

## ORTF Surround – the new standard for surround ambience



Windshield WSC ORTF Surround LM



## ORTF Surround – excellent spatial sound, compact size

- **"Plug and Play"** solution for Surround Ambience
- **Wind- and weather-proof** with internal heating
- Discrete recording of **4ch Surround: L, R, Ls, Rs** – if center channel is needed, simply add L+R
- Optimal imaging characteristics, similar to those of the "**IRT Cross**" (designed by Günther Theile, IRT): very good 360° imaging with a pleasant, natural-sounding spatial impression
- uses four SCHOEPS CCM 41 L supercardioids
- **"ORTF Surround Outdoor Set"**  
complete system with 4 microphones, heated microphone bar, WSC ORTF Surround LM windshield, multi-core breakout cable
- **Applications:** Sporting events, film sound, concert recording, etc.
- The ORTF Surround technique was successfully used for the 2010 world football (soccer) championships in South Africa. It is now a default setup at large sports events.

The *ORTF Surround* recording method is a reference technique for the pickup of surround am-

bience. Both the 360° imaging and the spatial impression are of optimal quality.

The passive mounting system "ORTF Surround bar LM" has a compact Binder multi-core connector and **optional internal heating** for rough weather conditions.

The ORTF Surround technique can also be used without a windshield as shown here.



ORTF Surround BAR LM and  
Rycote INV-7 suspension

## ORTF Surround – the new standard for surround ambience

### ORTF Surround Sets:

#### ORTF Surround Indoor Set:

- four CCM 41 L compact microphones
- a four-way "ORTF Surround Bar LM" terminated with a multi-pin connector
- an elastic suspension (Rycote INV-7)
- a 5-meter, six-way surround multi-core cable with two multi-pin connectors
- the AK Surround M/4U breakout cable for adapting the multi-pin connector to 4× XLR-3M

If a moderate degree of wind protection should be required, a Schoeps B 5 D foam windshield can be placed over each microphone separately.

#### ORTF Surround Outdoor Set:

- four CCM 41 L compact microphones
- a four-way "ORTF Surround Bar LM" terminated with a multi-pin connector, optionally with internal heating
- the WSC ORTF Surround LM windshield with black fabric and fur
- a 20-meter, six-way surround multi-core cable with two multi-pin connectors
- the AK Surround M/5U breakout cable for adapting the multi-pin connector to 5× XLR-3M (to allow connecting the power supply for heating)

The six-way surround multi-core cable is available in any length, and can optionally be delivered wound on a heavy-duty cable drum.



*High-quality, only 8 mm thick, flexible Multi-core cable*

Specifications of the *ORTF Surround Bar LM* and the *WSC ORTF Surround LM windshield*:

#### Weight:

- *ORTF Surround Bar LM* with elastic suspension only: 410 g
- windshield: 600 g
- windshield and fur: 850 g

Windshield dimensions (mm): 440 × 360 × 210

### The ORTF Surround geometry

The ORTF Surround setup was chosen in order to offer adequate 360° imaging and optimal spatial impression.

Smooth surround imaging is based both on arrival-time differences and level differences. The distances and angles are chosen such that each of the four stereo pairs provides a 90° recording angle, thus adding up to smooth 360° imaging.

An optimal spatial impression is achieved by the high degree of signal separation among channels down to low frequencies.

