

P2

This all-sided sensitive microphone is characterized by an excellent frequency response and is therefore suitable for the most diverse sound installations of high quality thanks to its reliable construction.

The microphone can be set to three different impedances, namely 10,000, 500 and 50 ohms. It is equipped with a short-circuit switch that can easily be changed to a break switch.

The house is made of die-cast aluminum, covered with a strong hammered finish and finished with chrome trim.

The interior is formed by a capsule (EL 6083/00), which is highly protected against the ingress of dust and iron filings.

The microphone is resistant to rough handling, humid environment, temperatures up to 75 degrees Celsius, sea air, tropical climate and most industrial chemicals.

The microphone comes with 5 meters of shielded two core cable with a sheath of chemically insensitive, wear-resistant material.

P3

The frequency characteristic is independent of the speech distance. The distortion is negligible, even with the greatest sound pressures. The own travel level is lower than the best amplifier. Wind noise is only displayed very weakly.

Above 5000 Hz, the microphone on the back is less sensitive than from the front.

Three impedances

Thanks to the built-in transformer, the microphone can be set to impedances of 50, 500 and 10,000 ohms. The magnitude of the supplied voltage depends on the set impedance.

P4

Choice of impedance

The four-pole microphone connector of the microphone cable fits the microphone in three different positions. Each of the stands includes one of the microphone impedances: 10,000, 500 or 50 ohms. (Insert the plug so that the arrow shows the desired value, then tighten the knurled ring).

The choice of microphone impedance depends on:

1. the input impedance of the amplifier;
2. the length of the microphone cable.

10,000 ohms

For tube amplifiers with high input impedance (without input transformer). The shielded microphone cable may be extended to 20 meters; a longer cable causes loss of highs due to the cable capacity.

500 ohms

1. for tube amplifiers with high input impedance, if very close into the microphone spoken.
2. For tube amplifiers with integrated or separate input transformer.
3. For transistor amplifiers.

In these cases, the length of the cable may be 200 meters and unshielded twisted 2-core cable may be used under favorable conditions (absence of shock sources).

50 ohms

See under '500 ohms', points 2 and 3.

When set to 50 ohm, the microphone cable may be practically unlimited in length and in most cases it is sufficient to use unshielded twisted two core cable.

P5

Sensitivity

Voltages at the open terminals and levels in relation to 1 volt, measured at 1000 Hz and a sound pressure of 1 microbar. A sound pressure of 1 microbar occurs with speech of normal strength at 1 meter distance from the microphone; if the distance is 30 centimeters, then the voltage is 10 times as high in the peaks.

Setup

The microphone can be attached to a tripod with 3 / 8th Witworth thread or suspended on its cable. It can be rotated vertically around a hinge with adjustable clamping screw, which can not work loose or fixed. The maximum inclination angle is 60 degrees.

If there are different sound sources, place or hang the microphone in the center.

Input transformer

When setting to a low microphone impedance (for example, if the microphone is to be used at very great distances from the amplifier), the maximum sensitivity can still be obtained if the microphone is connected to an amplifier input with a high impedance via a shielded input transformer (for example, cable transformer EL 6806). connected.

P6

Concentric plugs

If the amplifier input is of the concentric type (socket with one intermediate contact), attach the corresponding plug to the microphone cable by connecting the shielding and the ground wire of the cable to the plug housing and the signal core to the middle contact.

Avoiding malfunctions

The microphone cable is surrounded by a screen that is earthed via the connection plug. As a result, no malfunctions will occur under normal circumstances. If, however, the microphone cable lies in the immediate vicinity of an alternating steam line, there is a risk of hum induction.

More than one microphone

Microphones of the type EL 6021 can be connected in parallel without any problem, provided their number is not too large; the equalized contacts must then be connected (they have the same polarity).

In the "off" position of the microphone switch, the microphone is short-circuited (the amplifier system is then completely silent); if several microphones are connected in parallel, disconnect switches must be made of the short-circuit switches and this can be done by loosening the connections to the lower contacts of the switches.

Extension of microphone lines

For assembly of a microphone extension cable and for the installation of a fixed line with wall sockets all parts are available.

However, first refer to the section "Choice of impedance" to determine the maximum cable length.