SQUELCH TALES

Newsletter from the Merrymeeting Amateur Radio Association

for May 2026

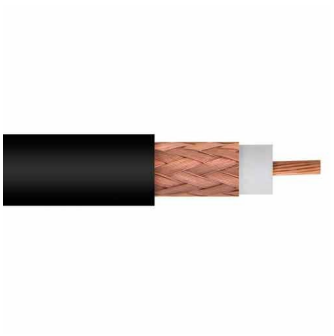
RG8X vs LMR240

By W1ZE

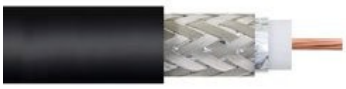
Are you aware that there is a medium size coax competitor to RG8X? Well, there is and it is LMR240. When considering a medium size low loss coax cable like RG8X you may want to look into the less known LMR240. For performance, flexibility, and loss factors both cables can be used in ham radio applications. The following critiques may help you in the future.

Phycical Properties

RG8X coax consists of a stranded copper conductor and a solid polyethylene dielectric making it flexible but with slightly more signal loss compared to LMR240.



LMR240 features a solid copper-clad aluminum center conductor and a foam polyethylene dielectric, with a low loss rating. It also uses a bonded foil with a 90% tinned copper braid, providing excellent shielding from interference.



Flexibility

Where flexibility is a concern, RG8X is better because of its stranded center conductor making it bend easily, making it ideal for restricted installations. However, LMR240 is a bit stiffer, maintains a more consistent impedance good over long runs. LMR240 maybe preferred for fixed installations where signal preservation and flexibility is needed.

Losses and Frequency Range

Cable loss can significantly affect transmission quality. For example, at 144 MHz, LMR 240 typically has a loss of around 3.8 dB per 100 feet, while RG8X loss is about 4.8 dB per 100 feet. The difference is more noticeable on VHF and UHF frequencies. Therefore, for UHF and microwave bands, LMR 240 offers much better performance.

Velocity Factor

LMR240 has a velocity factor around 0.84, meaning signals travel at 84% of the speed of light through the cable. RG8X averages VF around 0.78. LMR240 provides a small advantage on high-frequency applications.

Power Handling

Depending on frequency and cable length, LMR240 can manage higher power due to its lower attenuation. At 10 meters (29MHz), it can handles +/- 1,200 watts, while RG8X is around 900 watts. This making LMR240 more efficient for long-distance HF transmissions and higher-output transceivers.

Durability

LMR240 has a UV-resistant poilyethylene jacket that holds up better in an outdoor environments,

plus it also resists moisture and temperature changes. RG8X is durable but better suited for indoor or protected areas. Outdoors in sunlight, LMR240 provides better longevity.

Cost

RG8X is generally less expensive (+/-$.60 per foot) and easier to find at most retail outlets. Its lower cost appeals to hams who need OK performance at a bit lower price. LMR240 costs slightly more (+/- $1.00 per foot) but delivers premium electrical efficiency and longer service life that may justify the cost for the performance minded ham.

LMR240 vs RG8X Which Is Better?

It depends. Both LMR240 and RG8X serve valuable roles depending on your setup. RG8X excels in mobile and flexible applications where short cable runs are prevelent. For permanent stations, longer coax runs, and higher frequencies, LMR240 offers superior performance, less loss, and better durability. Therefore, LMR240 may be the better overall choice for serious hams.

Supply Sources

The following firms can supply both RG8X and LMR240:

Ebay, HRO, DigiParts, DXengineering, Amazon and Walmart (online). There may be many others.

C4FM DIGITAL, WHAY IS IT?

By Bruce Randall, W1ZE

As most of you may know three of MARA's repeaters are Yaesu Fuseon DR-2X repeatres with analog (FM) and digital (C4FM) capabilities allowing both modes to function independent on each repeater.

C4FM is just one of the various digital communications modes used by hams on the VHF and UHF bands such as DSTAR, DMR, P29, etc..

For some of you not all that fimiluar with C4FM I was able to find two online tutorials about the C4FM mode and thought it would help you have a basic understanding of that mode.

Go to:

https://www.k6ldf.com/wp-content/uploads/2022/12/Getting-Started-with-c4fm-KG5ZNJ.pdf

https://hamshackreviews.com/understanding-c4fm-continuous-4-level-frequency-modulation/

Hope this will give you some additional information in the event you want to dip your toe into this digital voice mode.

73,

Bruce, W1ZE

JOHN GORAN, K1JJS A SILANT KEY

Sadly we report that that long time member of this Association, John Goran, K1JJS became a silent key (SK) on Tuesday, April 14 after a long depilitating illness.

John became an active member of MARA immidetaly after obtaining his license in 2003 at a MARA VE session in Bath. John was instremental in getting our Association more active in ARES and forming a CERT team that supports Cumberland and Sagadahoc Counties while he was the media A/V guru for the Town of Brunswick and working with the Brunswick Fire Department to get them to sponsor the CERT.

Obituary for John is online at:

https://www.pressherald.com/2026/04/21/obituaryjohn-mark-goran-2/

John will be missed by us all. Rest is peace old friend.

MARA EXECUTIVE BOARD SELECTS NEW OFFICERS

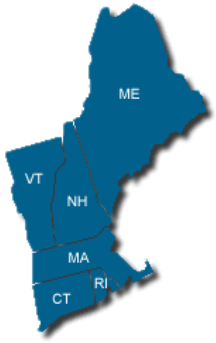
At the April 14th meeting the Executive Board firmed up the Association's officers for the upcoming year. They are as follows:

- **President = Eric Gilbert, W1KCA**
- **Vice President = Scott Higgins, W3VNE**
- **Secretary = Don Wakman, KA1WAL**
- **Treasurer = Tom Mixon, WA1PJS**

It took a while trying to find a good board member to assume the treasurer's position, previously held for many years by Marjory Turner, KX1I

Join The Fun During the NEQP

By Tom Frenaye, K1KI



The New England QSO Party on May 2nd and 3rh is a great time to check out antenna systems and offers a moderately paced opportunity to work new states and countries. You'll find a wide variety of participants, from newcomers to experienced contesters, all interested in making contacts with New England stations.

Our goal is to get every one of the counties in New England on the air so we hope you will encourage your members to join in the fun! Even if you can only join the fun for a couple of hours, we'd appreciate it! Will you be QRV? Let us know with a message to info@neqp.org

The New England QSO Party is 20 hours long overall, in two sections with a civilized break for sleep on Saturday night. It runs from 4 pm Saturday until 1 am Sunday, then 9 am Sunday until 8 pm Sunday. Operate on CW, SSB and/or digital modes

(not FT-4/8) on 80-40-20-15-10 meters. For each QSO you'll give your callsign, a signal report and your county/state. Top scorers can earn a plaque and everyone who sends in a log with 25 valid QSOs or more will get a certificate. The goal is to work stations anywhere in the world - and their goal is to work New England stations, so you'll be very popular!

Last year we had logs from 214 New England stations and 493 more logs from around the country and world.

The full rules are here -> www.neqp.org/rules
The 2025 results are posted https://neqp.org/2025-new-england-qso-party/
It's just under two weeks until the 2026 NEQP. Please make some QSOs even if you don't want to send in a log!

Thanks!

73 Tom/K1KI

Harry McNelley, N1TTT is now a Silent Key

Our good friend and past President of the MARA became a Silent Key on the morning of Friday April 24th.

Harry a long time member was always quick to volunteer for any activity or project of the Association and kept the wheels turning. Always with a great sence of Alabama humor.

Since we just received the word on his passing., details on family wishes and obituaries are not available at this juncture. However, we will pass along any additional information as soon as it is received.

Rest in peace old friend.