



Push To Talk

WCARG NEWS

Walker County Amateur Radio Group Newsletter



Issue #2
April 2023

Keep in Touch With WCARG Members

- W5HVL Repeater
146.860 DCS 631 – Offset
- DIGITAL ONLY Temp Down
146.64 Digital / Wires-X
- WCARG Wires-X Room
“Texas-Patriots” #60755
- Walker County Simplex
147.450 Mhz. Simplex
- EchoLink
NR5US-R through 146.860
Node 970435
- Web Page— [HTTPS://
WCARG.ORG](https://WCARG.ORG)
- Facebook Page—Join the Walk-
er County Amateur Radio Group
- WWW.Groups.IO — Search for
W5HVL
- Telegram App on your Phone —
Join the Walker County Amateur
Radio Group.

Hams & Eggs Breakfast

Come join us for Breakfast 9am every Saturday morning at Denny's. Good food, good conversation and meet new friends. You might just learn something. Get on the **Hams & Eggs Breakfast** text Message reminder by contacting Dian at 936-355-4585. She needs to know how many are coming so she can reserve a table.

WCARG GETS NEW COMPUTERS TO AID TESTERS

Thanks to the generous donation from Tyson, KI5VTR, we now have the ability to test applicants via computer laptop, fax in their results to the FCC. They can now get their call within the next 24 hours. If you are a VE and wish to join the VE Team, please contact Tyson at 936-635-2590 for training. We have really come a long way this last year. Thank you Tyson and everyone that has helped our great club grow.

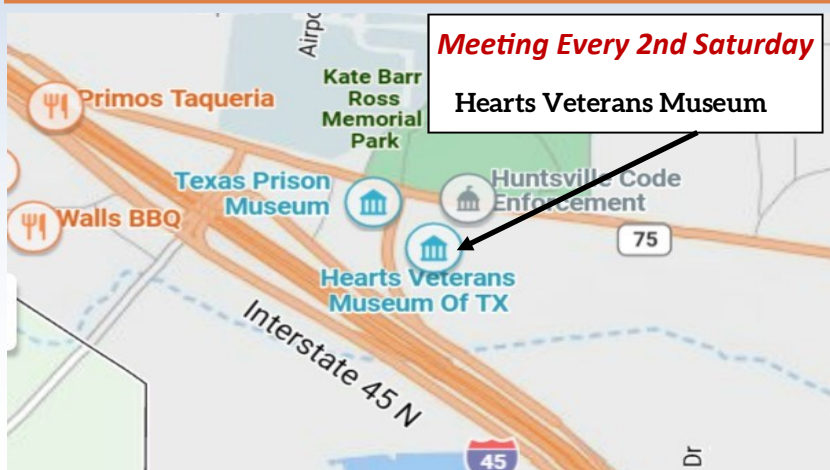


Who Am I?

Our Last Presentation



Lee gave a wonderful demonstration and explanation of the functionality of our club website. Among other things, he demonstrated how to access the member directory and use a filter on the database. This makes it easy to sort and filter the information for certain criteria you may be searching for. Thank you Lee, and we will all be looking forward to your next months presentation.



Concerning the Social Secretary's Calendar

In order to help with scheduling club activities, please submit the dates of anything you would like to put on the calendar to Diane Roman our new Social Director.

Having one person looking over all the dates helps keep the club organized and keeps us from unknowingly doubling or tripling activities on any given day. It allows for adjusting times on days that we do want to schedule multiple events. Please consult with Diane about the best possible open days.

Her email is mft4kids@mac.com and her cell is 936-355-4585. She will get back to you as soon as she can if you contact her. Thank you! - Laura



Need Your Help

Hello All - This might be a long shot, but does anyone have 'action photos' of hams operating or making visual observations during the 2017 eclipse? Outdoor operations would be best, but I am open to other situations. Here's why I ask:

HamSCI volunteers are working on publicity for the events we have planned for the upcoming eclipses. The goal, of course, is to get as many operators involved as possible. We are working with the major ham magazines (ARRL publications, CQ), popular websites and podcasts, partners (NASA citizen science) and others, including social media. Many request photos of past eclipse operations.

If you have one or more photos which you would be willing to share publicly, please let me know. If used, the photographer would be given credit (to the extent that we can control the content). The photos should not have been previously published under a copyright. There's no guarantee anyone's photos will be used, but for all those who dig through their phones and hard drives, the effort is sincerely appreciated.

Please 'Reply to Author' here on hamsci-eclipse or email me at gmikitinaf8a@gmail.com.

73 de Gary, AF8A

HamSCI Amateur Radio Community Coordinator

Meetings / Nets / Test

Who: The **WCARG** club Members and anyone interested in Ham Radio' Also anyone ready to take a test.

When: Meetings are the second Saturday of every month at 9:00 am. Testing starts at 10:30. Come early.

Where: Hearts Veterans Museum , 463 SH 75 N. Huntsville, TX See map above.

NET: **WCARG** Net meets every Monday evening at 7:00 pm on 146.860 Repeater. Come and join us You do not need to be a member of WCARG.

APRIL MEETING MINUTES

WCARG Minutes from our April 2023 Meeting.

By Laura WW700

- Convocation- Clenard Hightower KC5IYA.
- Pledges led by Lee.
- Introduction of Visitors- Jim Gatwood, Fred Koehler, John Marcus, David Cantrell (all from the Conroe association).
- Health & Welfare- Jim Thompson talks about property tax deferral.
- Hamfest announcement- Belton on 4-15, Hamvention in Dayton Ohio May 19-21, Museum ship event June 3-4.
- Jim Thompson- ordering badges again if anyone wants one.
- Becky Flarity brings notice of an error in the last minutes in the license upgrades section, Diane Roman motion to correct last month's minutes, Wes Howe 2nd, passes.
- Treasurer's report- no changes.
- Repeater Report- Russ Cooper- the installation of the new antenna is pending, he is picking up a hinge \$275.00, it will be a one day operation possibly in the next month or so, depending on the weather, hiring the tower crew will be \$800-\$1000 probably.
- Motion to approve \$1000 made by Greg Colson, 2nd by several, all approve.
- Net Control - Glenn extends an invitation to all to check in on the Monday night net, gave the details, volunteers for net control are welcome, Russ is the current and will be out the last Monday of the month but that is covered per Glenn.
- ARES/RACES- Greg Colson- 4:00 net this afternoon and an exercise in May coming up.
- VEC- an announcement by Tyson Eppink- he bought 6 Dell 15" laptops for portable testing and has given them to the club as a donation, he suggest we use the \$500 approved for the purchase last month to buy a case for the equipment. VE's interested in participating talk to Tyson after the meeting.
- Diane Roman- made a motion to reimburse Tyson, Tyson says no, Diane makes a motion to use the \$500 for a case. Several 2nd , approved. William Hubbard mentions that Tyson might need a receipt for tax purchases.
- Becky Flarity- Field Day update- working hard on everything, Lee says talk to Gary about community publicity T-Shirts-.
- Steven Prindle says he can help if Paola Brown needs assistance , Lee has a friend that will let us use his equipment and train us, we provide the materials, Diane Roman says that is a good idea, Rene Roman exhibits the t-shirt he is wearing with the artwork we will be using.
- Lee- get a committee together Steven says Laura, Diane and Matt for the t-shirts.
- Russ Cooper has sent emails to Yaesu about the use of their logo and received no response.

- - - Continued on Page 9 - - -

VIDEOS WORTH WATCHING

Interesting Youtube Videos

HAM—Official Documentary (2022)

This is a short documentary that follows a group of Montanan amateur radio enthusiasts that show the fading but loyal community of amateur radio, explore what it means to be a ham, and how they are trying to keep the hobby alive.

<https://youtu.be/wt5wZhC5crl>



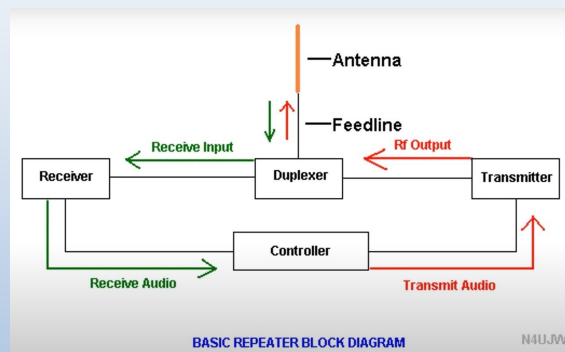
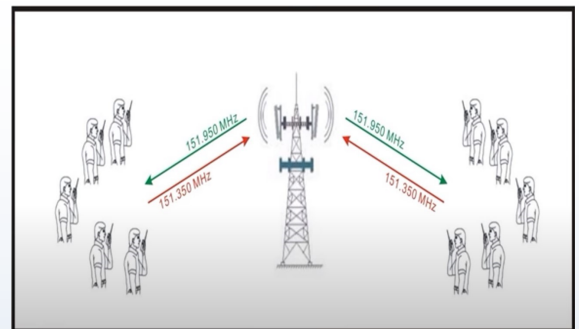
Repeater 101 for new Hams

This is a must watch video for all you new hams that will give a good explanation of how a repeater works.

In this video, the main topics are...

- ⇒ 3:53 Basic idea behind the repeater
- ⇒ 6:45 How does a repeater actually work
- ⇒ 7:23 Carrier Operated Relay
- ⇒ 9:35 Timeout Timer
- ⇒ 16:23 What does a Repeater Site look like

<https://youtu.be/TNxyfRDpwpA>



Please help keep this newsletter alive by sending in any articles, Equipment For Sale, Favorite QSL Cards, Most memorable contact, or anything else you would like to have published. Thank You... Dave NY5A

Even on the worst days there is the possibility of joy.

Published By Dave Godfrey NY5A



Everything you ever wanted to know about Flashlights

When it comes to an amateur radio operator's go bag / go box / portable kit we're usually very thorough with gear considerations and set-ups. However, there is one thing I believe is commonly overlooked, because we simply aren't familiar with them, so that is the subject of this article. Modern LED flashlights. How are you going to operate in the dark?

The same considerations you make with radio gear apply. Price, quality, durability, capabilities, power requirements, weight, [water proof rating](#), etc...Although, there are some considerations specific to flashlights. Brightness, tint, battery type, efficiency, and beam pattern are the most important.

Brightness for a flashlight is measured in Lumens. The higher the brighter. For our purposes anything over 400 lumens is beyond overkill. We as Hams are looking at our radio, computer, tablet, notepad, etc...within arms reach. Contrary to popular belief a 2000 Lumen search and rescue light is not necessary. Keeping the lumens modest also improves the run time of the light. Higher lumens means more power drain and shorter run times. Just like amateur radio, use the lowest power necessary to get the job done. This will improve the amount of time you can operate in the dark.

Tint of a light can make an extraordinary difference. Tint is measured in Kelvin. 5000K being neutral. Lower is warmer, and higher is colder. Incandescent bulbs are inherently warm as an example. Where fluorescent lights are cold. Cold light tends to throw farther, meaning it reflects off of objects farther away than a warm light of the same brightness. Warm light is easier on the eyes, and gives you better color rendering, or CRI. CRI of 100 is daylight at noon. That is how colors should look. You will see this rating on some flashlights. I prefer a 4000K tint.

The battery type depends on both personal preference and capacity. There are Primary batteries like AA/AAA/CR123 that are non-rechargeable. AA and AAA are 1.5 Volts where the CR123 is 3 Volts. This is important because modern LED flashlights cut off at ≈ 0.7 Volts. CR123 will give you more run time by voltage alone. It also has higher capacity than AA or AAA. For most people I recommend the CR123 Primary battery for flashlight use. (when traveling outside of U.S. use AA light because they are readily available anywhere) They have superior voltage and capacity, along with a 10 year shelf life. They also don't have the inherent dangers of a Lithium Ion rechargeable. Li-Ion batteries like the 16340, 18650, 21700 are the most prevalent. They are named by size . i.e. 16mm diameter 34mm length. The same size as a Primary CR123. Some lights will run both/either. Li-Ion batteries are high capacity high drain capacitors. They can explode if not handled properly. In the light, in a charger, or in a case. Never left in the open, and certainly not put in your pocket with keys and change. <https://www.youtube.com/watch?v=ey-JwV6jFu8> I prefer Li-Ion but I can't recommend them for everyone for this reason. The benefit of them is the very high capacity and 4.2 Volts nominal. Some will charge to 4.7 Volts. Li-Ion higher amp drain capability also means higher lumens that we don't need. I highly recommend these [Delrin cases](#) for all of your batteries, especially Li-Ion. The down side to Li-Ion is the need for a proper charger. These chargers can run off 5V USB though. The [XTAR X4](#) smart charger is highly recommended for ALL of your rechargeable battery needs.

The efficiency of most modern LED flashlight is typically on par. With productions brands like [ZebraLight](#) and some high end custom makers like [HDS](#) being superior.

Beam patterns are simple. Typically Spot in the center with spill to a wider degree, or Flood, a wall of even light. This is preferable for a normal operating environment, where we need to see everything evenly within arms reach. If the light is to double as your camp light then go with either. Hint, the spot will see farther than flood.

Continued on page 10

THIS MONTH TESTERS

A big Congratulations to our new Hams and Upgrades



Eddie loves emergency operations, He is a current WCARG club member.

Upgraded to Extra

Eddie Morgan
KI5YLO



Tom has been participating in CERT and someone was needed for communications. He did short wave as a kid. Really likes volunteering as radio support.

Tom Newsome Upgraded to Extra
WW5TOM



Mark is retired and took up Ham Radio as a new hobby. He always loved electronics and his parents had a CB repair shop so he learned about radio then. He really loves contacting other countries (DXing)

Upgraded to General

Mark Jungwirth
KI5VPP



Nathaniel was introduced to amateur radio by his grandfather. The facet of the hobby he enjoys most is experimenting with different things. He was a visitor from the Conroe club.

Nathaniel Howard Upgraded to Extra
W5NEH



Roy is retired from the Navy. He wants to be able to help with search and rescue.

Technician

Roy Pryor
New Ham



NO MUSS-NO FUSS WITH RUSS

WCARG Wires-X Digital Mode.

By Russ Cooper NR5US



FROM THE SOUTHEAST QUADRENT

So, what is Wires-x? Officially the term means Wide-coverage Internet Repeater Enhanced System. Big acronym to digest. In a nut shell, **WIRES-X** links amateur radio operators around the world via the internet. "Wires-x", "System Fusion" or "C4FM" is proprietary to Yaesu Corporation as is DMR to ICOM and D-Star to Kenwood and so on. **Since the entire universe knows that Yaesu radios are**

the absolute best, I highly recommend getting a Yaesu transceiver that is capable of operating digitally and join the fun! Yaesu offers a variety of digital transceivers but you may consider a unit that is capable of directly linking the radio to the internet with a computer. The process is simple and pretty much plug and play. First time hams have a wealth of experienced operators just waiting to be your "Elmer" with knowledge to get you on the air/internet in no time! I know for a fact that the Yaesu FT-1, FT-2, FT-3 and FT-5 are hand held that can operate as a standalone node for Wires-x operations or simply used as an HT with digital capability. Of course, there are other high end mobile rigs such as the FTM-200, FTM-300 and FTM-400 that offer full Wires-x digital and analog functions. Once the radio is connected to the internet, you are free to roam around the world making contacts in almost every country that has reciprocating agreements with the U.S. Here in Walker County our club sponsors the famous "TEXAS-PATRIOTS" room #60755, the brain child of Dave, NY5A. By programming the Wires-x software, you are free to join any room at any time! Be aware though you may connect to a node on the other side of the world where folks are asleep. Also, if you connect to #26817, Fukushima, Japan you will need a radiation suit and be able to speak Japanese! I recall during the early days when a few of us around the county had a simplex roundtable going and would choose an interesting digital room to visit. One such room was called "THE ZOMBIE ALERT NET". The QSO's were comical and we were reassured that hams have a sense of humor!

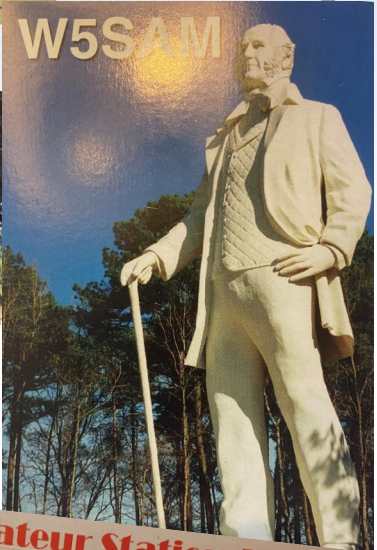
Soon, I hope to have our Wires-X repeater back on the air operating on frequency 146.640. You must have a Yaesu digital transceiver capable of C4FM to operate on the repeater. I encourage everyone to get involved as Wires-X digital communications can fill the gaps when the phone bands are dead. In doing so, "you can take a trip and never leave the farm!"

For the love of Ham Radio,

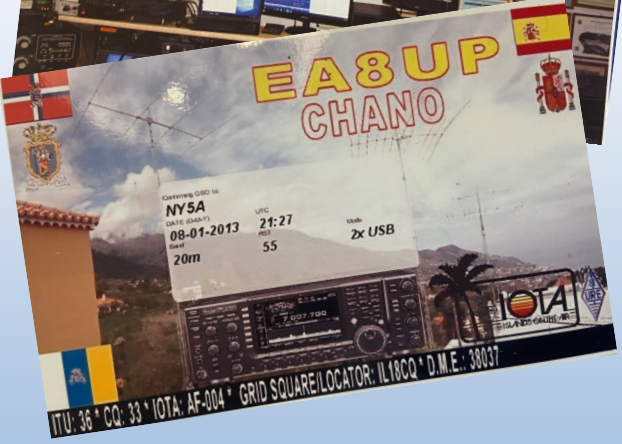
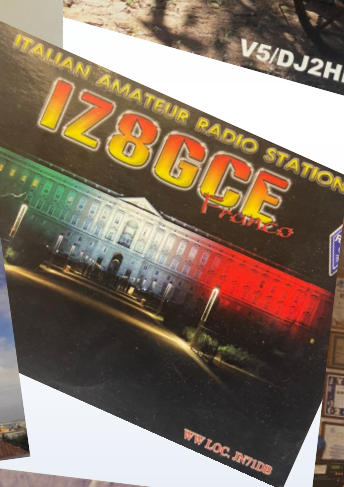
Russ-NR5US

FAVORITE QSL CARDS

Some of my Favorite QSL Cards *By Dave NY5A*



To: NY5A Confirming SWL reception of SSB QSO
Date: February 7, 2013 Time: 02:23 UTC
Band: 20m UR Sigs: 44
QSO with PY7DJ



Please submit your favorite QSL Card pictures for our next month's Newsletter.

Please eMail to Dave, NY5A at davegodfrey49@gmail.com

Your Net Control

146.860 DCS 631 (— Offset)

April	Russ Cooper	NR5US
May	Laura McDonald	WW7OO
June	Need Volunteer	
July	Need Volunteer	
August	Need Volunteer	

***Please Contact Glenn Rayfield
if you wish to volunteer.***

Your WCARG Officers

And Directors

President:	KV5M	Lee Murrah
Vice Pres:	KG6YYT	Rene Roman
Secretary:	WW7OO	Laura McDonald
Treasurer :	KJ5YN	Steve Farlow

Repeater	NR5US	Russ Cooper
Testing	KG6YYT	Rene Roman
Social	KG6ZAP	Diane Roman
Net Control	KC5JLN	Glen Rayfield
Newsletter	NY5A	Dave Godfrey

WCARG Minutes Continued from page 3...

- Rene Roman introduces someone who has just arrived to take the test.
- Lee clarifies that there are 2 sets of t-shirts, the ones from the Boy Scout purchase to be used for a communications team and t-shirts that we will be selling.
- Raffle News- Jim Thompson- he has gotten an AR-15 from Able at cost and it will replace the generator in the raffle if we like, there are several questions about age restrictions and background checks. The winner has to pick up the rifle at Able's and they handle all of the paperwork and background check, mention was made of the necessity to mention age and background check requirement on the tickets and when selling, can possibly have laminated pictures made up to display where selling tickets, Lee asks Matthew and William to assist Jim if he needs it. A vote was taken on using the generator or the AR-15 for the raffle. Generator-3 AR-15 everyone else. Motion to approve purchase- Greg 2nd- Glenn, Tyson 1 abstain and the rest approve. We have a rifle raffle!!
- Lee to Stephen- please take care of any tax forms Steven.
- Prindle- any Walker and surrounding county vets can test for free, we have a \$250 donation to get us started and maybe we could put that information on our website, Glenn asks if there is a limit to how many and Rene says since the county is paying, no.
- Jim Thompson adds that there is an incentive prize for ticket sales for the raffle.
- Russ Cooper—announcement about the HF net on Monday nights and an invitation for all to join.
- Presentation- Lee gives a wonderful demonstration and explanation of the functionality of our club website, showing how to access the member directory and use a filter on the database for certain info if you wish.
- Russ Cooper—Motion to adjourn, many 2nd, dismiss!

Ry Ry the Tech Guy Continued from page 5

Handheld or Headlamp? I prefer Headlamp so my hands are available while operating. I don't like holding a flashlight in my mouth. Your mileage may vary. Otherwise, either format will do.

Some light and battery combos that I recommend:

As with radios, you get what you pay for. These are not hardware store lights. All are water proof.

18650 Li-Ion lights

[Armytek Wizard C2 Pro](#) [INR18650MJ1 18650](#) Built like a tank!

[Armytek Prime C2 Pro Magnet USB Warm](#) [Sanyo NCR18650GA](#) Built like a tank!

[SC64c LE 18650 4000K High CRI](#) [Sanyo NCR18650GA](#) This is one of my Go-To's

[H600c Mk IV 18650 Headlamp](#) [Sanyo NCR18650GA](#) Flood. Great tint!

CR123 / 16340 lights

[Fenix E18R V2.0](#) Cool tint. Can use both battery types. Ultralight. Can put on bill of cap as headlamp.

[Eagletac D25C MKII](#) High CRI Warm light. I have 2 of these running [CR123 Primary batteries](#).

AA Lights

[Fenix E12 V2.0](#) Primary AA only. Cool tint, but Outstanding quality. Great for travel.

[Fenix E20 V2.0](#) 2 x AA version. Longer run time.

[Eagletac D3A Titanium](#) Uses both battery types. Comes with Li-ion battery and charger.

If you like high end items that can continue working after being run over by a tank check out these:

[HDS Systems with my recommended setup](#). This is almost always on my belt. Don't choke!

[HDS Torture Test Video](#) Absolutely nuts!

[Malkoff Devices MDC HA 1CR123](#) Choose Neutral Tint for CRI or Cool for Brightness

[MDC TurnKey Neutral XP-L 16650 500 Lumen](#) Full Setup. My 1st Malkoff. Highly Recommended!!

Some of you may have heard of Olight due to their very aggressive advertising. Because of their proprietary battery and charging requirements I no longer recommend them. If that doesn't bother you, Never pay full price. Sign up at [this site](#) where there is very frequently a sale.

There are countless other brands out there. Many I have tried and don't recommend, and many I have yet to try. These recommendations come from experience. If you would like an exhaustive list of links that I have for flashlight material, email me k4txn@yahoo.com

Until next month,

May the Farce be with you ...

Ry Ry the Tech Guy

Ryan Gills K4TXN

EQUIPMENT FOR SALE

Items listed here are for sale by our members to our members.



Kenwood Complete Station

Includes Kenwood TS-830 Transceiver with Kenwood MC-60 Microphone, Matching Antenna Tuner, Matching External VFO-230, matching Speaker SP-230, and matching Oscilloscope Station Monitor SM-220. Includes Manuals for each unit. This is the last model Kenwood made that had tube finals.

If interested, contact Dave Godfrey NY5A at 713-501-5980 for details



Here is a picture of the entire system setup in my ham shack.

The **Timewave DSP-9** employs advanced digital signal processing technology for superior performance in reducing QRM and QRN. It provides optimum filtering for random noise reduction, heterodyne elimination and band pass filtering. The front panel pushbutton switches enable quick, independent selection of all the functions of the DSP-9. In the voice mode the operator can simultaneously select a bandpass filter, the tone notch filter and the random noise reduction filter. This means you can reduce QRN, filter adjacent channel QRM and eliminate heterodynes *at the same time!* The DSP-9 is compatible with all amateur radio transceivers and receivers. Simply connect it between the radio and its speaker or headphones. Requires 12 VDC at 1 amp. 5.9 x 1.9 x 6.7 inches. 2 Lbs. Front Panel controls: Volume, Bypass, Voice/CW switch, Random Noise Reduction, Tone Noise Reduction, Filter Bandwidth. Indicator LEDs: Overload and Normal. Rear panel jacks: Audio input phono jack, speaker output phono jack and power in 5.5mm/2.1mm [+].

If interested, contact Dave Godfrey NY5A at 713-501-5980



Words of Inspiration

I don't know what your destiny will be, but one thing I know: the only ones among you who will be really happy are those who will have sought and found how to serve.

By Brendon Burchard The Motivation Manifesto

EQUIPMENT FOR SALE

Items listed here are for sale by our members to our members.



LDG AT-100 Pro II Autotuner

For more specifications, follow this link.

[LDG AT-100PROII Auto Tuner 125W GigaParts.com](https://www.gigaparts.com/ldg-at-100proii-auto-tuner-125w)

List Price New \$249.00, Will sell for \$175.00

Contact Dave Godfrey NY5A at 713-501-5980 for details

The LDG AT-100 Pro II is a general purpose automatic tuner suitable for many amateur applications. It covers 1.8-54 MHz, and features a two-position antenna switch allowing instant switching between two antennas. The **AT-100ProII** requires just 1 watt for operation but will handle up to 125 watts, making it suitable for everything from QRP to a typical 100 watt transceiver.

Like most LDG tuners the **AT-100ProII** operates automatically, beginning a tuning cycle whenever the SWR exceeds a preset limit. The AT-100ProII also features LDG's advanced memory tuning, providing 2,000 memory locations; when tuning near a previously used frequency it will recall the settings for nearly instant tuning. It learns your favorite frequencies and bands as you use it. You can also start a tuning cycle manually whenever necessary.

Large, easy-to-read LED bargraphs show forward and reverse power in peak or average mode, and SWR. Two power scales are provided: 12.5 watts and 125 watts. The bargraphs also indicate tuner status and input confirmations.

The **AT-100ProII** uses LDG's state-of-the-art, processor-controlled Switched-L tuning network. It will match dipoles, verticals, inverted-Vees or virtually any coax-fed antenna. With an optional LDG balun, you can also use longwires or antennas fed with ladder-line. It handles 100 watts SSB or 50 watts FM/Digital when used with a solid-state transceiver; vacuum tube transmitters cut the power ratings about in half.

The **AT-100ProII** uses latching relays which retain the tuned configuration indefinitely even when the unit is powered down. The latching relays also enable extremely low power consumption; when not actively tuning the **AT-100ProII** draws next to no power at all. This makes it suitable for portable or mobile operation from batteries.

EQUIPMENT FOR SALE

Items listed here are for sale by our members to our members.

LDG IT-100 Autotuner



For more specifications, follow this link.

[LDG Electronics IT-100 LDG Electronics IT-100 Automatic Antenna Tuners | DX Engineering](#)

List Price New 180.00, Will sell for \$100.00

Contact Dave Godfrey NY5A at 713-501-5980 for details

LDG Electronics IT-100 Automatic Antenna Tuners

LDG Electronics **IT-100** Automatic Antenna Tuners are the ideal tuners for your ICOM radio. They will match up to a 10:1 SWR (3:1 on 6 meters), so just about anything you can feed with coax is good to go.

They also have 2,000 memories--enough for every DXpedition, RTTY spot, and radio buddy you've got. Just hit the tune button on the radio, and your IT-100 will set tuner parameters in less than a second if you've been there before. If not, the tuner kicks off a full tuning cycle that will be over in about 3 seconds.

Don't need the tuner now? Just tap the tune button briefly and the tuner goes into bypass mode. Press it again to bring the tuner back on line--it's just that simple.

IT-100 ATUs weigh only 1.5 lbs. and get their DC power directly from the radio, so no separate power supply is required. IT-100 tuners work with any ICOM radio that supports AH-3 or AH-4 ICOM antenna tuners. Including; IC-7000, IC-7100, IC-7200, IC-7300, IC-706MkIIIG, IC-718, IC-746, IC-756ProIII and all others that are AH-4 compatible.

IT-100 tuners come fully assembled, aligned, and ready to use. The packages include a 14 in. ICOM radio interface cable, so you're ready to operate right out of the box. LDG Electronics IT-100 tuners are clearly the tuner of choice for your ICOM radio!

Additional features include:

- * 0.1 to 125 watt power range (SSB and CW), 100W on 6M.
- * Controlled from ICOM tuner button on radio OR push button on tuner.
- * Compatible with any ICOM radio that is AH-4 or AH-3 compatible (6M tuning from tuner button for radios that are only AH-3 compatible).
- * Tuning time is 0.1 to 6 seconds full tune, 0.1 seconds memory tune.
- * 1.8 to 54.0 MHz coverage with built-in frequency sensor 160—6 meter.
- * Tunes 4 to 800 ohm loads (16 to 150 on 6M), 4 to 3,600 ohms with optional 4:1 balun.
- * Optional external balun allows tuning of random length, long wire, or ladder line fed antennas.