



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

T Y P E

B



C L A S S A S O L I D S T A T E





*Fig. 1.1*

TYPE B MICROPHONE

# TYPE B

WHATEVER YOUR SOUND,  
IT'S JUST YOUR TYPE.

CONGRATULATIONS ON YOUR PURCHASE OF THE RED TYPE B. Our 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 B'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 B will reward you with many years of recording enjoyment.

The removable capsule that ships with your Type B is a pressure gradient large diaphragm condenser which employs a  $6\mu$  pure gold-sputtered mylar capsule membrane. It was designed with maximum versatility in mind for a wide variety of applications. Additionally, the Type B is designed to accommodate any of the Blue Bottle microphone capsules (B0 – B7) as well as vintage capsules of similar design.

## THE BOTTLE CAPS



- B0:** LARGE DIAPHRAGM CARDIOID — BRIGHT (ELAM 251 REFERENCE)
- B1:** SMALL DIAPHRAGM CARDIOID (SCHOEPS 221B, 451 AND 452 (CKI) REFERENCE)
- B2:** LARGE-DIAPHRAGM FIGURE OF 8 (RCA 44 VINTAGE RIBBON REFERENCE)
- B3:** MEDIUM DIAPHRAGM CARDIOID (NEUMANN U89, TLM 170 REFERENCE)
- B4:** SMALL DIAPHRAGM PERSPEX SPHERE PRESSURE OMNI (NEUMANN M50 REFERENCE)
- B5:** LARGE DIAPHRAGM PRESSURE OMNI (NEUMANN/GEFELL M55K REFERENCE)
- B6:** LARGE DIAPHRAGM CARDIOID (AKG C12 REFERENCE)
- B7:** LARGE DIAPHRAGM CARDIOID (NEUMANN U47, U48 REFERENCE)

FOR AVAILABILITY AND PRICING, PLEASE VISIT THE RED STORE AT  
[WWW.VINTAGEMICROPHONE.COM](http://WWW.VINTAGEMICROPHONE.COM)

Compared to similar microphones, The Type B has a very low self noise specification (>7.5dB) and an very high output level (+12dBV), making it the perfect choice for today's high sample rate/deep word length digital platforms. Instead of integrated circuits (chips), The Type B employs a transformerless Class A discrete amplifier circuit to insure the most accurate and noise-free signal possible, with minimal distortion and coloration. The Type B's versatility, due to its interchangeable capsule design, makes it an ideal microphone for recording virtually any sound source.

The Type B includes the *Red Shockmount* and *Cranberry Microphone Cable*. The shock is designed to isolate the microphone body from low frequency resonance (rumble) and the 22-AWG cable is designed to provide the best possible signal transmission from microphone output to preamp input. **Please note: Forceful positioning of the shockmount without loosening the thumbscrew can result in damage not covered by warranty.**

The Type B requires +48V phantom power, which is provided by most mic preamps and



*Fig 1.2*  
TYPE B MICROPHONE  
W/RED SHOCKMOUNT

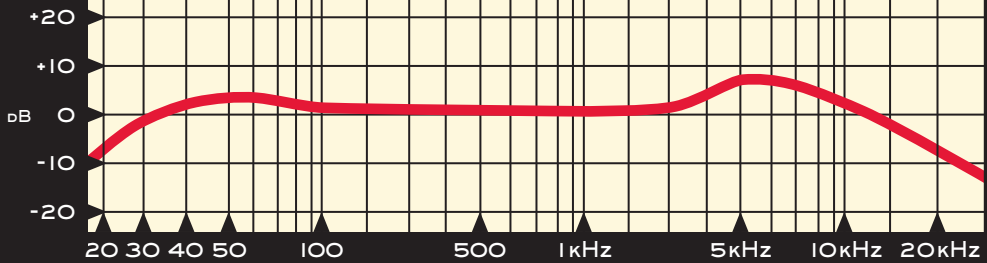
mixing consoles. If your preamp or console input does not provide phantom power, you will need to purchase a separate +48V power supply. It is important to note that some units, though rated at +48V, may supply insufficient or unstable phantom power, which can result in distortion and/or degraded performance when used with a condenser microphone. Because of this, we have designed the Type B to deliver outstanding performance with a power supply as low as +35V!

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

- 1 Set mic preamp gain to its nominal position ("off").
- 2 Mute console master, stage monitor and mains feeds, headphones or fold-back sends, and studio monitors.
- 3 Connect the female end of your balanced XLR microphone cable to the Type B's output jack. Connect the male end to your balanced console input or balanced mic preamp input.
- 4 Switch on phantom power.
- 5 Un-mute all previously muted signal paths and adjust mic preamp gain as necessary.

Once the Type B 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 Blue logo) is facing the desired source. The Type B is a cardioid mic, and is designed to reject off-axis sound arriving at the back of the capsule.

# TYPE B



## FREQUENCY RESPONSE CHART

*This frequency chart of the Type B capsule is only a start. It gives the recordist a basis of the sound provided. How the microphone reacts in a particular application will differ greatly because of many variables. Room acoustics, distance from sound source (proximity), tuning of the instrument and microphone cabling are only a few of the interacting issues. For an artist or engineer, how the microphones are used creates the basis of the sound.*



## RECORDING APPLICATIONS

Following are some application tips that will help you to get the most out of the Type B with its included capsule.



### VOCALS

Here's a little-known secret — vocalists love singing into unique and impressive mics like the Type B. 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 B 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 over-driven 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 B 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 B'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 end detail, move the Type B 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 B 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 B'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 B 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 B 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 B 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 B to be an ideal mic for a wide spectrum of instrumentation and recording needs.

## TECHNICAL SPECIFICATIONS

ACOUSTICAL OPERATING PRINCIPAL:  
PRESSURE GRADIENT

DIRECTIONAL PATTERN:  
CARDIOID  
(W/RED LOLLIPOP CAPSULE)

FREQUENCY RESPONSE:  
20Hz – 20kHz

SENSITIVITY (1kHz INTO 2.5k $\Omega$ ):  
27mV/Pa

RATED IMPEDANCE:  
50 $\Omega$

RATED LOAD IMPEDANCE:  
NOT LESS THAN 1k $\Omega$

NOISE LEVEL A-WEIGHTED (IEC 651):  
NOT MORE THAN 7.5dB

MAX OUTPUT (1% THD INTO 2.5k $\Omega$ ):  
12dBV = 3.1V

MAX SPL (0.5% THD INTO 2.5k $\Omega$ ):  
138dB

DYNAMIC RANGE (2.5k $\Omega$  LOAD):  
130dB

SUPPLY VOLTAGE (IEC 268-15):  
+48V PHANTOM POWER  
(+35V MIN.)

CURRENT DRAW (TYPICAL AT +48V):  
1.8mA



### 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.

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# TYPE **B**