The Flamingo Series Microphones

User manual

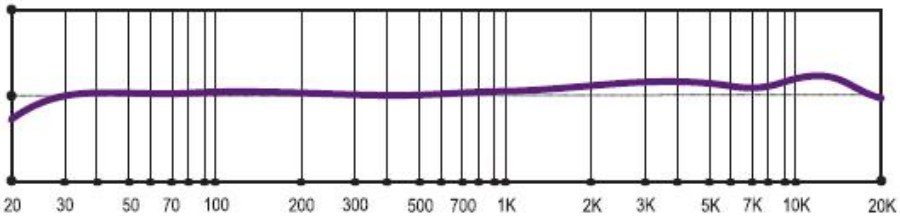
Thank you for your choice of "The Flamingo" !

You bought a high-end class electrostatic vacuum tube microphone which is the result of years of experience in leading studio microphone design, manufacturing and restoration, and the latest technologies merge with the highest qualification handcraft work.

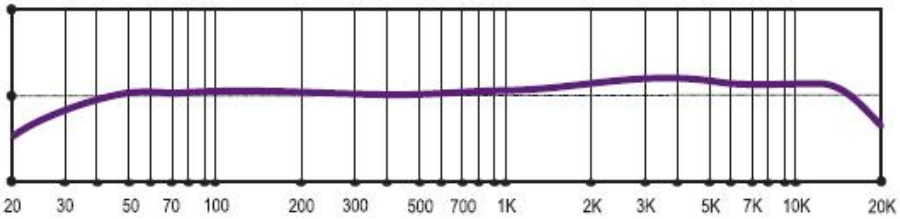
“THE FLAMINGO” MODELS

"THE FLAMINGO” vacuum tube series studio microphones are designed for the highest quality audio recording.
Vacuum tube electronics removes dynamic distortion resulting in clean, warm and natural sound. Using different capsules all “THE FLAMINGO” microphone models provide unidirectional polar pattern.
“THE FLAMINGO STANDARD’s" large dual diaphragm electrostatic capsule provides smooth, detailed sound known from the most popular vintage orchestral microphones.
"THE FLAMINGO VINTAGE’s" large dual diaphragm electrostatic capsule provides sweet, dense tone known from the most famous vintage vocal microphone.

THE FLAMINGO STANDARD



THE FLAMINGO VINTAGE



The above diagrams provide some technical information, but how the microphone reacts in concrete application depends on a number of factors - room volume, reflections, reverberation, microphone distance and the angle from the sound source and room walls, microphone external preamplifier input impedance and electronics type, microphone cable length and quality, etc. The basis of the sound comes from the know-how of the artist and engineer!

DESCRIPTION

"The Flamingo" series microphones are based on vacuum tube electronics and our original true electrostatic capsules.
The capsule diaphragms are made of the special, highest quality, calibrated film. Unique irregular sputtering with our special formula of gold mixture gives them fast impulse transient response with minimized resonance, sound coloration, high and low frequencies reduction, and possibility to handle high sound pressure levels. Using our original technology the diaphragms are tensioned and adjusted on our precisely made brass back-plates. At the end of the manufacturing process every capsule is carefully checked for electrical parameters and measured in an anechoic chamber for optimum of audio performance.

Being unidirectional “The Flamingo” microphones have relatively wide frontal incidence angle with optimized proximity effect. The two side open, acoustically transparent multilayer brass mesh head’s construction supports unidirectional polar pattern, keeps sound transparency almost unaffected and minimizes head’s internal resonances, the same time reducing plosive sounds, breath, pop, wind noise and shielding capsule from external interference.
The microphone’s internal preamplifier is based on class-A fully discrete vacuum tube circuit designed under the highest audio standards. Carefully selected vacuum tube and best quality components provide linear audio frequency range, high dynamics, minimum self noise and very low audio distortion of all types. Vacuum tube is mounted inside a massive heat sink to stabilize thermal regime, and on an internal damper to protect tube from mechanical resonances and acoustic feedback. Large size, noise cancelling design custom wound audio transformer balances the output circuit, separating the microphone from RF interference and adds „analog warmth” to the sound.
Gold plated contact 7-pin XLR output connector provides stable microphone connection.
Microphone is powered from an external soft starting smart power supply unit, providing stabilized and protected polarization, plate and heather voltages. Special 7-wire audiophile quality VTC-06 tube microphone cable with gold plated contact 7-pin XLR connectors must be used between microphone’s output and power supply unit’s input. Cable minimizes all types of internal and external interference, noise and signal loss, “The Flamingo” microphone’s rugged construction with balanced internal dampers-shock mounts for the capsule, for the head and for the vacuum tube, together with included large spider type elastic external studio shock mount effectively reduce stand rumble, infrasonic interference and mechanical shocks.
We recommend using of our audiophile quality VMC-06 quad microphone cable between power supply unit’s output and your preamplifier’s or console channel’s input to minimize all types of external interference, noise and signal loss. Gold plated contact XLR connectors provide excellent contact quality. VMC-06 quad microphone cable is available as option.
Under the special order "THE FLAMINGO" series microphones are available in matched stereo pairs to provide balanced recordings.

SAFETY, MAINS CONNECTION, SWITCHING ON AND WARMING UP

Check the AC voltage selector position at the rear panel of the power supply unit and adjust it to your regional voltage before connecting unit to mains. “The Flamingo” complete microphone system must be grounded and used away from the heat and humidity sources. Use only the provided original VPSU-FL power supply unit, VTC-06 tube microphone cable and grounded mains cable. Connect the microphone to the power supply unit using VTC-06 cable. Switch off Phantom power of preamplifier or console channel input - it is unwanted and potentially can provide noise. Put on minimum preamplifier or channel input’s gain and volume controls. Connect VPSU-FL unit to your preamplifier’s or recording console’s input using VMC-06 or other standard symmetric microphone cable with XLR type connectors.
Connect VPSU-FL unit to the AC using mains cable and switch the unit on. Wait 2-3 minutes until power supply unit’s led indicator becomes green and display shows voltage close to 120 V, it means vacuum tube is warmed up. Microphone is ready to start recording now, but we recommend to warm-up microphone for some additional 30 minutes for full stabilizing of vacuum tube’s thermal and electric regimes.

APPLICATIONS

“The Flamingo Standard" microphone is designed as universal tool for orchestral recordings, oriented on full spectrum of most musical instruments - piano, guitars, drums, percussion, strings, brass, wind and other sound sources including vocals. “The Flamingo Vintage" microphone is mainly designed for the lead function

recording - orienting on lead vocals and similar function lead sound sources, but is capable of capturing most musical instruments and other sound sources as well.
“The Flamingo” series microphones have unidirectional polar pattern, please use them from an active side of the capsule marked with Flamingo logo on microphone body. Use possibly quality and linear microphone preamplifier, vacuum tube units with switching input transformers are preferable. Find the best tone manipulating microphones distance, angle, pop filter, windscreen, reflectors, room’s acoustic, etc, and changing preamplifier input’s (load) impedance if there is such possibility. Lowering of input impedance will warmer and sweeten microphones tone and vice versa. Do not use equalizers, other corrections and dynamic processing at all, or use them so little as possible, orienting corrections to down (minus) side.

VOCALS
Choosing a model is a question of your taste and vocalist's individuality. “The Flamingo Vintage” provides warm classic vintage vocal tone. “The Flamingo Standard” provides wider spectrum detailed vintage sound. Use microphones 5 to 50 cm from capsule to get the best results. Use the pop filter or the foam windscreen to reduce plosive sounds, breath, pop and wind noises.

PIANO
Use a pair or more for stereo recording and add distanced microphones for room acoustics. There are many methods with close miking, distance miking and combined miking. The result depends highly on player, instrument qualities and room's acoustics. The right microphone placement is the most important factor. The best method is to find it by your own ears – go, listen and find the best position.

ACOUSTIC GUITARS
Right placement is the most important factor again. We recommend beginning with facing the microphone to guitars' neck, where it joins body, in some 10 cm distance from it. Use a pair of microphones for stereo recording, and add distanced microphones to get more room acoustics.

ELECTRIC GUITARS
"The Flamingo Standard" gives excellent results for dynamic and bright clean amp sound, “The Flamingo Vintage” is perfect for juicy, fat, dense and warm lead guitar overdrive and distortion sounds, or jazzy tones recording. Place the microphone 5 to 15 cm from a loudspeaker cone. To get more upper frequencies move it closer to loudspeaker cones center, or toward the cone edge to get fuller tone with more mid and low frequencies. Orient a microphone’s diaphragm under some angle to the loudspeaker’s cone to avoid low frequency peaks. Larger distance from the loudspeaker will add more air and room acoustics and soften high frequencies. There are endless methods of combining close miking, distanced miking, miking from a backside of an open speaker box, experimenting with different room acoustics, etc.

DRUMS
“The Flamingo Standard’ is the recommended model. The advisable distance is 5 to 15 cm from a drum rim, try different positions and angles. A bigger distance will add more air, environment and naturalness. A smaller distance will increase the low frequencies and separation from other sound sources. Use a pair as overhead microphones at some 70 cm distance. There are very different methods to record drums - from one pair of stereo microphones for right balanced drum kit in an optimal acoustics room until individually miked every sounding drum kit component and several microphones on such components as bass drum and snare drum.

PERCUSSIONS
Like on the drum recording "The Flamingo Standard" microphone gives transparent, clean and real results in percussions recording. The distance of 30 cm is the best to

start. Closer distance will add more details, tone and separation. Larger distance will add room ambience, naturalness and blending with other instruments.

BOWED STRINGS

Try different models depending from sound you are looking for. The distance of 30 to 50 cm above the instrument bridge is preferable for violin and viola. The distance of 10 to 20 cm in front of bridge is right for double bass or cello.

BRASS AND WIND

The warm, full, natural tone of "The Flamingo Vintage" microphones makes them the best choice to record saxophone and other brass and wind instruments. For the clarinet and the soprano saxophone use the microphone 10 to 30 cm above the horn and lowest pads. For the other saxophones place microphone 5 to 15 cm in front of the lip of the bell.

For the flute place the microphone above the middle of the instrument. Use 10 to 50 cm distances for the trumpet, the trombone, the French horn, the tuba and other brass instruments.

SPECIFICATIONS

Transducer type	electrostatic
Operating principle	pressure gradient
Diaphragm's active diameter	26 mm
Frequency range	20 Hz to 20 kHz
Polar pattern	unidirectional
Output impedance	100 ohms
Rated load impedance	1000 ohms
Suggested load impedance	>250 ohms
Sensitivity at 1000 Hz into 1000 ohms load	27 mV/Pa
S/N Ratio CCIR 468-3 weighted	76 dB
S/N Ratio DIN/IEC 651 A-weighted	87 dB-A
Equivalent noise level DIN/IEC A-weighted	7 dB-A
Maximum SPL for 0.5% THD at 1000 ohm load	134 dB
Dynamic range of the internal preamplifier	127 dB
Output connector (microphone)	7-pin XLR male, gold plated contacts
Signal polarity (microphone)	toward pressure on a diaphragm produces positive polarity voltage on XLR pin #6 relatively to pin #5
Microphones dimensions and weight	H307 x D68 mm, 1300 g
VSM47-FL dimensions and weight	H120 x W100 x D145 mm, 350 g
VPSU-FL dimensions and weight	H55 x W225 x D180 x 55 mm, 1000 g
Selectable mains voltage, frequency	100/120/220/240 V AC, 45-65 Hz
Mains fuse	250 mA (100/120V), 125 mA (220/240V)
Power consumption	<20 W

INCLUDED ACCESSORIES

VSM47-FL vintage style elastic spider type shock mount
VPSU-FL power supply unit
VAC-2 mains cable
VTC-06 tube microphone cable 6m

OPTIONAL ACCESSORIES

VMC-06 star quad microphone cable 6m

WARRANTY

We provide full five (5) year Warranty for all Violet Design microphones, and full one (1) year Warranty for Violet Design microphone accessories and electronic vacuum tube components included into Violet Design products. This Warranty relates to each original Customer of Violet Design product and is not transferable to other persons. The period of this Warranty commences at the official receipt date of product purchase from authorized Violet Design Distributor or Dealer.
Within a period of Warranty, Violet Design will remove defects in materials and manufacturing faults adversely affecting warranted product performance, by repairing or replacing parts or replacing the product as we deem appropriate, free of charge. This Warranty does not apply to any defect, failure, or damage due to any cause other than defects in materials or workmanship of the product. Violet Design will not be responsible for damage to, or failure of, or need for repair or correction of any product, which occurs as a result of user abuse or misuse, including but not limited to the operation with wrong power supply or excessive voltage, or other wrong application or storage including unreasonable exposure to heat, cold, wind, water, or other elements, negligence or accident, and to material fatigue or degradation through very intensive normal usage. Serial number removing or altering, actual or attempted correction, repair, service, modification or alteration of any Violet Design product by persons not authorized to do it automatically expires this Warranty.
Customer must contact his local Violet Design Distributor to receive Product Return Authorization Number that will be used to track and identify the returned product. After receiving Product Return Authorization Number please deliver the complete product in the original packing or in such packing that is adequate to prevent damage to the product during the normal course of transport to your local Violet Design Distributor. Transportation is the Customer's responsibility and is not covered by this Warranty.

In the interests of product development, the specifications, construction and appearance of all above products are subject to change without prior notice and without obligation to install these improvements in any product previously manufactured.

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