

OPERATION MANUAL



MK-220

PROFESSIONAL
MICROPHONE



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ABOUT FACTORY

The Public Joint Stock Company Oktava is the leading Russian manufacturer of studio microphones, telephone and microphone capsules, headsets and hearing aids. The company has long-term experience and has taken a leading position in the field of development and manufacturing of acoustic equipment in Russia.

Being established at the dawn of development of broadcast networks in 1927 in the city of Tula, Oktava became an iconic brand known throughout the world. Gagarin said his famous "Let's go!" in the Oktava microphone. The products are popular all over the world, and even such masters as U2, Sting, Iron Maiden and Radiohead use Oktava microphone products in their work.

SAFETY INFORMATION

- Before using the microphone, carefully read the operation manual.
- Keep the manual in a safe place, accessible for all users.
- Always handover the operation manual to third parties together with the microphone.
- Use the microphone only for its intended purpose in accordance with this manual.
- The liquid can get into the microphone, cause a short circuit in the electronic components or damage the mechanical components.
- Clean the microphone only with a soft, slightly moistened cloth. Solvents or cleaning agents may damage the surface or enter the product.
- Do not expose the microphone to extremely low and extremely high temperatures.
- Do not open the microphone body by yourself. The warranty does not apply to microphones, opened by customers themselves.

OVERVIEW

Microphone MK-220 is a large-diaphragm condenser microphone, designed for professional studio recordings.

FEATURES

- 1" large-diaphragm condenser capsule;
- 2 gold-plated diaphragm;
- variable stepped polar response curve type omni, cardioid, figure-eight;
- robust metal body;
- made in Russia.

APPLICATION

- speech/vocals;
- string instruments;
- percussion instruments;
- wind instruments;
- professional recording studios;
- home recording studios.

DELIVERY INCLUDES

1. Microphone MK-220.
2. Microphone clip.
3. Packing.
4. Operation manual.

SETUP

MICROPHONE INSTALLATION INTO CLIP

1. Screw the microphone clip onto robust, stable stand (Fig. 1).
2. Insert the microphone into the microphone clip through the top and fasten it from below with a nut (Fig. 2).
3. In order to rotate the microphone, use the nut and the screw (Fig. 3).

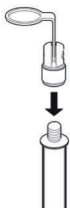


Fig. 1

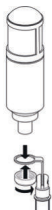


Fig. 2



Fig. 3

MICROPHONE INSTALLATION INTO SHOCK MOUNT

1. Screw the microphone shock mount AM-60/27 (Oktava) onto robust, stable stand (Fig. 4).
2. Insert the microphone into the shock mount inner ring through the top and fasten it to the ring from below with a nut (Fig. 5).
3. In order to rotate the microphone, use the nut and the wing screw (Fig. 6).



Fig. 4

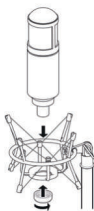


Fig. 5

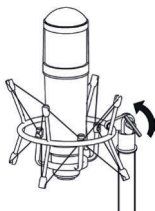


Fig. 6

MICROPHONE CONNECTION

1. Connect the microphone only to microphone inputs or power supply units that provide 48 V phantom power according to IEC 61938.
2. Connect the microphone to the XLR-3 socket of the mixing console, microphone amplifier or power supply unit with the XLR-3 microphone cable (Fig. 7).

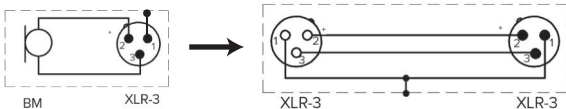


Fig. 7

CAUTION! UNSUITABLE POWER SUPPLY MAY RESULT IN DAMAGE TO THE PRODUCT!

INSTALLATION

1. Install the microphone on the stand with a microphone clip or shock mount.
2. Connect the microphone to the equipment using a microphone cable.
3. Point the microphone toward the sound source.
4. In order to suppress external noise, make sure that there are no sources of parasitic noise in the microphone active zone (for example, computer fans).
5. In order to extend the life of the microphone, it is recommended to use a pop screen when working with vocalists (Fig. 8).

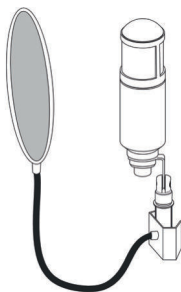


Fig. 8

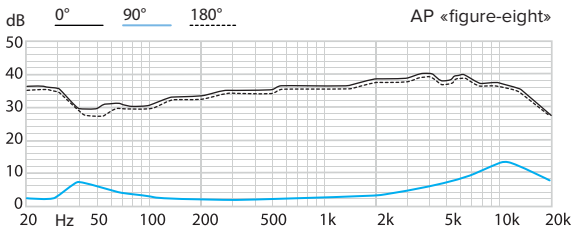
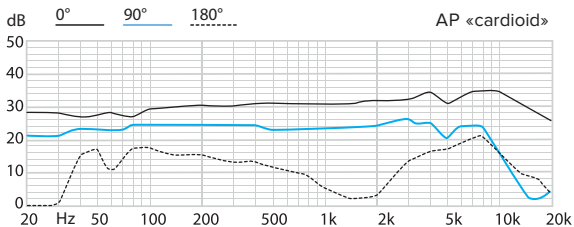
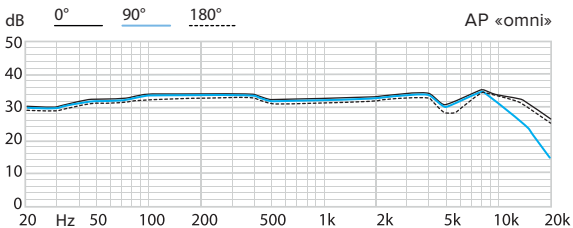
OPERATION AND STORAGE

- The microphone is designed for application in enclosed spaces at an ambient temperature of 5 °C to 45 °C and a relative humidity of 85% at an temperature 20 °C.
- Do not subject the microphone to sudden shocks or impacts.
- Do not allow water to enter the microphone.
- Do not use organic solvents (gasoline, dichloroethane, alcohol, etc.) to clean the microphone.
- Do not use or store the microphone in rooms containing acidic or other aggressive impurities in the air.
- Store the microphone in a dry, clean and dust-free room at room temperature, using the packing included in the package.

TECHNICAL DATA

Transducer type	Condenser with external polarization
Polar patterns	Omni, cardioid, figure-eight
Acoustic principle	Pressure gradient receiver
Diaphragm diameter	25,4 mm / 1"
Maximum sound pressure level	122 dB
Frequency range	20 Hz - 20 000 Hz
Sensitivity at 1000 Hz	6 mV/Pa
Equivalent sound pressure level due to self-noise	18 dBA
Sensitivity switch	-10 dB
Low-pass filter switch	10 dB per octave at 50 Hz
Impedance	200 Ohm
Diameter	52 mm
Length	205 mm
Weight	550 g

FREQUENCY RESPONSE



TROUBLE AND COUNTERMEASURE

Condition	Causes	Corrective action
Microphone does not work	The power supply unit or mixing console is not connected to the mains.	Check the connection to the mains.
	The mixing console or the power supply unit is not turned on.	Check the corresponding buttons of the mixing console and power supply unit.
	The microphone is not connected to the power supply unit or the power supply unit is not connected to the mixing console.	Check that the cables are correctly connected from the microphone to the power supply unit and from the power supply unit to the mixing console (see page 9).
Sound distortions	The input sensitivity or preamplification of the subsequent amplifier is incorrectly adjusted.	Decrease the input sensitivity or preamplification of the subsequent amplifier in such a way that there is enough modulation reserve.
	Transmission of the body noise.	Use a suitable shock mount (page 9).
Dull sound	The polar pattern is not taken into account.	Check that the microphone is installed correctly. The microphone must be pointed at the sound source.

MANUFACTURER WARRANTY

- The manufacturer guarantees compliance of the microphone technical characteristics, if the user observes the conditions and rules of operation and storage specified in this manual.
- The warranty — 24 months from the date of sale.
- The manufacturer guarantees a free replacement or repair of a microphone during the warranty period, if it does not comply with the requirements of this manual through the manufacturer's fault.
- No claim for a microphone will be accepted without certificate of sale.
- Please, dispose of the microphone at the local collection point for recyclable materials or at the recycling center after the end of its service life.

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NOTES

ACCEPTANCE CERTIFICATE

unit type

serial number

**Manufactured and approved
Chief controller**

personal signature

printed name

L.S.

year, month, day

CERTIFICATE OF SALE

unit type

serial number

dealer

signature of seller

printed name

L.S.

year, month, day

THE GUARANTEE CONDITIONS ARE ACKNOWLEDGED AND ACCEPTED

signature of buyer

printed name

WARRANTY CARD

For warranty service (repair) No. 1

Professional microphone MK-220

No.

product serial number

date of receipt for repair

full name of a person responsible for repairs

L.S.

signature

WARRANTY CARD

For warranty service (repair) No. 2

Professional microphone MK-220

No.

product serial number

date of receipt for repair

full name of a person responsible for repairs

L.S.

signature

WARRANTY CARD

For warranty service (repair) No. 1

Professional microphone MK-220

No.

product serial numbe

date of receipt for repair

reason for repair

seller

L.S. _____

signature of seller



information on performed repairs

L.S.
of repair organization

signature, printed name

address of owner

full name and signature of owner



WARRANTY CARD

For warranty service (repair) No. 2

Professional microphone MK-220

No.

product serial numbe

date of receipt for repair

reason for repair

seller

L.S. _____

signature of seller



information on performed repairs

L.S.
of repair organization

signature, printed name

address of owner

full name and signature of owner





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