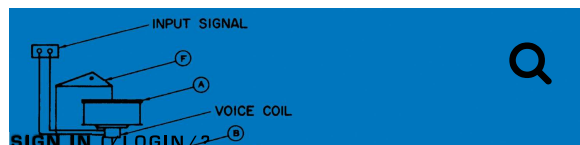




()



() MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES), RIBBON MICS (/REVIEWS/CATEGORY/RIBBON-MICS)

ISSUE #111

# RM1 ribbon mic (<http://www.oceanwayaudio.com/>): Ocean Way Audio / Cliff Mics



REVIEWED BY GEOFF STANFIELD (/REVIEWS/BY/GEOFF-STANFIELD)



New ribbon mics are everywhere these days. They have always been part of every good studio's microphone locker, but in recent years, there have been several new ideas for what a ribbon mic can be. Beyond the modern ribbon designs from the likes of AEA and Royer Labs, there are several unique ribbons that are certainly worth a look and listen. The new *Cliff Mics RM1*, manufactured and sold in partnership with Allen Sides' [Tape Op #106] Ocean Way Audio, is one such mic.

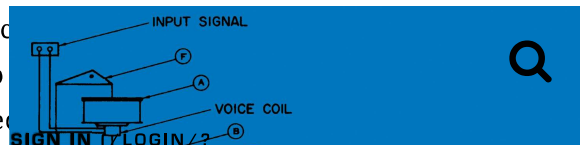
The *RM1* is a bi-directional (figure-eight polar pattern) ribbon mic with a claimed frequency response of 20-20,000 Hz. Its ribbon motor employs massive neodymium-iron-boron (NdFeB or "Neo") magnets protected with an electroless nickel plating. Boasting "the greatest magnetic force ever available in a ribbon mic" and employing an onboard preamp with an all-discrete circuit design, the *RM1*'s output level and noise floor are comparable to that of a high-end large-diaphragm condenser mic.

The *RM1* is surprisingly heavy, weighing in at over 7 lbs. (Big magnets are heavy!) My first thought was, "Do I have a stand that is going to hold this beast?" Don't put it on a flimsy stand at the end of an extended boom; you will regret it when you find yourself reviewing the dent in your hardwood floor and sending back the mic to Ocean Way Audio for a ribbon replacement. I found a suitable stand and made sure things were well balanced before stepping back and letting go.

The *RM1* has a look that I would describe as suitable for Billie Holiday reincarnated in the future... on a space station.

It has a thoroughly classic aesthetic, but is also very contemporary in its styling. Speaking of space stations, a little lack of gravity would also help with the weight! Kidding aside, this is a beautiful microphone that's built like a tank. Interestingly, instead of a metal mesh to protect the ribbon, the *RM1* utilizes an integral two-stage pop filter. A thin, stretched layer of Spandex-nylon is augmented with a second, sheer-knit layer underneath. I am sure this design contributes to the resonance-free clarity of the mic's sound, while keeping even tiny particles (like metal filings or even magnetic tape dust) from being sucked into the motor by the 130 lbs of tractor-beam force that each of the two Neo magnets produces. But I do wonder what it might look like after many sessions. I suppose if your string players are not cave dwellers, you'd be okay, but even a

rough fingernail could snag and tear this Spandex, so handle with care. The hardware is super bulky, making it easy to manipulate the mic into position. A short XLR cable is permanently attached to the mic, and you connect it to your preamp.



As mentioned above, the *RM1* has an onboard preamp and requires +48V phantom power. This provides excellent output level and keeps noise to a minimum. Not once with any of the preamps I paired with the *RM1* did I feel like I was getting close to topping out or having to drive the preamp undesirably to achieve good level. This is not the case with all ribbon mics, especially older ones, so I found this to be a nice perk.

Once I plugged the *RM1* in and started using it, I wanted to hear it on everything. If I had to give a single-word review, it would be this: Natural. With all the hyper-processed sounds that are typical in so much modern pop music, it was a refreshing exercise to demo and review the *RM1* using acoustic instruments with minimal compression and EQ. With a little extra attention to mic placement, I was able to capture true-to-life images of several acoustic sources. The *RM1* captured lovely dynamics and tone, and as advertised, it sounded natural. I would add "open" to the description too.

I went with perhaps "typical" ribbon mic applications, while I tried the *RM1* with API 512, Crane Song Spider, Meris 440 [*Tape Op* #103], and Burl B1 and B1D [this issue] preamps. I like to use a mic for everything in a session as I am working it up, to see where it excels and where I would perhaps reach for a different option. For this review, I created a simple, short piece utilizing acoustic guitar, clarinet, alto sax, vocals, and percussion.

When I placed the mic about a foot in front of the clarinet and kept the preamp on the clean side, there was a lovely realism to the recorded track. It was very warm, and never lacking in the "air" bands. A nice halo of breath and space was presented around the focused source. High-frequency information that is fully realized but not hyped is a real treat, and there was no fitzy sizzle of a cheap condenser - just silky smooth highs complementing the detailed midrange and fully realized lows. It was a complete picture - clear, but not the least bit sterile or clinical.

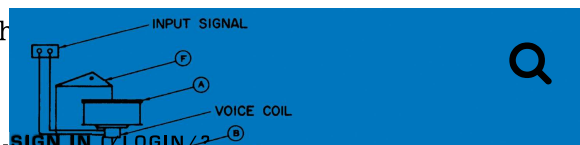
On acoustic guitar, I got nice balance and even tone from a Gibson Dove. Initially, I rolled off some low end using an EQ, but on a second pass, I repositioned the *RM1* farther up the neck and backed it off a bit, and the resulting track sat right in there, sans additional tweaking. Worth noting is that I found it unnecessary to add any high-frequency EQ, which I might typically do with other ribbon mics.

The *RM1* also worked well on vocals. I liked the presence and the smooth, gentle high end. It never felt dark and muddled, nor did it sound hyped - again, just natural. It certainly delivers that "classic sounding" tone that a jazz or folk singer would desire. Try it with different marriages of preamp and singer to find just the right thing for your taste and situation, but it seems to me that with minimal tweaking, this microphone would be an outstanding choice for a vast array of vocal-recording scenarios. The *RM1* is prone to some proximity effect when worked up close, so don't eat the mic! Position appropriately, and you will fall in love with its rich, detailed tone. I liked the mic best positioned above and angled down towards the singer, to avoid air blasts while still capturing enough warmth and body.

As you probably already know, ribbons are great for horns. They tend to be a little more mellow/smooth on the top, which can lend a hand in taming the sometimes ear-searing quality of brass instruments (especially trumpets). From a couple feet away, the *RM1* captured a full beefy tone of an alto sax. When soloed, you

could hear the breath and air all around the focused sound, and what a beautiful presence without any need for EQ.

(/)



In general, I felt that this mic compelled me to be a touch more thoughtful of placement, and it encouraged listening to get the tone and frequency response through mic positioning instead of processing after the fact. It was a good reminder! Get it right from the source.

My friend, cohabitor, and all-around fantastic engineer at Studio Litho in Seattle, Floyd Reitmer, asked if I had any ribbon mics he could borrow for an upcoming session. Funny he should ask! I told him I'd love his ears and opinion on the *RM1*. Floyd explained that he was looking for something "classic" sounding for the drum kit to harken a '60s psychedelic vibe. His first note back was that the mic was "loud." Yep, as noted above, you will be surprised to get this much signal level out of a ribbon mic. Floyd said, "When I brought it up in the control room, it sounded like what I expected, in terms of placement, but better." We both collectively thought it sounded like a great classic ribbon mic but with welcomed modern touches. Floyd's feedback and opinions in this regard carry some weight, as he has extensive experience with Litho's pristine vintage RCA Type 44 mics. He too noted that he found himself having to be very cautious with the way he handled the mic, due to the nylon screen.

The mic has a five-year warranty and a 90-day ribbon- replacement policy. It's made in the USA and is by all accounts a well-built, great-sounding microphone for just about anything you'd put in front (or back) of it. (Importantly, the manufacturer states that low frequencies will damage the ribbon, so the *RM1* is not going to be a great choice in front of your bass cabinet or for close-in kick drum applications.) I had purposely used the *RM1* and written the review fully "cost blind," so I wouldn't equate dollar signs to performance. Typically, but not always, there is a price tag associated with performance and ease-of- use, so I expected that this was by no means a budget microphone and would carry a substantial price tag. In my opinion, a top-shelf microphone should yield great results with minimal effort. The *Cliff Mics RM1* from Ocean Way Audio checks all those boxes, and although it is unlikely this will be a casual purchase for the masses, it is very reasonably priced for its performance and quality.

\$2100 street w/ standard yoke mount, optional isolation mount \$150; [www.oceanwayaudio.com](http://www.oceanwayaudio.com)

Geoff Stanfield is at [www.geoffstanfieldrecording.com](http://www.geoffstanfieldrecording.com)



***Tape Op* is a bi-monthly magazine devoted to the art of record making.**

**SUBSCRIBE FOR FREE HERE [/SUBSCRIBE/]**

**OR LEARN MORE [/EXPLAINED/]**



(/)

SPONSORED



# DISTROKI

THE NEW STANDARD IN DIGITAL MUSIC DISTRIBUTION

Get your music into Spotify, iTunes, Apple Music, Tidal, YouTube Music, Pandora, and more!

**Upload as much as you want.  
Keep 100% of your royalties.**

Automatically share revenue with your collaborators with our TEAMS product. We handle the accounting for you!

Get verified! DistroKid will help with instant verification on Spotify, as well as providing lyrics, credits, and artist images to stores.

Market your release within minutes of uploading using HyperFollow. We immediately create a Spotify pre-save page that automatically adds all other stores on your release date. Promote one URL, make sure all your fans can add your music on their service of choice!

For a 10% discount, sign up at <http://distrokid.com/vip/tapeop>

(<https://ad.jawbot.com/?c=070041>)



## ECHOBOY

THE CREATIVE STANDARD FOR ECHO

Get 30 built-in styles and decades of vintage echo devices in a single plug-in.

[SHOP NOW](#)

(<https://ad.jawbot.com/?x=4788&r=ee1d21306cddf0e43641f1dc52d810be&c=070041>)

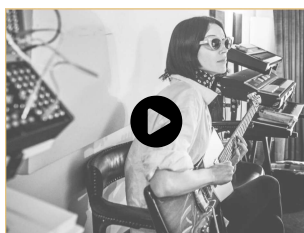


(/podcasts/)

 **LISTEN NOW**  
(/PODCASTS/)

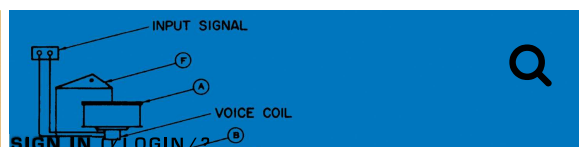


(/)



(/podcasts/episode-37-annie-clark)

NEW! EP37: ANNIE CLARK  
(/PODCASTS/EPISODE-37-ANNIE-CLARK)



SPONSORED



(https://ad.jawbot.com/?

x=4795&r=8caa38721906c1a0bb95c80fab33a893&c=070041)



**UR-RT** AUDIO-INTERFACES  
WITH REAL RUPERT NEVE DESIGNS TRANSFORMERS



(https://ad.jawbot.com/?x=4789&r=3bf75f7173e9ff794fc9c53515defaad&c=070041)

## MORE GEAR REVIEWS

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 78  
(HTTPS://TAPEOP.COM/ISSUES/78/)

### JRS-34 And JRS-34-P Ribbon Mics (/Reviews/Gear/78/Jrs-34-And-Jrs-34-P-Ribbon-Mics/)

BY CRAIG SCHUMACHER (/REVIEWS/BY/CRAIG-SCHUMACHER)

One of the benefits of being a Tape Op subscriber is finding and meeting other readers in your home town. That in turn points you towards your resident gear geeks. The original rumor we heard here at...

(/reviews/gear/78/jrs-34-and-jrs-34-p-ribbon-mics/)

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 115  
(HTTPS://TAPEOP.COM/ISSUES/115/)

### Halo Reflection Filter (/Reviews/Gear/115/Halo-Reflection-Filter/)

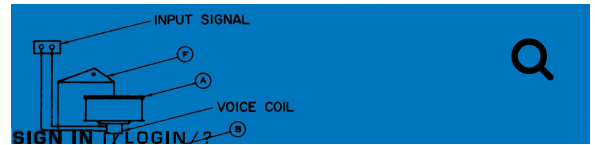
BY SCOTT MCCHANE (/REVIEWS/BY/SCOTT-MCCHANE)

Don't you just love things that are simple? Aston Microphones believes that reflection filters should be simple — easy to use, lightweight... and purple. Since the introduction of the SE...

(/reviews/gear/115/halo-reflection-filter/)



MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 101  
 (HTTPS://TAPEOP.COM/ISSUES/101/)



## **SOM50 Superomni Condenser Mic** (/Reviews/Gear/101/Som50-Superomni-Condenser-Mic/)

BY ADAM KAGAN (/REVIEWS/BY/ADAM-KAGAN)

In a world of modern mics which are all beginning to look and sound alike, the SOM50 mic stands out from the pack both visually and sonically. Ashman Acoustics, a Seattle based company, is headed by...

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 68  
 (HTTPS://TAPEOP.COM/ISSUES/68/)

## **HM-2d Large-Diaphragm Condenser Mic** (/Reviews/Gear/68/Hm-2d-Large-Diaphragm-Condenser-Mic/)

BY STEVE SILVERSTEIN (/REVIEWS/BY/STEVE-SILVERSTEIN)

If a microphone helps me learn about how other mics in my collection sound, then it is worth spending time with it for this reasons alone. The KEL Audio HM-2d not only accomplishes this feat, but does...

(/reviews/gear/68/hm-2d-large-diaphragm-condenser-mic/)

AMPLIFIERS (/REVIEWS/CATEGORY/AMPLIFIERS), MICROPHONES  
 (/REVIEWS/CATEGORY/MICROPHONES) | NO. 103  
 (HTTPS://TAPEOP.COM/ISSUES/103/)

## **Ehrlund EAP Acoustic Pickup System** (/Reviews/Gear/103/Ehrlund-Eap-Acoustic-Pickup-System/)

BY MIKE JASPER (/REVIEWS/BY/MIKE-JASPER)

When I record acoustic guitars, I use a mic. A real one. Mainly mono, but sometimes stereo — especially if it's a one-voice, one-guitar recording — but definitely a mic; no pickup...

(/reviews/gear/103/ehrlund-eap-acoustic-pickup-system/)

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 96  
 (HTTPS://TAPEOP.COM/ISSUES/96/)

## **PM9 Supercardioid Dynamic Mic** (/Reviews/Gear/96/Pm9-Supercardioid-Dynamic-Mic/)

BY ADAM KAGAN (/REVIEWS/BY/ADAM-KAGAN)

Miktek is an American mic company that has quickly gained traction in both professional and project studios. Recently, Miktek attacked the live sound stage with an array of microphones for vocals,...

(/reviews/gear/96/pm9-supercardioid-dynamic-mic/)

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 108  
 (HTTPS://TAPEOP.COM/ISSUES/108/)

## **U 47 Fet Condenser Mic (Reissue)** (/Reviews/Gear/108/U-47-Fet-Condenser-Mic-Reissue/)

BY GEOFF STANFIELD (/REVIEWS/BY/GEOFF-STANFIELD)

The U 47 fet reissue from Neumann is a faithful recreation of the solid-state version of the U 47 manufactured from 1972 to 1986. It has a fixed cardioid polar pattern and employs a K 47 capsule and...

(/reviews/gear/108/u-47-fet-condenser-mic-reissue/)

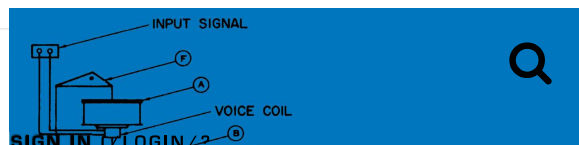


MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 117  
(HTTPS://TAPEOP.COM/ISSUES/117/)

## (/Reviews/Gear/117/Delphos-Large-Diaphragm-Condenser-Mic/)

BY ADAM MONK (/REVIEWS/BY/ADAM-MONK)

A while back, Tape Op contacted me to review Roswell's follow-up to their Mini K47, the Delphos. I had heard good things about the Mini K47 [Tape Op #109], and knew Matt McGlynn to be the mind behind...



MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 71  
(HTTPS://TAPEOP.COM/ISSUES/71/)

## X-M Omni Mic (/Reviews/Gear/71/X-M-Omni-Mic/)

BY MIKE JASPER (/REVIEWS/BY/MIKE-JASPER)

Since November, I've been working on a huge shootout of small-diaphragm condenser mics; I might have mentioned this in my last review. Frankly, I might mention this in every review forever, since it...

(/reviews/gear/71/x-m-omni-mic/)



(https://ad.jawbot.com/?x=4791&r=3bf75f7173e9ff794fc9c53515defaad&c=070041)

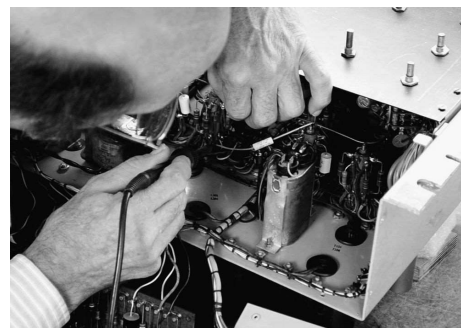
# BEHIND THE GEAR

BEHIND THE GEAR (/COLLECTIONS/BEHIND-THE-GEAR/)

## Restoring The "Holy Grail Of Compressors": Behind The Scenes At The Vintage King Tech Shop (/Interviews/Bonus/Vintage-King-Restoration-Series-Part-1-Outboard/)

BY

Vintage King co-founder Michael Nehra shares some of his love, knowledge, and practical advice for diving into the world of vintage audio gear, and then takes us behind the scenes for a walk through...



(/interviews/bonus/vintage-king-restoration-series-part-1-outboard/)

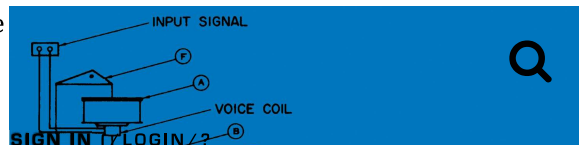
BEHIND THE GEAR  
(/COLLECTIONS/BEHIND-THE-GEAR/)

(/interviews/90/jim-williams/)

## Jim Williams: Behind The Gear With Audio Upgrades (/Interviews/90/Jim-Williams/)

BY MIKE JASPER (/ARTICLES/BY/MIKE-JASPER)

Jim Williams has spent much of his 56 years working with some of the biggest names in the music business, including Frank Zappa, John McLaughlin and Stevie Wonder. He's the owner of Audio Upgrades,...



BEHIND THE GEAR (/COLLECTIONS/BEHIND-THE-GEAR/)

## From WWII Planes To Stax Consoles: Behind The Gear With Bill Cheney & The History Of Spectra Sonics (/Interviews/Btg/102/Bill-Cheney/)

BY JOHN BACCIGALUPPI (/ARTICLES/BY/JOHN-BACCIGALUPPI), LARRY CRANE (/ARTICLES/BY/LARRY-CRANE)

Bill Cheney and Jim Romney are the men responsible for keeping the amazing legacy of Spectra Sonics, a legendary, if criminally unheralded, pro-audio company alive.



(/interviews/btg/102/bill-cheney/)

BEHIND THE GEAR (/COLLECTIONS/BEHIND-THE-GEAR/)

## Rich Williams: Behind The Gear With Burl Audio (/Interviews/105/Rich-Williams/)

BY LARRY CRANE (/ARTICLES/BY/LARRY-CRANE)

Burl Audio, under the direction of owner/designer Rich Williams, has developed some of the best new recording equipment over the last eight years. Their mic preamps, summing amps, and control room...



(/interviews/105/rich-williams/)

(https://ad.jawbot.com/?x=4792&r=3bf75f7173e9ff794fc9c53515defaad&c=070042)

(/fb/) (/tweets/) (/ig/)

(https://soundcloud.com/tapeopmagazine)

TUTORIALS (/TUTORIALS/) | MESSAGE BOARD (HTTP://MESSAGEBOARD.TAPEOP.COM)

ABOUT TAPE OP (/EXPLAINED/) | ADVERTISE (/ADVERTISE/) | SUBSCRIBE (/SUBSCRIPTIONS/) | STORE (/SHOP/) | PRIVACY (/PRIVACY/) |  
FEEDBACK (/FEEDBACK/) | F.A.Q. (/FAQ/) | CONTACT US (/CONTACT/)