



TAPE OP

()

[] MICROPHONES [/REVIEWS/CATEGORY/MICROPHONES]

Pearlman Church

(<http://www.pearlmanmicrophones.com>): TM-1 & TM-2 tube mics

REVIEWED BY MARK WARREN [/REVIEWS/BY/MARK-WARREN]



ISSUE #60

[.ps://tapeop.com](https://tapeop.com)BROWSE
ISSUE

JUL/AUG 2007

There are legends in microphone technology, and there are legends in microphone technology. Everyone has surely heard about the legendary U 47 microphone, but have you heard about the *U 47 Church* microphone? The legend goes something like this. On a smoky movie set on an MGM soundstage sometime in the mid-1950s, a director yells "Sound!" A mic boom is lowered, and then "Action!" is called. Clark Gable takes to the set and suddenly begins his dialogue into... a *stubby black U 47???*

At the time, most people wouldn't have known what that mic was, but Church-modified U 47. Stanley Church was the Chief Sound Engineer in the 1950s⁽¹⁾ period, and he must have had some gumption to think that he could, using some of Neumann's own parts! Because that is precisely what Stanley Church attempted; he went ahead and ordered a stockpile of U 47 capsules from Neumann (or more likely from Gotham who was the US Neumann distributor) and proceeded to build his own microphone from them. These microphones were designed to use a bit higher power and be more detailed than a standard U 47, perhaps for getting more sound to the tape from a more distant mic placement on a movie set; or maybe Church was just nuts.



History would prove Church's vision valid though, as today these original Church U 47 microphones are rare and found only in the hands of the lucky few with a serious microphone collection. This is because once Neumann got wind of what Stanley Church was doing with their capsule, they proceeded to shut him down — so to speak — letting Church and MGM know in no uncertain terms that they weren't going to tolerate a Frankenstein version of their microphone being built and distributed to movie studios in Hollywood. In the end, it is rumored that of 200 capsules Church acquired, less than 20 actual Church mics were completed. Talk about rare!

In regards to technical specs, beyond the obvious Neumann capsule, Church used a 6072 tube with a Triad transformer and then shoved the messy works into a stout black microphone body. As the years advanced and soundstage microphone technology along with them, the Church mics retired from movie studio use into the hands of most likely the very engineers who used them. Over time, these found their way into some recording studios where they were as good as and sometimes even better than a standard U 47. Thus the legend began.

Dave Pearlman of Sherman Oaks, CA is a relative newcomer to the microphone industry. In a few years, he has turned the boutique microphone industry on its side (or at least on its head) with microphones that capture and emulate the best the U 47 had to offer on a budget of almost any studio, even a home or project studio. Dave began with the TM-1, which uses a custom configuration of capsule, tube (original German), and transformer to create which is in my opinion, the best damn large-diaphragm condenser under \$2,000! Capturing the essence of the original vintage U 47s, the Pearlman TM-1 is an amazing microphone, especially on vocals, for the price point of \$1,750. To get anything better or closer to a U 47 in an LDC, you'd have to spend at least two to three times as much.



Always looking to innovate, Pearlman began researching the different variants of the U 47 last year and came upon the legend of the Church microphone. Upon confirming its existence and legendary character, Dave used all his secret microphone powers to procure a schematic and parts list of the components used by Stanley Church to build these mics while at MGM Studios. Thus the Pearlman *Church* microphone was born. This mic uses an actual, original Neumann K 47 capsule, the same used in U 47s the world over, along with a 12AU7 tube (better sounding, Dave found, than the 6072) and an original old Triad tranny, just like Stanley Church's. Interestingly, Dave Pearlman also has chosen a great looking black body for his whole series of microphones, so the Pearlman *Church* mic is even more true to its original form.

So how does the Pearlman *Church* mic sound? In a word — amazing! For just a little bit more than the *TM-1*, the *Church* mic, at \$2500, is the next step up in terms of sound quality and polish. Where this mic really shines is in its top end. The top end is rich and distinct, capturing every essence of the "magic" in a vocal but *without* being sibilant, even on sibilant singers!

A lot of this likely has to do with the Neumann capsule as well, produced like they used to. Therefore, of course there are also only so many Pearlman Church mics (1) there are only so many original Neumann capsules to be found, so that's why they're so hard to come by in production throughout the years. Not quite as limited as say Gunter Wagner's U 47 clone, which has a two year waiting list-but let's just say there are only going to be so many to go around.



So back to the sound. I went ahead and tracked a male vocal within the context of a song with a variety of LDC tube mics, including a Soundelux U95S, Manley Reference Cardioid, Pearlman TM-1, and Pearlman *Church* mic at 5am Studios in downtown Austin, TX. I would have liked to have had the original *Church* mic handy as well, but they are so rare it was impossible. The results of sonic tests confirmed what Dave had already told me. This mic is special.

Without a doubt, the Pearlman *Church* mic track was the one that had the most finished and polished "album" sound, if you will, with a top end that sounded perfect. The Manley Reference is also a great mic with a top end that will show you every highlight-and every flaw-in the vocal. On this particular track, the Manley mic sounded far too sibilant and harsh. Therein lies the difference between a 100% accurate and open microphone capturing the good and the bad, and one that is simply perfect for voice and vocals. The *Church* mic is precisely that-a mic that can take a vocal and let it sit in the mix, with minimal fine tuning and most of the time alleviating many potential problems in the top end with harshness and sibilance.

I also got to see the Pearlman *Church* mic put to the test on drums within a Glyn Johns mic setup during a session at 5am Studios. You can search Google to see this setup if you are not familiar with it-basically a four-mic configuration that, if you have the right player and room, can get you a better drum sound than with twenty mics on the kit. We used the *Church* mic for the floor tom / side mic in this setup, and it delivered a

wallop! Great imaging on all the drums, and even using a different overhead mic in this setup, the *Church* mic blended in perfectly and the best sounding drum sound setups we've heard at the studio, esp



On acoustic guitar, the Pearlman *Church* mic also sounded excellent, delivering the warm full sound of a Collings body along with all the shimmer and detail in the high end. The Pearlman *Church* mic was even put to task on a roaring electric guitar cabinet, and in combination with a Royer, it helped to again put that great high end to work, adding interesting high-end detail that can be lost on the Royer.

Is the Pearlman *Church* microphone a perfect microphone? From a technical perspective, no. One aspect of the *Church* mic I did find awry is that it wasn't completely balanced in the bottom end vs. top end without adding some low-end EQ—say a bump around 200 Hz or so. Interestingly, after adding some low-end EQ on the bottom, the detail there was marvelous too. It's like it was there all the time anyway, just not in perfect balance in volume and intensity with that pristine top end. So in some situations where you'd be looking to mic a source that required even balance throughout the frequency spectrum, you'll definitely be reaching for some EQ. I found this true even on some vocals, but again, as soon it got a little bump on the bottom end, man, there it was, what a great sounding microphone!

The Pearlman *Church* microphone can also be tuned to taste by trying some different tubes in the socket contained within. While I didn't have a chance to try this, Dave informed me that I could also try a 6072, 12AY7, or 12AX7 to tune the mic to taste. Since Dave is a boutique builder, he is personally accessible to help you fine tune your mic to your specifications. Not many mic builders today will take the time to do so. The original *Church* mics were special and so is the Pearlman *Church* mic. For about half the price of any other U47-style mic, it gets so close to that classic magical sound, especially on vocals, that I think Dave will have more orders than he can fill in the near future for his new/old *Church* mic.

Dave also sent along his newest original creation—the TM-2 microphone. In a smaller body than the *Church* mic or TM-1 and uses a 6AK5 glass capsule. The shape of the basket is also changed, and this mic can fit wouldn't, especially on a drum kit. I think Dave has a winner with this mic as well. While it isn't as full and rich as his flagship TM-1, or with the same magical top end as the *Church* mic, it does sound great on just about everything I tried it on. In front of an acoustic guitar, it gave our resident Schoeps a run for the money, and even on vocals it was very good at capturing enough detail to classify it as a potential vocal session mic choice.



In summary, this new TM-2 in my opinion is designed to be a great all-around microphone for those on a budget. If I was limited in my mic choice, whether for budget reasons or in the studio or on a location gig, I would want to have at least one Pearlman TM-2 around as I could likely place it front of any source and get a good sounding track out of it. This mic will be a full-production microphone and not a limited special as is the *Church* mic. Having used Dave Pearlman's microphone products in my studio for more than year, I can attest to their quality, durability, and again to Dave's customer service. I'd encourage anyone shopping for condensers who doesn't have \$5K-\$10K to spend on a vintage piece to check out Pearlman microphones for capturing that classic essence at incredible price points.



TM-1 \$950 direct, TM-2 w/ American tube \$1600, TM-2 w/ German tube \$1750, Church \$2500;

www.pearlmanmicrophones.com (<http://www.pearlmanmicrophones.com>)



Tape Op

Tape Op is a bi-monthly magazine about the art of record making.



[SUBSCRIBE FOR FREE HERE \(/SUBSCRIBE/\)](#)

[OR LEARN MORE \(/EXPLAINED/\)](#)

MORE GEAR REVIEWS

[LDCS \(/REVIEWS/CATEGORY/LDCS\), MICROPHONES \(/REVIEWS/CATEGORY/MICROPHONES\) | NO. 34 \(HTTPS://TAPEOP.COM/ISSUES/34/\)](#)

[\(/reviews/gear/34/ela-m-251-microphone/\)](#)

Ela-M 251 Microphone (/Reviews/Gear/34/Ela-M-251-Microphone/)

BY KIRT SHEARER (/REVIEWS/BY/KIRT-SHEARER)

I've been waiting for many years for someone to accurately recreate the legendary Telefunken 251 microphone. I've had several conversations wondering why this had never been done, with of course no...

[MICROPHONES \(/REVIEWS/CATEGORY/MICROPHONES\) | NO. 133 \(HTTPS://TAPEOP.COM/ISSUES/133/\)](#)

[\(/reviews/gear/133/ku5a-ribbon-microphone/\)](#)

KU5A Ribbon Microphone (/Reviews/Gear/133/Ku5a-Ribbon-Microphone/)

(/) BY CHRIS KOLTAY (/REVIEWS/BY/CHRIS-KOLTAY)

It's no secret I'm a big fan of AEA microphones. When my studio High Bias Recordings first opened the Michigan Ave. location, I bought a pair of AEA R84s [Tape Op #38] and the rest is history. In the...



MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 54
(HTTPS://TAPEOP.COM/ISSUES/54/)

GT60, GT50, GT40, GT30 (/Reviews/Gear/54/Gt60/)

BY ANDY HONG (/REVIEWS/BY/ANDY-HONG)

(/reviews/gear/54/gt60/)

Since receiving these mics a few months ago, I've used them on every recording session to date. And I've got a large collection of mics, with some of them costing many times what the most expensive of...

LDCS (/REVIEWS/CATEGORY/LDCS), MICROPHONES
(/REVIEWS/CATEGORY/MICROPHONES) | NO. 99 (HTTPS://TAPEOP.COM/ISSUES/99/)

Dove LDC FET Mic, Archangel Mic Preamp (/Reviews/Gear/99/Dove-Ldc-Fet-Mic/)

BY JOEL HAMILTON (/REVIEWS/BY/JOEL-HAMILTON)

(/reviews/gear/99/dove-ldc-fet-mic/)

Transparency comes in many colors. The Archangel is a mic preamp that seems to create its own reality of transparency - with unprecedented "passive gain" topology; cool, interesting design; and...

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 127
(HTTPS://TAPEOP.COM/ISSUES/127/)

(/reviews/gear/127/r44ce-ribbon-microphone/)

R44CE Ribbon Microphone (/Reviews/Gear/127/R44ce-Ribbon-Microphone/)

(/) BY JOSEPH BRANCIFORTE (/REVIEWS/BY/JOSEPH-BRANCIFORTE)

With its unmistakable visual presence, enormous versatility, and famously silky smooth top end, the original RCA Type 44 (continuously produced from 1932 to 1955) has secured its place as one of the...



MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 57
(HTTPS://TAPEOP.COM/ISSUES/57/)

(/reviews/gear/57/sputnik-multi-pattern-tube-mic/)

Sputnik Multi-Pattern Tube Mic (/Reviews/Gear/57/Sputnik-Multi-Pattern-Tube-Mic/)

BY JOEL PATTERSON (/REVIEWS/BY/JOEL-PATTERSON)

There's hype, and then there's hype... and then there's HYPE. No buzzwords have been spared in the promotion of M-Audio's new tube microphone, the Sputnik. "The end of microphone envy," with its saucy...

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 135
(HTTPS://TAPEOP.COM/ISSUES/135/)

(/reviews/gear/135/u-67-tube-microphone-reissue/)

U 67 Tube Microphone Reissue (/Reviews/Gear/135/U-67-Tube-Microphone-Reissue/)

BY ELI CREWS (/REVIEWS/BY/ELI-CREWS)

I'm not going to do the thing where I give you the full history of Neumann microphones and how the U 67 fits into it. There are already plenty of places to read about all of that. We're taking it for...

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES) | NO. 38
(HTTPS://TAPEOP.COM/ISSUES/38/)

(/reviews/gear/38/r84-ribbon-microphone/)



P84 Ribbon Microphone (/Reviews/Gear/38/R84-Ribbon-Microphone/)

(/) BY LARRY CRANE (/REVIEWS/BY/LARRY-CRANE)

"More mics," that's what I always ask for when Christmas comes around. All the other tools used for recording are great, but mics are always the first in line to capture acoustic-based sounds. I'm...



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

PL-DK5 5-Piece Drum Mic Set (/Reviews/Gear/96/PL-Dk5-5-Piece-Drum-Mic-Set/)

BY JOSEPH LEMMER (/REVIEWS/BY/JOSEPH-LEMMER)

This drum mic set has been serving me well for about a year now. It consists of four PL35 supercardioid snare/tom mics; four DRC-1 drum rim clamps; one supercardioid PL33 kick drum mic; one SAPL-2 mic...

(/reviews/gear/96/pl-dk5-5-piece-drum-mic-set/)

BEHIND THE GEAR

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,...

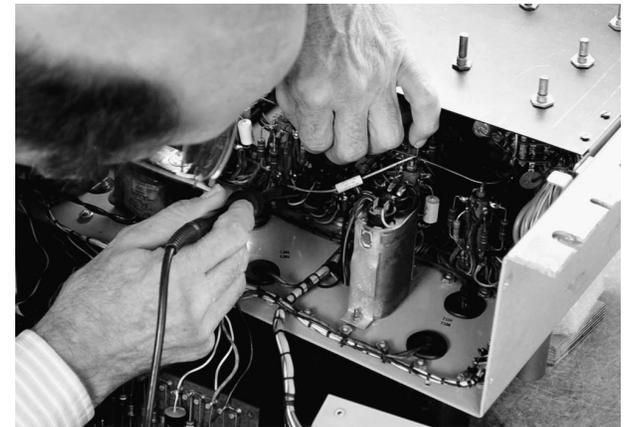


BEHIND THE GEAR (/COLLECTIONS/BEHIND-THE-GEAR/)

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/)

From WWII Planes To Stax Consoles: Behind The Gear With Bill Cheney & The



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

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.



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/)

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


(<https://soundcloud.com/tapeopmagazine>)

TUTORIALS (/TUTORIALS/)

MESSAGE BOARD ([HTTP://MESSAGEBOARD.TAPEOP.COM](http://messageboard.tapeop.com))

[ABOUT TAPE OP \(/EXPLAINED/\)](#)

[ADVERTISE \(/ADVERTISE/\)](#)

[SUBSCRIBE \(/SUBSCRIP](#)



[FEEDBACK \(/FEEDBACK/\)](#)

[F.A.Q. \(/FAQ/\)](#)

[CONT](#)

(/)

