



V I N T A G E M I C S E R I E S

T Y P E

A



C L A S S A T U B E M I C





Fig 1.1

TYPE A MICROPHONE

TYPE

A

WHATEVER YOUR SOUND,
IT'S JUST YOUR TYPE.

CONGRATULATIONS ON YOUR PURCHASE OF THE RED TYPE A. Red Microphones unite the heritage of the world's most respected classics with leading-edge technology, innovative engineering and inimitable styling.



In order to familiarize yourself with the Type A's specialized and unique features, please take the time to read this manual and be sure to try the suggested recording tips. With proper care and use, the Type A will reward you with many years of recording enjoyment.

To get the most out of your Type A, we recommend you check out the *Redheads*, Red's series of interchangeable capsules, all available for purchase from your authorized Red dealer. Each Redhead capsule has been engineered to capture a different tonal characteristic and pickup pattern, from airy highs to larger-than-life lows — and everything in between.

THE REDHEADS



R CAPSULE: LARGE DIAPHRAGM CARDIOID
CONDENSER (VERSATILE SONIC SIGNATURE)

RO: LARGE DIAPHRAGM CARDIOID —
BRIGHT (ELAM 251 REFERENCE)

R1: SMALL DIAPHRAGM CARDIOID
(SCHOEPS 221B, 451 AND 452 (CKI) REFERENCE)

R2: LARGE-DIAPHRAGM FIGURE OF 8
(RCA 44 VINTAGE RIBBON REFERENCE)

R3: MEDIUM DIAPHRAGM CARDIOID
(NEUMANN U89, TLM 170 REFERENCE)

R4: SMALL DIAPHRAGM SPHERE
PRESSURE OMNI (NEUMANN M50 REFERENCE)

R5: LARGE DIAPHRAGM PRESSURE OMNI
(NEUMANN/GEFELL M55K REFERENCE)

R6: LARGE DIAPHRAGM CARDIOID
(AKG C12 REFERENCE)

R7: LARGE DIAPHRAGM CARDIOID
(NEUMANN U47, U48 REFERENCE)

FOR AVAILABILITY AND PRICING, PLEASE VISIT THE RED STORE AT
WWW.VINTAGEMICROPHONE.COM

The Type A ships with a custom shockmount, high-definition 5-conductor tube mic cable, and an ATA-style flight case. For best results, we recommend the Red high-definition quad mic cable available from your authorized Red dealer.

Hey you! Forceful positioning of the shockmount without loosening the thumbscrew can result in damage not covered by warranty.

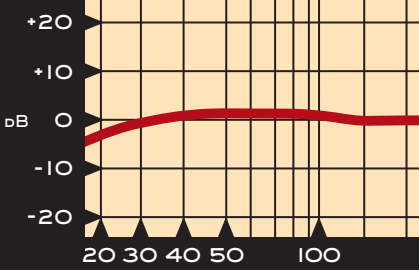
The *PowerStream* power supply is designed to provide years of reliable service. No other commercially available tube mic power supply offers as many unique features as the *PowerStream*.

A typical tube mic power supply applies both heater and plate voltages simultaneously once power has been switched on. In this case, the high voltage potential on the plate forcefully attracts electrons from the not yet heated cathode, a process known as “cathode stripping”. Practically, this means that each time the power supply is switched on, the microphone tube changes its electrical properties. To put it simply, the tube begins to wear and gets noisier.

To avoid this problem the *PowerStream*’s soft start feature delivers the tube’s heater voltage first. The *PowerStream*’s circuitry also prevents the heater current from exceeding the limits for which the tube was designed. Without this feature the tube’s cold heater would draw more current than specified, and begin to deteriorate the valuable microphone tube. After approximately 45 seconds — when the cathode is fully heated — the plate voltage is gradually applied starting from 1.5V to 120V. During this time the output of the microphone is muted. After approximately ninety seconds, the tube is settled in its correct operating mode, the muting is disabled, and

2

TYPE A



FREQUENCY RESI

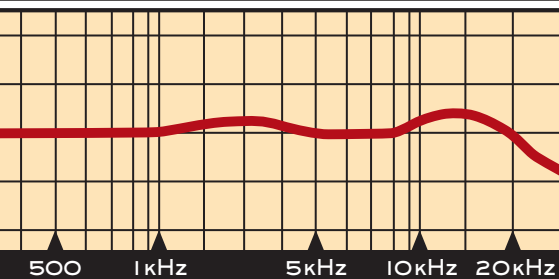
This frequency chart of the Type A capsule is only a start. It gives the recordist will differ greatly because of many variables. Room acoustics, distance from only a few of the interacting issues. For an artist or engineer

audio is present. Both the heater and the plate voltages are ultra stable and non-dependent on AC main changes or fluctuations. And most importantly, the plate voltage supply is of low impedance, which improves clarity.

To avoid damage to audio components when connecting the Type A to your microphone input, we recommend the following procedure:

- 1 Set mic preamp gain to its nominal position (“off”).
- 2 Set PowerStream’s power switch to “OFF” position.
- 3 Connect 5-pin female jack of the tube mic cable to the output of the Type-A. Connect 5-pin male jack to the 5-pin input of the PowerStream power supply.
- 4 Insert the female jack of an XLR microphone cable into the PowerStream audio output. Connect the male jack of that cable to your microphone preamplifier (like a Blue Robbie) mic input.
- 5 Set PowerStream’s power switch to “ON” position. Power up your mic preamplifier.
- 6 After about 90 seconds, slowly bring up the gain on your mic pre — you should now have audio. Adjust gain for optimum level.

Once the Type A is on the stand and powered up, make sure that the active, on-axis side of the capsule (the side aligned with and directly above the Red logo) is facing the desired source. Following are some application tips that will help you to get the most out of the Type A with its included capsule.



RESPONSE CHART (R6 CAPSULE)

On a basis of the sound provided. How the microphone reacts in a particular application from sound source (proximity), tuning of the instrument and microphone cabling are clear, how the microphones are used creates the basis of the sound.



VOCALS



Here's a little-known secret — vocalists love singing into unique and impressive mics like the Type A. For a “big” vocal sound, position the vocalist within one to four inches of the capsule. There is no need to worry about overloading the microphone, but be sure to use a high quality wind screen or pop filter to protect the diaphragm. Tilt the microphone upward (toward the forehead) for more projection and head tone, straight on at the mouth for maximum brightness and intelligibility, or down toward the chest for more robust full lows and smoother highs.

ELECTRIC GUITAR



Because of its robust characteristics, the Type A is an excellent mic for any clean guitar sound. Position the capsule toward the center of the speaker to capture more highs, or toward the edge of the cone for a fuller sound with more bottom end. For overdriven or distorted tones, move the mic towards the outer edge of the cone, or back it away from the amp a foot or more to add a little room sound and soften the extreme high end. Give the Type A a try on electric bass, blues harmonica, and organ too!

ACOUSTIC GUITAR



Large diaphragm mics require careful placement when used on acoustic guitar, but the Type A's shimmering high end is well-suited to this job. For a balanced sound with plenty of sparkling high end, place the microphone facing the guitar neck, right where the neck joins the body (usually around the 12th – 14th frets). For starters, keep the mic as close as possible, and tilt the capsule toward the soundhole to capture a blend of low end and pick sound. If you need more lows, move the microphone closer to the soundhole. For more high frequency detail, move the Type A farther from the guitar, either at the same neck position, or above the instrument up by the guitarist's head.

STRINGS



Because of its natural highs and soft midrange characteristics, the Type A is an excellent choice for miking all members of the bowed string family. In general, the capsule should be positioned toward the instrument's bridge to pick up a blend of resonance and bow sound. On bass and

cello, placement from 3 to 6 inches in front of the bridge is usually ideal. For violin and viola, it is preferable to position the microphone 1 to 2 feet above the instrument. Angle the capsule toward the bridge for more bow sound and low tones, or move the microphone toward the tuning pegs to capture a more diffuse, bright, and blended sound.



DRUMS

The Type A's slim profile and fast transient response offer numerous advantages when recording drums. For kit and hand drums, begin by placing the microphone two to four inches above the rim or hoop (where the head is secured to the shell). Angle the capsule toward the player's stick or hand to pick up more attack and definition. Positioning the capsule toward the shell will soften the sharp attack of a hand drum, or pick up more of the bright, crackling buzz from a snare. Moving the microphone closer to a drum generally increases the low end, shell resonance, and separation from other sound sources, while more distant placement emphasizes the interaction of the drum and the environment, producing a blended, airier sound.

SAXOPHONES, FLUTES AND REEDS



The extended high end response of the Type A makes it an ideal choice for modern tonality when miking saxophones and other wind instruments.

For soprano sax, clarinet, and related instruments, position the capsule directly above and in front of the keys between the middle of the horn and the lowest pads. Try moving the mic up or down along the length of the body to adjust the balance of airy highs (toward the mouthpiece) and cutting midrange (toward the bell). On flute, start by placing the Type A above the middle of the instrument, and move the capsule closer to the mouthpiece if more highs and breath sound is desired. For other members of the saxophone family, start by placing the Type A two to six inches in front of the lip of the bell. Angle the capsule up toward the mouthpiece to capture more air, brightness, and high notes. For a mellower sound, orienting the capsule toward the floor emphasizes the low range of the sax, and tames the biting upper mids that project straight out of the bell.

We hope you enjoy your purchase and find the Type A to be an ideal mic for a wide spectrum of instrumentation and recording needs.

TECHNICAL SPECIFICATIONS

ACOUSTICAL OPERATING PRINCIPAL:
PRESSURE GRADIENT OR PURE
PRESSURE
(DEPENDING ON CAPSULE)

DIRECTIONAL PATTERN:
CARDIOID, OMNIDIRECTIONAL,
FIGURE 8
(DEPENDING ON CAPSULE)

FREQUENCY RESPONSE:
20Hz – 20kHz

SENSITIVITY (1kHz INTO 2.5k Ω):
50mV/Pa
(+/- 10mV DEPENDING ON CAPSULE)

RATED IMPEDANCE:
50 Ω

RATED LOAD IMPEDANCE:
NOT LESS THAN 1k Ω

NOISE LEVEL A-WEIGHTED (IEC 651):
NOT MORE THAN 9dBV - 14dBV
(DEPENDING ON CAPSULE)

MAX OUTPUT (1% THD INTO 2.5k Ω):
+28dBV = 25.11 VRMS

MAX SPL (1.0% THD INTO 2.5k Ω):
139dB

DYNAMIC RANGE (2.5k Ω LOAD):
130dB



WARRANTY

This product is warranted under the conditions outlined below to its original, registered owner, provided the purchase was made from an authorized Red dealer. This microphone or related part is guaranteed to remain free from operating defects for one year from the date of purchase. In the event that service is required, all necessary parts and labor will be furnished free of charge during this period except for tubes, which are guaranteed for 90 days against defects. This warranty is void if the serial number has been altered, removed or defaced. The warranty is void if the equipment is altered, misused, mishandled, maladjusted, or is serviced by any parties not authorized by Red. The warranty does not include transportation costs incurred because of the need for service unless arranged for in advance.

©2006 Red Microphones. Red, Type A, Redheads, and PowerStream are trademarks or registered trademarks of Red Microphones, Inc. All other trademarks contained herein are the property of their respective owners. All features and specifications subject to change without notice.

WWW.VINTAGEMICROPHONE.COM

WWW.REDMICROPHONES.COM

TYPE

A