

2006/2007

# RED



## MICROPHONES

S O U N D   T H I N K I N G







JOEY CIGAK, VOCALIST



CLAY HARRISON  
ASSEMBLING TYPE B  
MICROPHONES



## P A I N T   T H E   S O U N D   R E D

Whether you record songs in the garage for your girlfriend or spend endless hours in a state-of-the-art studio perfecting that next platinum hit, making music requires a lot of work, a lot of dedication and mostly a lot of love. We here at Red get it. We understand because making music is our heart and soul and we'll never, ever, grow out of it.

It's this passion for music and recording that is the driving force behind Red Microphones. Red was founded and is run by a small group of highly creative people who are also musicians, engineers, gearheads and audio junkies. We argue over Band A vs. Band B and spend lunches remixing songs we've been working on. We flail away on the company drumkit (no, really) when we need to blow off steam. And we also find time to build microphones: really, really *great* microphones and capsules and a variety of accessories.

Our products are outstanding because of the passion and experience of the people behind them, people with years of engineering smarts and years of gigs under their belt. Simply put, we engineer and build what we want to hear, and we do it with the same creativity and dedication that we would expect as musicians. Working collaboratively with the renowned designers at Blue Microphones, Red has created an expandable family of microphones and capsules that offer today's artist and engineer a more flexible way of capturing audio with uncompromising fidelity.

### Paint the world **Red**

We're committed to making the world a better place to be heard. Red makes donations to support a variety of charitable music-related organizations around the globe. We fund programs that directly support musicians as well as those that use music to promote progressive causes. That, to us, is a sound investment.



REDHEAD R4 CAPSULE

# TYPE A MICROPHONE

WHATEVER YOUR SOUND, IT'S JUST YOUR TYPE.



The **Type A** vacuum tube microphone system is an innovative and unique solution for virtually any recording need. Combining low noise and superb transient response along with a choice of nine different interchangeable capsules (*The Redheads*), you'll quickly discover the Type A is a microphone system that will provide years of dependable service and amazing sounds. In an instant, you can change the bayonet-mount capsule for a stunning variety of sounds and pickup patterns without even shutting off the power! The transformerless Class A discrete amplifier circuit of the Type A is a thoroughly modern design with a nod to the classic circuits of yesterday. Utilizing a single hand-selected ECC88 vacuum tube, you'll hear musical detail and subtlety previously only heard in mics costing thousands more! The Type A includes a custom-built flight case, our high-definition tube mic cable, shockmount and the innovative *Powerstream* power supply, which not only ensures ultra-stable performance but features our soft-start feature which maximizes tube life and minimizes startup time.



## RED'S THEORY OF RELATIVITY

Every model of the Type A family employs a capsule with a different tonal characteristic and pickup pattern, each designed to provide the recordist with the ultimate sonic solution for their respective application. Turn to the next page to learn about all the different Type A mic/capsule combinations. Get them all and have a complete mic cabinet!

## TECHNICAL SPECIFICATIONS

■ Acoustical operating principal:	Pressure gradient or pure pressure (depending on capsule)
■ Directional pattern:	Cardioid, omnidirectional, figure of 8 (depending on capsule)
■ Frequency response:	20Hz – 20kHz
■ Sensitivity (1kHz into 2.5k $\Omega$ ):	50mV/Pa (+/- 10mV depending on capsule)
■ Rated impedance:	50 $\Omega$
■ Rated load impedance:	Not less than 1k $\Omega$
■ Noise level a-weighted (iec 651):	Not more than 9dBV – 14dBV (depending on capsule)
■ Max output (1% thd into 2.5k $\Omega$ ):	+28dBV = 25.11 Vrms
■ Max spl (1.0% thd into 2.5k $\Omega$ ):	139dB
■ Dynamic range (2.5k $\Omega$ load):	130dB
■ Supply voltage (IEC 268-15):	+48V phantom power (+35V min.)
■ Current draw: (typical AI+48V):	1.8mA



Type A microphone with shockmount



Type A flight case with mic, capsule, power supply and mic cable



Powerstream power supply

# TYPE B MICROPHONE

## WHATEVER YOUR TYPE, IT'S JUST YOUR SOUND.



Meet the **Type B**, cousin of the Type A. The Type B is our affordable Class A discrete solid state mic with a foundation for interchangeable capsules, including Red's nine vintage lollipop-style capsules, *The Redheads*. This bayonet-mounted system gives the user unlimited flexibility and a wide variety of tonal characteristics and pickup patterns, all in one mic! Precision-designed and hand-assembled, the Type B is crafted for a lifetime of use. Compared to similar microphones, the Type B has a very low self noise specification ( $<7.5\text{dB}$ ) 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 ensure the most accurate and noise-free signal possible, with minimal distortion and coloration. The Type B is an ideal microphone for recording virtually any sound source. In addition to the microphone, the Type B also includes the *Type B Accessory Pak*, containing Red's high-definition 20-AWG mic cable and Type B Shockmount.



### RED'S THEORY OF RELATIVITY (AGAIN)

Every model of the Type B family employs a capsule with a different tonal characteristic and pickup pattern, each designed to provide the recordist with the ultimate sonic solution for their respective application. Turn to the next page to learn about all the different Type B mic/capsule combinations. Get them all and have a complete mic cabinet!

### TECHNICAL SPECIFICATIONS

■ Acoustical operating principal:	Pressure gradient or pure pressure (depending on capsule)
■ Directional pattern:	Cardioid, omnidirectional, figure of 8 (depending on capsule)
■ Frequency response:	20Hz – 20kHz
■ Sensitivity (1kHz into 2.5k $\Omega$ ):	27mV/Pa (+/- 10mV depending on capsule)
■ Rated impedance:	50 $\Omega$
■ Rated load impedance:	Not less than 1k $\Omega$
■ Noise level a-weighted (iec 651):	Not more than 7.5dBV – 14dBV (depending on capsule)
■ Max output (1% thd into 2.5k $\Omega$ ):	+12dBV = 3.1 Vrms
■ Max spl (1.0% 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 AI+48V):	1.8mA



Type B microphone  
with shockmount



Type B microphone  
with shockmount and  
optional pop filter

# TYPE A & B MICROPHONE FAMILIES

## IT'S ALL ABOUT BUILDING SOUND RELATIONSHIPS.



The real beauty of the Type A and Type B microphones is that each is nine mics (and counting) in one. Simply by swapping any of the interchangeable capsules, you instantly have a completely different sound and pickup pattern right at your fingertips. Below is an in-depth look at each mic/capsule combination; on the opposite page are frequency and polar response charts for all of The Redheads.

### R0 CAPSULE • Large Diaphragm Cardioid – Bright

#### THE ULTIMATE BIG VOCAL SOUND

The Type A0/B0 vacuum tube microphone with the Redhead R0 capsule offers a bright, silky and intimate presence – perfect for background and lead vocals, guitar, percussion and all top-end sources.

The R0 is a bright single backplate capsule, tuned rather high. It is similar in tone to the R6, with an added sparkle of air in the extreme high end. To obtain the best Big Vocal Sound, work the R0 close with a pop filter. The R0 exhibits lots of cutting power and airy response, and is particularly useful for an enhanced pop music vocal presence requiring extended highs and lows.

- Superior bright, silky and intimate presence
- Suggested applications: Background and lead vocals, guitar, mandolin, percussion, and any source where top end is featured.

### R1 CAPSULE • Small Diaphragm Cardioid

#### THE ACCURACY PLUS MICROPHONE

The Type A1/B1 vacuum tube microphone with the R1 capsule offers sonic accuracy with extended high-frequency response – perfect for nylon/steel-string acoustic guitar, drum overheads, percussion, room miking & Foley. The R1 has been designed to capture instruments with a detailed high end, and features a dip in response around the 400 Hz to enhance the clarity of a program source.

The R1's most notable characteristics are sweet highs, abundant high end detail, extremely lifelike transient response and an open, uncompressed sound that seems to add extra depth and dimension to any source. It offers a punchy bass pickup without extended or muddy lows, neutral off-axis response, and a lack of harshness that is extraordinary for a small diaphragm transducer.

- Sonic accuracy with extended high frequency response
- Suggested applications: Nylon or steel-string acoustic guitar, accordion, drum overheads, metal percussion, hi-hat, small pitched percussion such as toy piano or marimba, room or ambient miking, Foley and sound effect recording, strings and orchestral recording.

### R2 CAPSULE • Large Diaphragm Figure of 8

#### THE VINTAGE MIC

The Type A2/B2 vacuum tube microphone with the R2 capsule has been tailored to resemble the big, warm sound and open pickup pattern of a vintage ribbon microphone. When worked close this capsule is reminiscent of the “Bing Crosby Sound” with soft highs and an enhanced proximity effect.

The R2 offers a thick and compressed tonality, with an aggressive upper midrange and big low end response on par with the R0 and the R4 capsules. It does a remarkable job of capturing the gentle timbre and roomy pickup of a ribbon microphone.

- Big, warm sound of vintage ribbon mic
- Suggested applications: Emulation of vintage saxophone, brass, guitar, or vocal sounds, jazz ensembles and horn sections, muted trumpet, flugelhorn and other low brass instruments, clarinet, overly bright or “edgy” instruments, room miking, acoustic bass, cello and other bowed string instruments, electric bass, clean or distorted electric guitar, pedal steel and slide guitar, whistling, organ.

### R3 CAPSULE • Medium Diaphragm Cardioid

#### THE NEUTRAL MICROPHONE

The Type A3/B3 vacuum tube microphone with the R3 capsule is Red's most accurate, and, in a purely technical sense, “best” mic. The R3 has a soft midrange boost to detail the center frequencies in a program source. The capsule tends not to flatter or enhance the recorded source, but rather “tells it like it is.” The high end response is smooth with exemplary transient response, and its midrange to low end pickup is mostly flat.

Recommended for: Female vocals, distant miking of orchestral groups and instruments, banjo, mandolin, jazz guitar, distorted electric guitar, bass, acoustic guitar, piano and organ.

- Very transparent, neutral sound
- Suggested applications: Female vocals, distant miking of orchestral groups and instruments, banjo, mandolin, resonator guitar, jazz guitar, distorted electric guitar, electric bass, a natural or “folky” tone on nylon and steel-string acoustic guitar, oboe, bassoon and other double reeds, organ.

### R4 CAPSULE • Small Diaphragm Sphere Pressure Omni

#### THE BIG OMNI

The Type A4/B4 vacuum tube microphone with the R4 capsule represents Red's finest craftsmanship, evoking an ethereal quality sought after by producers and engineers alike. For room sounds and ambient drum recording, nothing parallels the sound of this capsule.

The R4's sweet highs are never harsh or strident, and the bass response below 120 Hz is unusually robust for an omnidirectional microphone. Its smooth presence lift conveys an extra measure of high end detail and focus, preventing distant sounds from becoming overly diffuse or “washed out.”

- Sweet highs, robust lows, unique design and sound perfect for ambient recording
- Suggested applications: Orchestral sounds, classical instrumentation, background vocals, organ, accordion, distant miking of any source — particularly bowed strings, and drums.

### R5 CAPSULE • Large Diaphragm Pressure Omni

#### THE PRESENCE OMNI

The Type A5/B5 vacuum tube microphone with the R5 capsule features frequency response peaks at 3-5 kHz and 12-15 kHz, giving this capsule a distinctive bright and incisive timbre.



# FEATURING THE REDHEADS

BECAUSE NINE HEADS ARE BETTER THAN ONE.

The R5 is distinguished by super detailed highs and attenuated lower midrange to bass response. This capsule is the ideal candidate for close miking many acoustic instruments.

- Very unique compressed quality, extremely accentuated low and high frequency response
- Suggested applications: Acoustic guitar, percussion, any highly transient sources, any acoustic sources that need very close miking or extra presence boosting to cut through a dense mix.

## R6 CAPSULE • Large Diaphragm Cardioid

### THE MODERN PRESENCE VOCAL SOUND

The Type A6/B6 vacuum tube microphone with the R6 capsule, is tuned to deliver a larger than life sound with extension in the lower and upper frequencies.

The R6 capsule has a modern tone with sharply-etched presence. With a brighter response and more proximity effect than the R7, and less high or low end extension compared to the R0, this capsule is logically the first choice for vocals. The R6 has the highest sensitivity of our R line of capsules, and delivers significantly hotter output than most condenser microphones.

- “Larger than life” sound — enhanced lows and high frequency presence
- Suggested applications: Lead vocals, background vocals, voiceovers, percussion, piano, vibraphone, accordion, clean electric guitar, jazz guitar and distant miking of acoustic or resonator guitar.

## R7 CAPSULE • Large Diaphragm Cardioid

### THE CLASSIC VOCAL SOUND

The Type A7/B7 vacuum tube microphone with the R7 capsule is our best selling microphone! This single backplate capsule is Red’s version of the unmistakably warm sound of the great 1950’s tube microphones. A boost in the upper midrange response brings out just the right amount of intimate detail for vocal tracks that demand extra presence. The natural high end response of this capsule is the perfect complement for midrangy or thin voices, as well as any rock/soul/blues/jazz vocals that need to “sit in the mix.”

- Classic vintage detailed mids with airy presence
- Suggested applications: Lead vocals, background vocals, saxophone, flugelhorn, clean or distorted electric guitar, pedal steel and slide guitar, organ, conventional jazz recording.

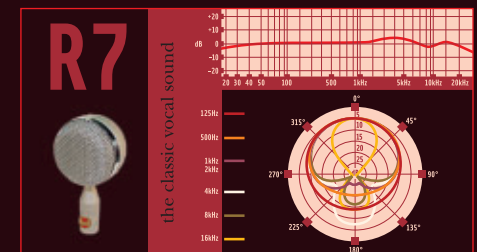
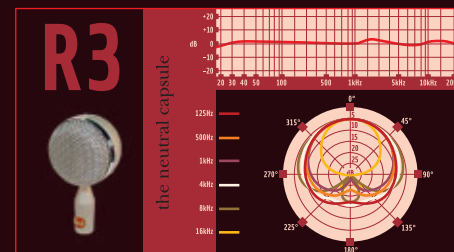
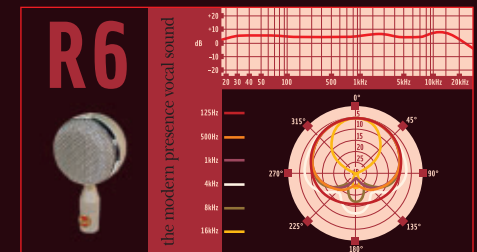
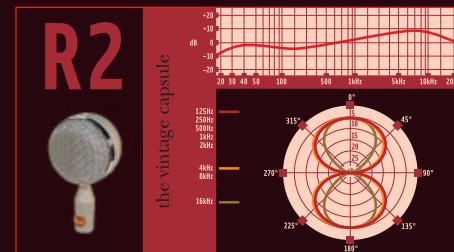
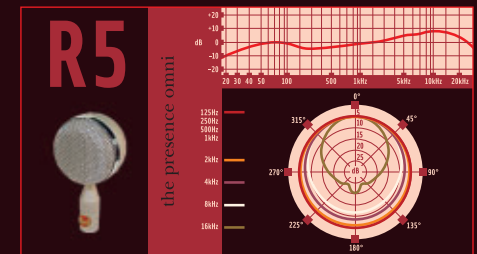
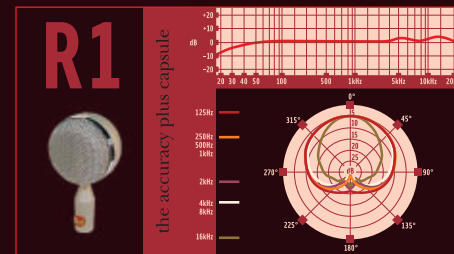
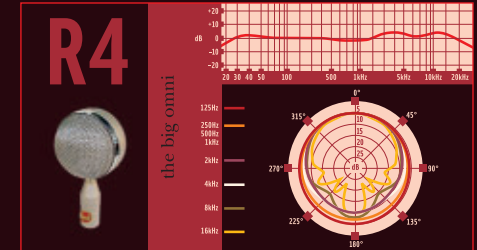
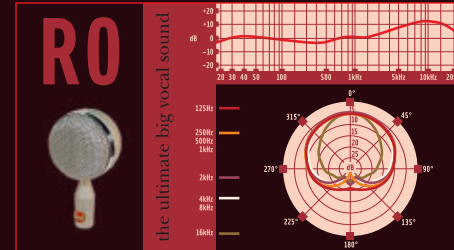
## R8 CAPSULE • Large Diaphragm Cardioid Condenser

### THE VERSATILE MIC

The Type A8/B8 vacuum tube microphone with the R8 capsule is Red’s all-around microphone, designed to be as versatile as possible, with applications ranging from vocals to electric and acoustic guitars, close-miking of drums, drum overheads, percussion, piano, horns, strings and any other applications where crystal-clear sound quality and detail is of the utmost concern.

The R8 lollipop capsule is a pressure gradient large diaphragm condenser which employs a 6μ pure gold-sputtered mylar capsule membrane. It was designed with maximum versatility in mind for a wide variety of applications.

- Best choice if only using one capsule — crystal clear sound quality, excellent detail for a wide range of recording applications
- Suggested applications: Male & female lead vocals, electric & acoustic guitars, drums, piano, horns & strings.



*These frequency charts of the Redhead capsules 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.*







ARI SOUDAK, DRUMMER



# LOLLIPOP CAPSULES

## COOL THREADS.



### THE LOLLIPOP CAPSULE

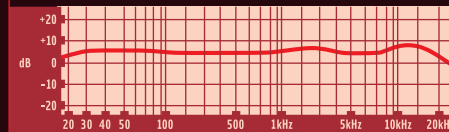
A hand-built and threaded capsule that works with vintage AKG 451/452, C60/C61 & C28 microphones, Red's classic Lollipop Capsule (utilizing the Redhead R6 capsule) has been designed to deliver a larger than life sound with extension in the lower and upper frequencies. What's more, Red has engineered the nine different Redhead capsules to fit in the Lollipop head, allowing the versatility of the entire Redhead family to be transported to the threaded lollipop architecture.



### THE R12 CAPSULE

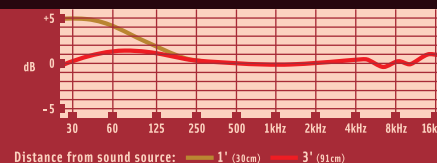
The R12 is a hand-built large diaphragm capsule designed to work with the Oktava MC012 microphone. The R12 enhances the versatility of the Oktava mic by providing a wider array of applications, from vocals to electric and acoustic guitars, close-miking of drums, drum overheads, percussion, piano and strings. The R12 delivers an extended top and bottom that results in crystal-clear sound quality and detail.

### THE LOLLIPOP CAPSULE



*The frequency charts of the Lollipop and R12 capsules 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.*

### R12 LOLLIPOP CAPSULE



# RED QUAD MICROPHONE CABLE

## MAKE THE CONNECTION.



Red's 4-22 AWG quad conductor cable offers maximum frequency resolution with extended low and high frequency response, while rewarding the recordist and performer a signal path of outstanding sonic quality and high durability. Although recommended for use with Red's Type A & B mics, Red's quad cable will enhance the performance of any studio or live performance microphone.



Quad microphone cable

## RED POP FILTER



With its fully-adjustable gooseneck design and solid brass screen mount, **The Pop** is a “must have” for any microphone. Styled after the famous filters used by the Beatles during their recording sessions, the fine mesh used in the screen helps keep “P” popping and moisture away from the valuable microphone capsule. A truly elegant addition to any microphone setup.

### OUR ONE-STOP POP.



*The Pop on the Type B mic*

## RED SHOCKMOUNTS

### ALONG CAME A SPIDER . . .

Red has engineered a variety of shockmounts for new and vintage microphones. All are finely crafted from solid brass and designed to reduce noise generated from low-end frequencies.

Our series of spider shockmounts fit many vintage microphones, including the C12/C24, Elam 250/251, UM57/CMV 563, SM2/SM69/SM69fet, U47/U48 and U67/U87/269c. Red has added a handy thumbscrew assembly so that the shockmount can be hand-tightened after positioning.

Red has also re-engineered the hard-to-find yokemount for the M50/M49 mics, with an added improvement in the ring assembly of rubber buttons that help protect the microphone's finish.

The custom-designed **Red Wing** shockmount works with a wide variety of contemporary and vintage mics, including the AKG C 414 series. Unique in design, this mount allows for easy positioning.



RED WING SHOCKMOUNT



*Top: Yokemount for the M49/M50*

*Bottom: Spider shock for the C12/C24*



## RED MIC STORAGE BOXES

### AN OPEN AND SHUT CASE. OR TWO. OR THREE.

Protect your valuable microphones in one of Red's handbuilt cherrywood-finished storage boxes. Designed to protect against moisture and form-fitted to ensure against damage in transport, these velvet-lined boxes will last a lifetime. Vintage mic boxes include the U-47 Long Body, U47/U48 Short Body, U67/U87/M269, C24/C12, Elam 250/251, M49/M50, SM69/SM69fet, SM2 as well as boxes for all of *The Redheads* mic capsules.



*Wood box for the SM2 microphone*

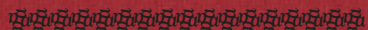




DANNY RODRIGUEZ, RED SHIPPING/SURFING CZAR







All persons depicted in this brochure are actual employees of Red Microphones and, to the best of our knowledge, harbor no dreams of being professional models. At least that's what they say publicly . . .

# RED

## MICROPHONES

[www.redmic.com](http://www.redmic.com)

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