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**

- **Facebook Page—Join the Walker 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.

2023 WCARG RAFFLE
Smith & Wesson M&P15

Raffle Tickets for this years Raffle were available starting at this months June 2023 meeting.

The tickets are $5.00 each or 5 Tickets for $20.00.

If you sell tickets, payment can be made via check (made out to WCARG), Cash, or Electronically using PayPal at **wcargtreasurer@gmail.com** Please add an additional $0.50 to the price to help cover the PayPal processing cost. Because the tickets are serialized, if their payment does not clear, the tickets can be removed from the Raffle.

Below is the raffle prize.

This model includes a Crimson Trace CTS-103 & Real Avid Gun Tool Pro Kit. The S&W M&P15 Rifle is the ideal modern sporting rifle. It is versatile, reliable, and built to perform multiple uses under various conditions. It is also lightweight and rugged which embodies the best combination of function and form. The M&P 15 Sport II model offers enhanced upgrades to the original M&P15 Sport rifle. Features included a forward bolt assist and dust cover, forged 7075 T6 aluminum upper and lower, bipod, flip up iron sights, 6 position collapsible stock and an Armornite barrel finish. This Optic Ready model comes with a 30-round magazine and 125 rounds of 5.56 ammo.

Jim Thompson, KR8MCS
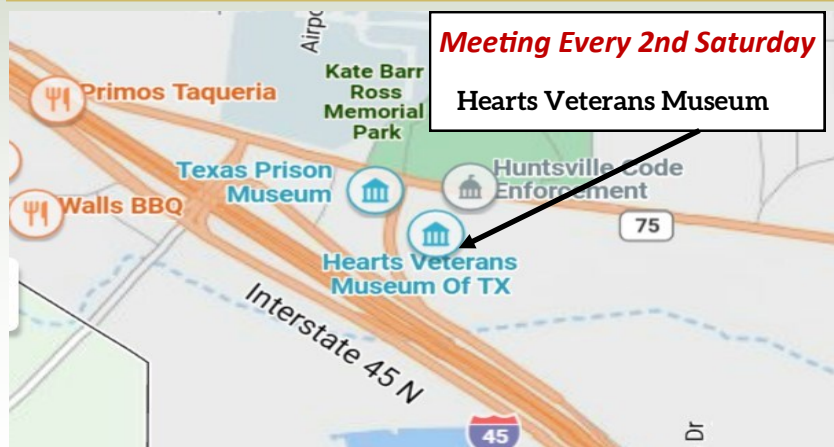
Words from Ry Ry the Tech Guy

Listen to Local First Responders without a scanner.

Want to listen to local First Responders but don't have a scanner?
Huntsville PD, SHSU PD, Walker County SO Walker County EMS, Walker County Fire can be heard live on Boadcastify

https://www.broadcastify.com/listen/feed/37451

Meeting Every 2nd Saturday

Hearts Veterans Museum

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 our WCARG Social Director, Diane Roman KG6ZAP.

Diane's email is mft4kids@mac.com and her cell is 936-355-4585.

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.

NETS: WCARG Net meets every Monday evening at 7:00 pm on 146.860 Repeater.

Wires X Texas Patriot Room Net meets every Monday evening at 8:00 pm in Room 60755

Come and join us. You do not need to be a member of WCARG to join in on all the fun.

ARRL 2023 Field Day

We are proud to have secured 6 sponsors for our 2023 ARRL Field Day get-together. Here is the list.

RëJUVEN8

Becky KI5YAX

Able's Sporting

The Facemaker

Bill Flick Ford

Wischewsky Dodge Jeep

Charlies Used Cars

Psalm 118:24

"This is the day the Lord has made; let us rejoice and be glad in it."

Inspiration by
Clenard Hightower KC5IYA

"On FT8, no one knows you're a dog."

Always Guy your Towers…

Here is an interesting picture submitted by Dwane Walters, W5DPW.

Some people believe a relative short tower does not need guy wires.

This collapsed tower is located west of Madisonville and went down with a recent storm.

It was about 40 feet tall and attached at the peak of the roof/gable.

I don't know details, but...

If you want a good source for tower guying specs… Here is a good HamNation Link to follow .

[Antenna Mast Guying for Simple Ham Radio Antenna Installations](#)

73

Dwayne W5DPW

Raspberry Pi Talk   *by Tyson KI5VTR*

A Piece of the PI, Raspberry flavor please :)

So, you've heard about this thing called a Raspberry Pi. What is it? What can it do for
me? How does it work? Well, I am going to attempt writing a small series of articles covering those very topics as well as some kit projects you can do so you can put your newfound knowledge to work.
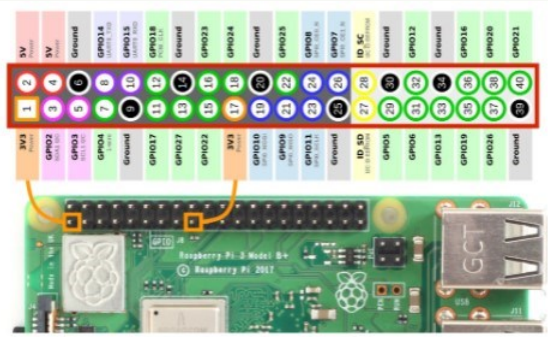
A Raspberry Pi is nothing more than a single computer on one circuit board about the size of a credit card. The official definition is system on a chip(SOC). It includes a processor, memory, storage, wifi, Bluetooth, and various input and output interfaces, depending on which model you have. Below are some pictures of a few different types. The main difference in these compared to pc's you are used to is these are not generally upgradeable as far as the memory and processor are concerned. However, the storage is on a micro sd card that is removeable. The operating system and all data reside on this single micro sd card.
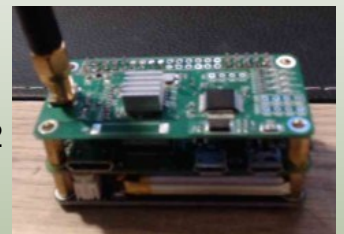
One of the things that makes the Raspberry Pi's interesting is their ability to use what are called HATs. (hardware attached on top) All pi's except for the 400, have what is called a GPIO connector (general purpose input output) on one side that usually has 40 pins. See pic below.
This allows you to add on hardware modules to suit whatever it is that you want to use the pi for, other that just a cheap computing device. HATs can range from motor controllers to relay breakouts, speakers, atmospheric sensing devices, battery packs, you name it. There are more to list than I have room for in this article, but you get the idea.
Here is a pic of a simplex hat mounted on a Raspberry Pi with another hat on the bottom thatis a Lithium ion battery module that I put together for use as a Pi-star. Completely self contained no wires. The pi's were made for tinkerers, to create their own devices and program them to do what they will. When it comes to HAM radio uses, the 2 most common are SDR's (software defined radios), and Pi-stars, for connecting over the internet to digital radio rooms using a small handheld. A good example would be connecting to the Texas Patriots Room. Another interesting thing about the Raspberry Pi's are their ability to be an all in one computing device that only consumes 5V and approximately 1A or 5 watts. Some smaller models use less. This is ideal for those that want to make a go bag and be able to use digital with a very minimal draw on their batteries.

A Piece of the PI, Raspberry flavor please :) Continued ...

Now after I have tried to sell you on the idea of a Raspberry Pi, lets talk a little bit about the down-sides. These devices do not run Microsoft Windows or Mac OS like most people are familiar with using. Their operating system is usually some form of Linux like Debian OS. Debian OS is a graphical user interface like windows or Mac OS, but the backend is very different. Linux by nature is very minimalistic and streamlined. Generally, people use it for a single purpose, unlike Windows where it has to be able to do anything a user wants to do or run many programs simultaneously. Therefore, the hardware it runs on is generally much less powerful than a traditional pc, but that's ok because it doesn't have to have as much horsepower. If you look at the model comparison chart in the previous picture you will see the specifications of some of these devices. They are not nearly as powerful as pc's.

You have now had a general overview of the Raspberry Pi. Maybe you want to try your hand at building one? In this first article I will walk you through step by step of how to get a Pi up and running with Debian OS so you can goof around and get familiar with using Linux and configuring a PI. I recommend starting off with one of the cheapest Pi's because they all are configured the same. So, lets use a Pi zero W.

1) The list of things you will need: Pi Zero W, hdmi capable monitor, usb keyboard and mouse, mini hdmi to hdmi adapter, micro usb to usb hub, power brick with a micro usb plug, a micro sd card, and a micro sd card usb adapter to plug into your pc.

2) On your pc you need to download the raspberry pi imager Raspberry Pi OS – Raspberry Pi and install it on your pc.

3) Insert your micro sd card into your micro sd to usb adapter and plug it into a usb port on your computer.

4) Take note of what drive letter windows assigns your micro sd card.

5) Run the raspberry pi imager.

6) Click choose os button and select the first option of Raspberry Pi OS 32 bit.

7) Click choose storage button and select the drive letter assigned to your micro sd card. Please verify this choice because you don't want to overwrite something you didn't intend to do.

8) You will see a gear icon on the bottom right, click that and scroll down to configure wireless lan and check the box and enter your wifi details and click save.

9) Then click the write button. This will take a few minutes and it will also verify the data. Once its finished successfully you can remove the micro sd card from the usb adapter.
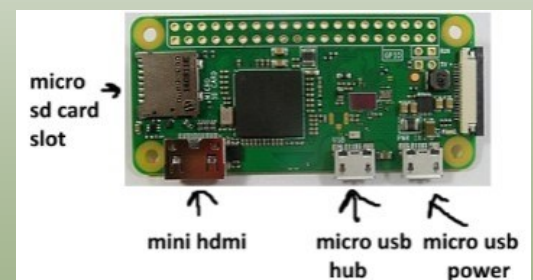
10) With all the cables plugged into your raspberry pi zero w and it powered off, insert the micro sd card into the slot on the top of the board.

11) Power on your pi.

12) You will see a much different boot screen than you are used to with Windows or Mac OS.

13) It will ask you a few simple questions like time zone and keyboard layout and language. Just choose appropriately and continue.   *Continued Next Page ...*

A Piece of the PI, Raspberry flavor please :) Continued …

14) If you are successful, you will end up at a screen that looks like this:.

15) Feel free to explore, It has a built in web browser
and a few other basic tools. Don't worry about
messing anything up. If you do, you can always
repeat the steps above and re-image your sd card
and start over.

16) Congratulations! You have just installed Debian Linux OS onto a raspberry pi!.

In my next article I will walk you through step by step of how to build a pi-star for connecting
your handheld or base station to internet radio rooms like the Texas Patriot. Room. If you have
any questions or run into any issues, feel free to email me at **tysoneppink@yahoo.com**

73

KI5VTR Tyson

Russ Cooper
NR5US
WCARG
Repeater Coordinator

Here is a couple QSL cards sent in by
Russ, NR5US. I particularly like the
one below. I do wonder however, has
Russ really learned to speak Poodle?

Just Because...   *"Push To Talk" Editor ... Dave Godfrey-NY5A*

Dave Godfrey
NY5A
WCARG Newsletter Editor

NEWS FROM THE YEAR: 2040

- Ozone created by electric cars now killing millions in the seventh largest country in the world, Mexifornia, formerly known as California.
- White minorities still trying to have English recognized as the third language.
- Couple petitions court to reinstate heterosexual marriage.
- France pleads for global help after being taken over by Jamaica. No other country comes forward to help the beleaguered nation!
- Last Castro finally dies at age 112; Cuban cigars can now be imported legally, but President Chelsea Clinton has banned all smoking.
- Postal Service raises price of first-class stamp to $17.89 and reduces mail delivery to Wednesdays only.
- Average weight of Americans drops to 250 lbs.
- 85-year and $75.8 billion study: Diet and exercise is the key to weight loss.
- Abortion clinics now available in every high school in the United States .
- Supreme Court rules any punishment of criminals violates their civil rights.
- New federal law requires that all nail clippers, screwdrivers, fly swatters and rolled-up newspapers must be registered by January 2060.
- IRS sets lowest tax rate at 75 percent.

It could happen!

Your WCARG Net Control

146.860 DCS 631 (— Offset)

Month	Name	Call
April	Russ Cooper	NR5US
May	Laura McDonnald	WW7OO
June	Gary Joyce	KI5RMO
July	Dwane Walters	W5DPW
August	Steven Prindle	K9UNI

Please Contact Glenn Rayfield if you wish to volunteer.

Your WCARG Officers And Directors

Position	Call	Name
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

This Months Tech Talk is about "

Ryan, K4TXN

GMRS - WQZF521

WCARG Teck Coordinator

"OFFSET/DUPLEX = SIMPLEX, PLUS, MINUS, AND SPLIT? "

The first three are self explanatory, and the direction is usually pre-determined by frequency, and amount of offset determined by band. Hence "Automatic Repeater Shift" settings in radios.

What is the "Split" used for though? Ad-Hoc or Semi-Permanent repeater utilizing radios with cross-band repeater function!

A regular repeater has a pair of frequencies determined by the band, and where in the band that frequency is. i.e. the W5HVL repeater transmits on 146.860 while simultaneously receiving on 146.260. A Negatie offset of 600kHz within the same VHF band.

Cross-Band repeat is what it sounds like. Receive on one band, and transmit on the other band simultaneously. Transmit on 147.410 VHF while simultaneously receiving on 446.410 UHF. If these frequencies sound familiar, they are the WCARG SSF Frequencies.

Set a radio like the TYT TH-UV8000D With 2 separate channels.
XBANDV (VHF) 147.410 Simplex with DCS 073
XBANDU (UHF) 446.410 Simples with DCS 073
Set the repeater function to unidirectional.
Set A band to XBANDV and B band to XBANDU.
Select B as the active/main band and activate cross-band.
It will receive on the active/main B band and transmit on A band simultaneously.

Now, you could easily set your A band to XBANDV, the B band with XBANDU, and stay on the B band for transmit while hearing the A band IF you have a dual band dual VFO radio. For radios with a single VFO you use the "Split" function in a memory channel. This can be done from the face of some radios, but others require the software to properly enter the settings. TDR or Dual Watch function on a single VFO radio can accomplish this task, but draws more power swapping between 2 frequencies rather than staying on one.

Set one memory channel with: Receive - 147.410
Select "Split" for offset/duplex.
With Chirp Software selecting "Split" pops up a window to enter transmit freq.
Transmit - 446.410 Tone Mode - DCS - 073
Note: Yaesu, Kenwood, Baofeng, Wouxon, Anytone, etc brand radios can do this, but Icom can not.

With a single VFO you are now set to listen to 147.410, and transmit 446.410 when you press the PTT.

With a cross-band repeat capable radio set up at your campground, deer camp, or on your property, you now have a portable, short range, inexpensive, personal repeater. With a telescoping mast and a dual band roll-up j-pole antenna, you're set!

73

Ryan, K4TXN

Wes Harris
W5WES
Wires X Texas Patriots Net Control

Birth and growth of the "Texas Patriot" Room

I was asked by Dave, NY5A to pen a little info on the Texas Patriots room for the newsletter. As a ham who tries to do my part I reluctantly agreed. Hihi This is not the whole story, just a piece, from the perspective of one ham, W5WES.

History

In early 2020 the Baytown Eastside Amateur Radio Service (EARS) group began looking to replace their 30-year-old club repeaters. We heard about the deal Yaesu was making clubs to upgrade to the DR1X and DR2X Fusion repeaters. After discussion we decided to order a couple of Yaesu System Fusion DR2X repeaters. The new machines were very easy to configure and deploy. We decided to run the 2-meter 145.310 machine as a standalone analog repeater. The UHF repeater had been off the air for a couple of years with blown finals. We configured the UHF repeater for full time digital and connected it to Wires X. We purchased an HRI 200 and set up a wires X node called the San Jacinto Texas room. The fancy new machines were in production and were working better than we hoped they would. The VHF machine was well used by local hams but we noticed the UHF machine was basically a dead repeater. We attributed it to the fact that there were only a handful of club members who owned Yaesu rigs capable of operating in System Fusion C4FM digital mode. As time went on a lot of members started adding Yaesu digital radios to their shacks and mobiles. Business began to pick up! As the guys and girls got more sophisticated and learned about digital we were asked by club members if they would be allowed to "steer" the repeater to other rooms using the Wires X button on their radios. This is one of the nice features of a System Fusion Wires X connected repeater. We agreed but soon learned that this came with unfavorable side effects. Imagine turning on your radio, tuning the local repeater only to hear a QSO in a foreign language or trying to use the repeater to have a QSO with your new digital radio only to be told to get off the air and stop tying up the network. After a short period of time, we decided that was not the direction we wanted to go. We needed another plan.

Plan coming together.

WA5JDI Bill introduced the club to Steve WB5HZM and Terry KG5ENK in Coldspring. After some discussion we thought it would make sense to link a couple our or repeaters. The question was would we use one of our existing nodes or register something new? Steve mentioned that the *Walker County Amateur Radio Group* had setup a Wires X node called the Texas Patriots Room. As much as I would love to be able to take credit for "inventing" Texas Patriots Room it was the brainchild of Dave NY5A, although Russ NR5US, Butch KF5ZIP and the Walker County Amateur Radio group are totally responsible for its incredible growth. We decided to move the NE5TX and WB5HZM repeaters into Texas Patriots 60755 and see how that would work out. And work out it did!

"Texas Patriot" logo Designed by
Ron Mosley AA5RX
and Wes Harris W5WES

Words From Wes on Wires X Continued ...

Literally overnight, we had linked up 4 repeaters in southeast Texas via Wires X. The Texas Patriots room 60755 was a big hit! Hams from 4 clubs were able to interact. The club repeaters now had a lot of great hams enjoying digital on their new Yaesu C4FM radios. The repeaters were alive with traffic.

The Monday night Net

In early 2021 we decided to start a weekly net on Monday nights at 8pm. On the very first net, John Kruk from Yaesu joined us. John N9UPC spent almost 2 hours answering questions from the net. It was great fun and left us wanting more. We initially ran 15 to 20 check-ins per week. We operated the net as a topic net with one or two topics. Today we usually run an average of 40 check-ins per week with our highest to date being 53 great check-ins. I usually act as net control station, but we always have someone to take the reins when I am unavailable. Robert N5BSB, Russ NR5US, Diane N5PTB, and Sam KC1OGG have filled in as the net control station. The nets are always lively with great participation, and we have a lot of fun. We use Netlogger and Ron KI5GNL usually logs the net.

The bridge to digital convenience.

In mid 2021, Ron KI5GNL (new vanity call AA5RX) set up a YSF Node called US Texas Patriot. He linked the YSF network to the Wires X network.   This innovation allows operators to connect to the Texas Patriots Network without the need to set up their own Wires X node and from areas without repeater coverage. While I am not a big fan of "bridging" networks, having the ability to connect with an OpenSpot, Blue DV, or Raspberry pi, or any MMDVM device is very convenient. It has allowed a lot of great stations access to the Texas Patriots Room that would otherwise not be able to join.   Ron and Steve do great work behind the scenes "fine tuning" to ensure the network runs smoothly.

You don't need to be from Texas!

I really enjoy the fellowship and comradery found here in theTexas Patriots room.   We all identify with patriotic values, God, family, guns, honoring our veterans, and we LOVE Texas. But we most certainly welcome all who want to be part of the group. You don't need to be from Texas to be a regular part of the Texas Patriots room. Just ask Sam KC1OGG. Sam is a regular in the TPR who found us while browsing the Wires X pages.

The core operators.

The core network operators are Steve WB5HZM, Russ NR5US, Robert N5BSB, Doug N8IQT, Ron AA5RX, Butch KF5ZIP and me W5WES. Doug runs the SADRC network in San Antonio but keeps one or two of his repeaters in for nets and other events. These guys really make it all happen from a technical perspective. We have occasional outages usually caused by service providers……but like I always say "we are hams, no one loses money when the site goes down."

In conclusion.

When you take a listen in the Texas Patriots room, you will hear hams from all over Texas, around the country, and worldwide. The allurement to me is that we have individual hams, members from various ham clubs, and hams who are invited, but it's not a club. Everyone who comes into the room does so because they want to talk with other hams who have the same value system.

Please join us 8 pm, Monday nights on room 60755!

73

De Wes, W5WES   Link to the Texas Patriots Dashboard - http://texaspatriot.ddns.net:8000/

Huntsville Hams help Seven Hills Running Club MAY 29TH 2023

Rene Roman KG6YYT Vice President

Seven Hills Running Club Timberwilde 5K

On Sat5urday, May 29th, the Seven Hills Running Club had their Timberwilde 5K Fun Run. A group of WCARG hams were present to handle the vast communications needs for the group. Laura, WW7OO actually got us connected with the Seven Hills Running Club promoter who is incidentally a neighbor. Several more photos and the club's information is available on Facebook. Just search for "Seven Hills Running Club." Each year around this time they do their annual 5K run in our neighborhood. Last year I was the "turtle" (the person who follows the last runner to make sure there are no stragglers, injured or lost runners. This year I got Diane KG6ZAP, Jim Thompson KR8MCS and Steve Prindle K9UNI to help. Jim ran the first checkpoint and turn around point to make sure no one passed his way in the wrong direction.   Diane was net control and Steve was the de facto backup and relay from his location miles away. Fun was sure had by all. We invite you to contact Rene, Dian, or Laura about helping out on any future fun runs. There are many groups participating during the year and the help that the WCARG Hams provide is very much needed. Besides spending some time in the great Texas outdoors, we also get to practice our Ham Radio skills.

Running Clubs definitely see the value of hams because we provide instant communication.

73

Rene KG6YYT

WCARG Minutes from our June 10th 2023 Meeting.   *By Laura WW7OO*

Laura McDonald
WW7OO
WCARG Secretary

WCARG June Monthly Meeting Minutes

Call to order

Invocation- Clenard Hightower

Pledges

Visitor- Randall Kujawa KI5ASE , Huntsville resident.

Items for sale- Mark Green ICOM 756 Pro 2 $300.

Dave Godfrey- Kenwood PS830, in newsletter.

New member- Johnny Phillips, retired military, working on a PHD in ministry.

Interesting contacts-2 people mentioned making one.

Minutes of last meeting are read, Gary Joyce makes a motion to approve, Jim Lanier 2nd. Passes.

No treasurer's report. S. Farlow is out of town.

Vote to approve the check to pay the scouts for cooking for Field Day- Greg Colson motion, Jim Thompson 2nd, passes.

Vote to reimburse L. McDonald for yard signs and 1st order of hats and tshirts to sell- James Walker motion, several 2nd, pass.

Committee Reports-

Repeater- Russ Cooper- catching up on projects, doing tower for Tyson, antenna for the Laniers, has a full work schedule, needs club members to help!

Net- Glenn Rayfield- could use some volunteers.

Ares/Races- Greg Colson- mentions training that is available.

Testing- no one in attendance.

Social- Diane not here.

Newsletter- Dave Godfrey- should be out before this coming weekend.

Raffle and badges- Jim Thompson- wants to make $250 incentive for selling raffle tickets, there is a vote which is later stayed by VP and Pres.

QRP, T-Shirts and hats- Steven Prindle- will be selling hats and t-shirts.

Field Day- Becky- bring chairs, shade, water.

Jim Thompson- order a name badge with him if you want one.

Program by K4TXN on crossbanding.

Motion to dismiss- Jim Lanier, 2nd Russ Cooper, passes- Hasta la vista baby!

EQUIPMENT FOR SALE

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

This above station is for
sale by Dave Godfrey NY5A. Please Make Offer for complete station. I would just
hate to break up the beautiful set. It is a complete Kenwood TS-830 Station
which includes a TS-830 Transceiver with tube finals, MC-60 Microphone, AT-230
Antenna Tuner, SP230 Speaker, and SM220 Station Monitor. All have Instruction
manuals and needed interconnect cords.

13

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

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.

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-706MkIIG, 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.