

# OPERATION MANUAL



## **MK-102** PROFESSIONAL MICROPHONE





# CONTENT

<b>ABOUT FACTORY</b>	4
<b>SAFETY INFORMATION</b>	5
<b>OVERVIEW</b>	6
<b>DELIVERY INCLUDES</b>	7
<b>SETUP</b>	8
<b>INSTALLATION</b>	10
<b>OPERATION AND STORAGE</b>	11
<b>TECHNICAL DATA</b>	12
<b>TROUBLE AND COUNTERMEASURE</b>	14
<b>MANUFACTURER WARRANTY</b>	15

# 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-102 is a large-diaphragm condenser microphone, designed for professional studio recordings.

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## FEATURES

- modular design in the form of a microphone preamplifier and a capsule;
- 1" large-diaphragm condenser capsule;
- gold-plated diaphragm;
- low level of self-noise;
- attenuator is used to work with high levels of sound pressure;
- robust metal body;
- made in Russia.

## APPLICATION

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

# DELIVERY INCLUDES

1. Capsule.
2. Preamplifier.
3. -10 dB attenuator.
4. Microphone clip.
5. Packing.
6. Operation manual.

# SETUP

## MICROPHONE INSTALLATION INTO CLIP

1. Screw the microphone clip onto robust, stable stand (Fig. 1).
2. Draw the clip clamps apart and insert the microphone (Fig. 2).
3. In order to rotate the microphone, use the screw on the clip (Fig. 3).



Fig. 1

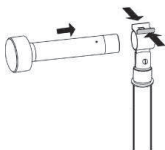


Fig. 2

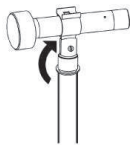


Fig. 3

## MICROPHONE INSTALLATION INTO SHOCK MOUNT

1. Screw the microphone shock mount AM-20 (Oktava) onto robust, stable stand (Fig. 4).
2. Insert the microphone on the side of the shock mount inner ring (Fig. 5).
3. In order to rotate the microphone, use the nut and the wing screw (Fig. 6).





Fig. 4

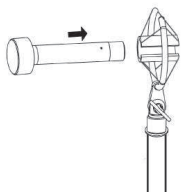


Fig. 5



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

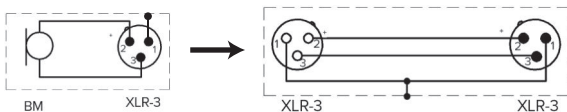


Fig. 7

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**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).

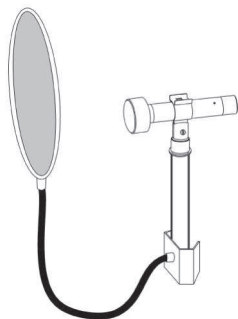


Fig. 8

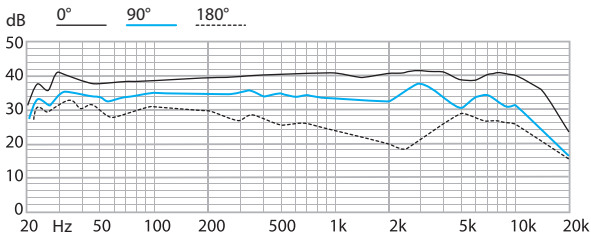
# OPERATION AND STORAGE

- The microphone is designed for application in enclosed spaces at an ambient temperature of 5 °C to 45 °C and a relative humidity of 93% at an temperature 25 °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	Cardioid
Acoustic principle	Pressure gradient receiver
Diaphragm diameter	25,4 mm / 1"
Maximum sound pressure level	120 dB
Frequency range	20 Hz - 20 000 Hz
Sensitivity at 1000 Hz	9 mV/Pa
Equivalent sound pressure level due to self-noise	18 dBA
Impedance	300 Ohm
Diameter	39 mm
Length	160 mm
Weight	160 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-102

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-102

No.

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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-102

No.

\_\_\_\_\_

product serial numbe

\_\_\_\_\_

date of receipt for repair

\_\_\_\_\_

reason for repair

\_\_\_\_\_

seller

L.S. \_\_\_\_\_

signature of seller



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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-102

No.

\_\_\_\_\_

product serial numbe

\_\_\_\_\_

date of receipt for repair

\_\_\_\_\_

reason for repair

\_\_\_\_\_

seller

L.S. \_\_\_\_\_

signature of seller



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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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