout Cable AK SU/2U | No. 152202 |
| Cable Hanger H 20 | No. 161801 |

ORTF Surround



The ORTF Surround technique can be used to record 4-channel ambience recordings. It consists of 4 supercardioid CCM 41 microphones arranged in a rectangle with side lengths of 10/20cm. The angles between the microphones are 80°/100°. The four signals from the microphones would typically be routed discretely to L, R, Ls and Rs channels. This arrangement has become a standard in recording 5.1 ambiances for sports.

Recommended products and accessories:

| | |
|---|------------|
| ORTF Surround | No. 175204 |
| Outdoor Set with heating | |
| Windscreen for ORTF Surround WSC ORTF Surround H | No. 175207 |
| Multicore cable 5m K Surround 5 M | No. 152407 |
| Adapter Cable AK Surround H M/4U inkl. PS-H | No. 152402 |

ORTF-3D



The ORTF-3D technique can be used as a main microphone or an ambience microphone when recording for 3D playback systems or VR. It consists of two sets of four supercardioids: one set of CCM 41 and one set of CCM 41V. Signals from those would then be routed discretely to 8 loudspeakers, e.g. L, R, Ls, Rs, LH, RH, LsH, RsH.

The distances and angles within the ORTF-3D arrangement were chosen to create a good 3D image and an open room sound.

More info at
www.schoeps.de/ortf3d

Recommended products and accessories:

| | |
|---|------------|
| Set for outdoor ambience recording ORTF-3D Outdoor Set | No. 176201 |
| Windscreen WSC ORTF-3D, for suspended operation | No. 176202 |
| Windscreen WSC ORTF-3D, tripod version | No. 176203 |
| Mounting Bar for ORTF-3D CB ORTF-3D | No. 176204 |
| Adapter Cable AK Surround H M/4U inkl. PS-H | No. 152402 |
| Adapter Cable AK Surround M/4U | No. 152403 |