

EHLUND
MICROPHONES

EHR-T
MANUAL

CONTENTS :

GETTING STARTED WITH YOUR EHR-T 3

FREQUENCY RESPONSE 4

POLAR PATTERN 5

CHARACTERISTICS 6

POLAR PATTERN SWITCHING 7

TECHNICAL SPECIFICATIONS 8

GETTING STARTED WITH YOUR EHR-T

1. Plug in the microphone using the supplied 5-pin to dual 3-pin XLR cable.
2. Turn on 48V Phantom power for both channels at the audio interface you are using.
3. Set the mixer channel EQ completely flat to begin with.
4. Listen to your microphone to make sure that equalizers are turned off and everything sounds right. Try making high frequency and low frequency noises by mouth, such as “sss”, “chh”, “bop” and “pom”. This is for ensuring a natural sound.
5. (Optional) Turn the EQ to your desired setting, or apply whatever filters you find necessary.

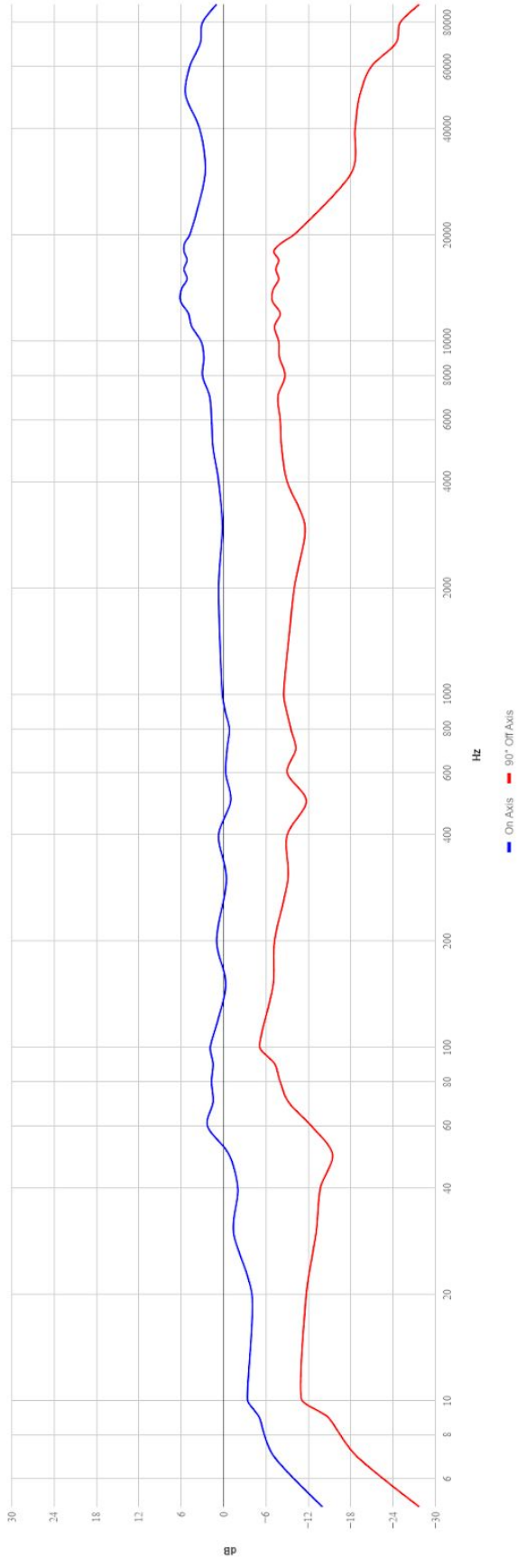
Good luck and have a great time performing!

TIPS

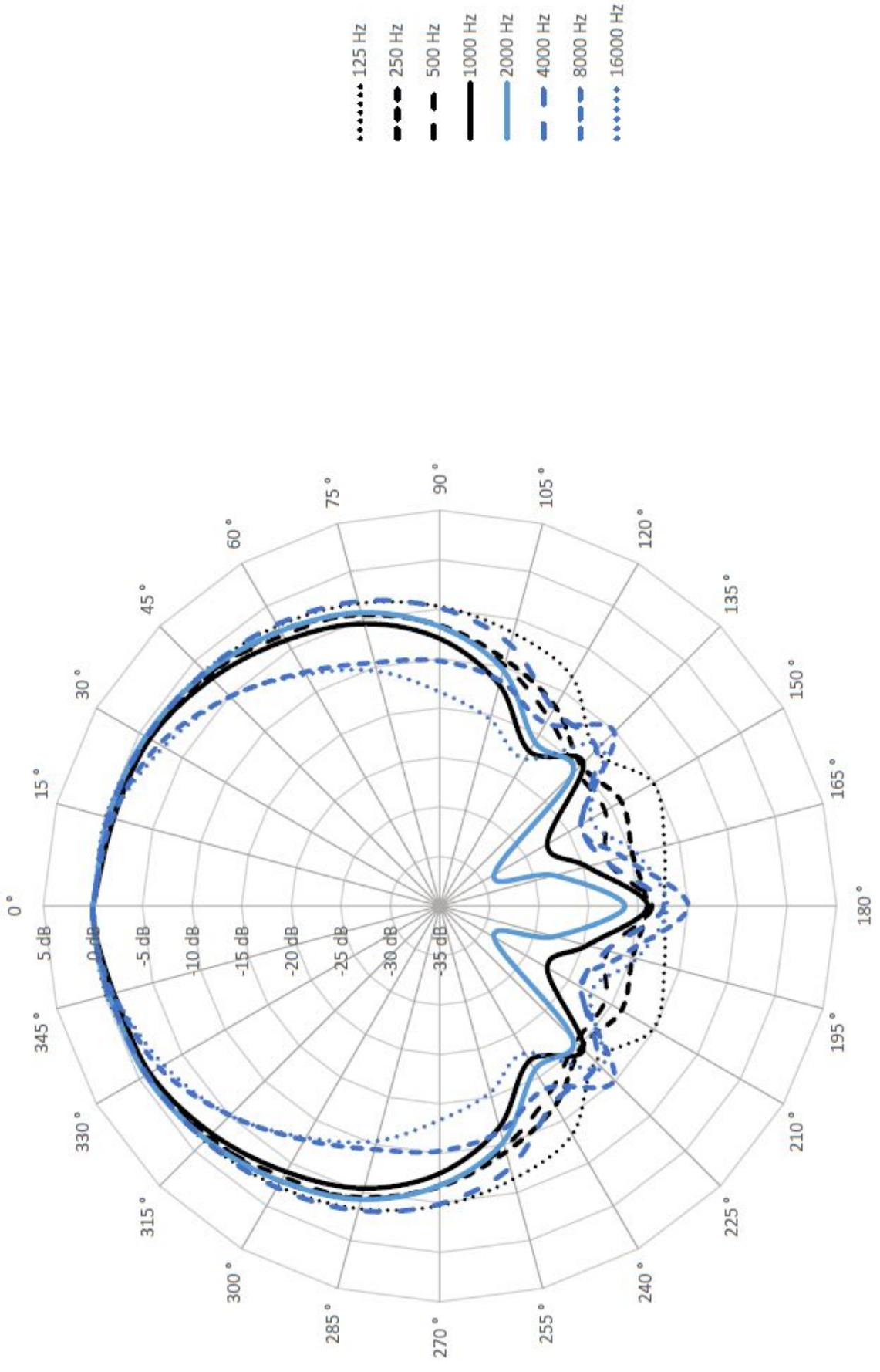
1. To get the absolutely best low-noise experience out of your Ehrlund microphone we suggest using it together with high quality shielded cables and a power source that has a centre-tapped transformer to deliver Phantom power.
2. If you have any questions about your Ehrlund microphone please feel free to email us at info@ehrlund.se.

Our microphones have a sound that is a bit different from other conventional microphones, we encourage experimenting with EQ to get your own unique sound, or just go with a flat EQ and get a really clear, airy and transparent sound.

Frequency Response ± 2 dB (Cardioid)



Polar Pattern (15°), Ehrlund Microphones EHR-T



TWIN EXCELLENCE

The EHR-T is a Swedish manufactured condenser microphone for studio use, it has been designed to deliver the cleanest sound possible. Its patented dual triangular membrane design has been allied to patented very low noise and low power phantom feed amplifiers. The EHR-T has both broad and smooth pickup characteristics, with deep bass and extended treble. This microphone has impressive stats in self-induced noise, sensitivity and frequency range. Having two separate channels for the front- and backside of the microphone brings great flexibility at the mixing table. The output signal is strong and usually does not need much amplification.

CHARACTERISTICS AND FEATURES

- Large Diaphragm Twin Condenser Microphone
- Patented triangular membranes
- Patented internal amplification and power circuits
- Optimised for studio environments
- Transparent and natural sound
- Great low-noise performance
- Phase and frequency linear internal amplifiers
- Excels at distance miking
- Broad pickup range, linear frequency response even at distance or off axis
- Bass frequencies are picked up in an accurate way even at some distance
- Separate outputs allow for change of polar patterns at the mixing table
- Natural reproduction of fast transients
- Colouring of sound is negligible and true to the original source
- Frequency range spans from infrasonic bass to ultrasonic treble
- Low energy consumption, ~4.0 mA
- Strong output signal, usually doesn't need any external amplification
- No pre-filtering needed, Ehrlund microphones are made for flat EQs
- Each and every Ehrlund microphone is stereo matched with its own model
- Handles all impedances without altering frequency or phase

POLAR PATTERN SWITCHING

The EHR-T is like two EHR-M built into one case, with the two capsules placed back-to-back with two separate amplifiers.

The two recorded channels from the EHR-T are independent of each other. By using phase inversion and amplitude adjusting of these two channels at mix time it is possible to produce different polar patterns.

This can be achieved by inverting phase and/or adjusting gain:

- Omnidirectional pattern: leave the phase switches in their original position
and use equal gain on both channels.
- Cardioid pattern: turn the gain all the way down on the backside channel.
- Wider cardioid pattern: like the cardioid pattern, but increase the gain a little bit on the backside channel.
- Bi-directional (figure-eight) pattern: phase invert the backside channel
and
keep the gain of each channel at equal level.
- Supercardioid pattern: phase invert the backside channel and lower the gain to be significantly lower than the gain on the frontside channel.

A good idea is to take a couple of hours and experiment with this so you intuitively understand how these parameters affect the polar pattern and microphone characteristics in the real world. You might just discover something, a new polar pattern that you never even thought about before, what happens at the limits between different patterns or what happens if you use panning, filters or other effects on one of the channels. Once you get a hang of this you will have the ability to make just any polar pattern that fits your needs for all kinds of recordings.

IMPEDANCE

Due to our patented electronics, the frequency response is not affected by variances in impedance from the mixing console. For example, you should experience the same frequency response using a mixing console at 200 Ω as one at 2000 Ω .

POWER SUPPLY

2 x 48 V / 2.0 mA Phantom power.

Both outputs need to have 48V Phantom power enabled for the microphone to work at all. If you wish to use the microphone as a single-sided one you would just turn the volume to zero on one side whilst keeping both power feeds on.

CABLE

Supplied with the microphone is a 5-pin XLR female to dual 3-pin XLR male microphone cable.

MICROPHONE STAND

Standard USA threads.

5/8" with an included and pre-mounted removable adapter for 3/8".

EHR-T TECHNICAL SPECIFICATIONS

Type	Twin Condenser Microphone
Membrane Type	Dual triangular membrane, combines the characteristics of both large and small membranes
Pickup patterns	Cardioid, supercardioid, bi-directional and omnidirectional
Frequency range	7 Hz - 87000 Hz
Sensitivity at 1kHz	-33 dBV/Pa (23 mV/Pa)
Impedance	Handles all impedances
Equivalent noise level	< 7 dBA
Signal-to-Noise	87 dBA
Dynamic Range	115 dB
Max SPL (peak)	
0.5% THD	116 dB
1% THD	122 dB
Power supply	48 V Phantom power
Current Consumption	4.0 mA (2.0 mA per channel)
Connector	5-pin XLR female to 2x 3-pin XLR male
Materials	Aircraft-grade aluminium body, hardened nickel-plated stainless steel net
Finish	Glass bead blasting
Dimensions	Ø60 mm x 155 mm
Weight	345 grams