

# SLATS



# St. Louis Amateur Television Society

# MAY 2024 | **Volume 5-**

#### **IN THIS ISSUE**

#### On the News Front

DATV on Satellite 0100......Pg-2
Stereo Mic for your ATV.....Pg-3
The K7RA Solar Update.....Pg-4
The K7RA Solar Update (cont)..Pg-5
Items for sale or give-away.....Pg-6
Ham Radio Quick Links.....Pg-7
Hamfest coming up......Pg-7

SLATS newsletter is published monthly on the 15th as the official newsletter for the St Louis Amateur Television Society.

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Weekly Nets
7pm Fall/Winter
8pm Spring/Summer
W0ATN/R 440in 426out
Talk-back radio: 144.34 MHz

#### -ON THE NEWS FRONT-

# **SLATS** offer to loan gear for prospective STL area ATV hams

SLATS has ATV equipment for loaning out to prospective hams expressing an interest in getting on ATV. If this is you, then click (https://slatsatn.net/want-to-try-atv/).



Typical Digital ATV Station. Just add a TV, camera and antenna.

# MAY

#### 2024

# 

#### NET CONTROLLER FOR MAY



**GARY** NØGL

#### PAGE 2

## FROM THE PRESIDENTS DESK

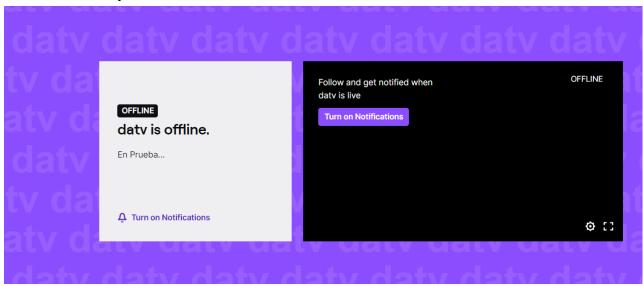


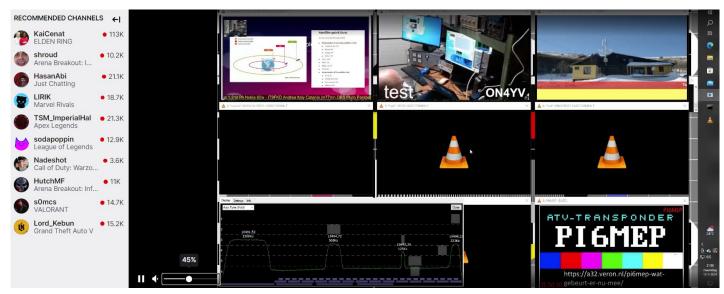
## **DATV on Q0100**

#### https://www.twitch.tv/pa3fbx

Guys com and go... lot of activity. Look at how many users they have (on one of the tabs). Use full screen or click on any of the pictures to make larger views. US cannot view the satellite. Maybe someday AMSAT we'll have a geosync sat for North America.

Check out DATV on the websiteTwitch on the Q0100 satellite from the address above. You may have to sign-up to access the site. You want to hit the "Turn on Notifications" tab to get notified when they are on the air.





Examples of what you can see and hear

# **Stereo Mic for your ATV**

By Armand Hoffstetter

Stereo mic for your ATV, yes, some cameras do have stereo audio, but if you have a pair of good mics, the line input on your computer may be a better deal. In my case I had a late 1960's B & O stereo ribbon microphone and a pair of SHURE mic transformers, all I needed was a butt load of flat gain.

For this I used a cheap op-amp phono preamp, after removing the RIAA curve. This preamp used essentially removing the two resistor bridging caps in each inverse feed back loop. Then just dig down into the line-in properties and check the "listen" box.

YMMV, CAVEAT EMPTOR,

**KDOPXF** 

P.S. this is the one I used

https://www.amazon.com/Pyle-Phono-Turntable-Preamp-Preamplifier/dp/B00025742A/ ref=pd lpo sccl 2/147-4995810-8948502?pd rd w=ciFUb&content-id=amzn1.sym.1ad2066f-97d2-4731 -9356-36b3edf1ae04&pf rd p=1ad2066f-97d2-4731-9356-

36b3edf1ae04&pf rd r=XQMNXACS3N1XV3CZN2CC&pd rd wg=kyYtN&pd rd r=19274cb9-8854-4b25a83e-7e3c2e54eedb&pd rd i=B00025742A&th=1



Pyle Phono Turntable Preamp - Mini Electronic Audio Stereo Phonograph Preamplifier with RCA Input, RCA Output & Low Noise Operation Powered by 12 Volt DC Adapter - PP999, Black

Visit the Pyle Store

5,854 ratings | Search this page 4.3 **\*\*\* \* \* \*** 

Amazon's Choice in Audio Component Preamplifiers by PYLE

#### PAGE 4

# The K7RA Solar Update (from ARRL)

https://www.arrl.org/news/the-k7ra-solar-update-829

05/10/2024

"ASWFC GEOMAGNETIC DISTURBANCE WARNING ISSUED AT 2302 UTC/09 MAY 2024 BY THE AUSTRALIAN SPACE WEATHER FORECASTING CENTRE.

"Four halo CMEs first observed over 08-09 May are expected to arrive at Earth on 10-May, starting at 1000 UTC +/- 10 hours. G4 geomagnetic conditions are expected on 10-May, reducing to G3 with a chance of G4 on 11-May.

"INCREASED GEOMAGNETIC ACTIVITY EXPECTED DUE TO CORONAL MASS EJECTION FROM 10-12 MAY 2024.

#### "GEOMAGNETIC ACTIVITY FORECAST:

"10 May: G4

11 May: G3, chance of G4

12 May: G1"

Six new sunspot groups appeared this reporting week, May 2-8, one each day on May 2-4, two on May 5 and another on May 6. On May 9 two more sunspot groups emerged, and the daily sunspot number rose to 170.

Average daily sunspot number increased from 124.6 to 138.3, and average daily solar flux rose from 144.9 to 177.6.

Average daily planetary A index climbed from 9.6 to 14.4, while middle latitude numbers went from 8.6 to 12.3.

The most active day was May 2, when the planetary A index was 44. Alaska's College A index was 61. The cause was two CMEs striking Earth, causing a G3 class geomagnetic storm.

The solar flux is peaking now and may peak again around June 11-12 at 205.

Predicted solar flux is 240 and 225 on May 10-11, 220 on May 12-13, then 215 on May 14, then 210 on May 15-16, and 200, 195, 190, 185, 180, 175, 170, 165 and 170 on May 17-25, then 175 on May 26-27, 170 on May 28, then 165 on May 29-31, then 175, 180, 185, 190 and 185 on June 1-5, 175 on June 6-9, 180 on June 10, 205 on June 11-12, then 200, 195, 190 and 185 on June 13-16.

Predicted planetary A index is 8, 5, 8, 12 and 10 on May 10-14, 5 on May 15-22, then 8, 12, 8, 5, 12 and 8 on May 23-28, then 5, 5 and 8 on May 29-31, and 12 on June 1-3, then 8, 10, 5 and 5 on June 4-7, then 8, 15 and 10 on June 8-10, and 5 on June 11-18.

# PAGE 5 The K7RA Solar Update — continued

Weekly Commentary on the Sun, the Magnetosphere, and the Earth's lonosphere - May 9, 2024 from OK1HH.

"This week, the number of sunspot groups was smaller than in previous weeks (decreased from nine on Monday to six on Wednesday), but two of them (AR3663 and AR3664) are really big. Moreover, both have a beta-gamma-delta magnetic configuration, indicating the possibility of producing strong solar flares. Moderate flares (M-class) were observed several times a day and large flares (X-class) were not an exception.

"Although AR3663 is now approaching the northwestern limb of the solar disk, the overall solar activity is certainly not decreasing, quite the contrary: AR3664 continued to grow rapidly, and has merged with neighboring AR3668 to rival the large Carrington spot of 1859 in size. If it were to produce a CME eruption similar to 1859, and if the CME were to hit the Earth, the so-called 'Carrington Event' could be repeated, with potentially devastating consequences for power and communications grids.

"So far, on the lower shortwave bands, we have seen rapid and large increases in attenuation during large flares, up to and including disruption of communications for tens of minutes to hours. The phenomenon is abbreviated SWF (Shortwave Fading), belongs to the SID (Sudden Ionospheric Disturbance) group. SWF is named after two physicists, John Howard Dellinger and Hans Mogel, as the Dellinger effect, or sometimes Mogel-Dellinger effect.

"Solar flares with CMEs in the western half of the solar disk appear to be followed by an increase in geomagnetic activity and a marked fluctuation in shortwave propagation conditions around the weekend, with a slow return to average conditions in the following days."

Recent reports from Dr. Tamitha Skov, WX6SWW:

https://www.youtube.com/watch?v=CGdPOsRgBIE

https://www.youtube.com/watch?v=RDEWbYqyNAo

Today's large sunspot comparable to Carrington Event:

https://bit.ly/3Uxd94R

### ITEMS FOR SALE OR GIVE-AWAY

#### 38 FOOT PNEUMATIC MAST

I want to:

Give an item away for FREE!

Name

Tom Psara

Call Sign

KØTVI

Phone (optional)

+13147993499

Email

#### foxtvsng@vahoo.com

Brief Description of item

38' Wil-Burt Pneumatic Mast

Details, price, condition, etc.

Free to a good home. 38' Wil-Burt pneumatic mast with compressor. Good condition. I removed this mast from a retired tv live truck. The mast was serviced before being put into storage. I intended to put the mast up at my home QTH but will be moving soon and it will not be erected at the new QTH.





#### HL-100R & T RX/TX LCD CONTROL MODULES

I want to:

Sell an item

Name

Mel Whitten Call Sign

KOPFX

Phone (optional) +13147391108

+1314

#### mel@melwhitten.com

Brief Description of item

 $HL\text{-}100R\,\&\,T\,RX/TX\,LCD\,control\,modules\,for\,HiDes\,Receivers/Xmtrs$ 

Details, price, condition, etc.

HL-100 is a LCM module with buttons to configure HiDes Transmitters HV-320/200 (HV-100T) and HiDes receivers HV-110/120/122 (HV0100R) With these, the PC running AVSender is not needed for the basic functions of configuring a transmitter for frequency, BW, Guard Channel, etc for the Transmitter. For the receiver, it replaces the IR Remote for configuring the basic functions of the receiver. Control is via the UART in the TX and RX. See the HL-100 quick installation guide for views of the config process using the these modules. The Firmware is different for each one and the Receiver has 2.1×5.5 power connector while the TX does. The TX has a inline connector while the RX has individual single wire female connectors. Sold on eBay from HiDes store found here:

#### https://www.ebay.com/itm/323221412243 and here:

#### https://www.ebay.com/itm/224000672508

I built mine in a small Bud box (not 4 sale). See picture. Docs provide hole locations for building your own enclosure

\$25 EACH plus USPS shipping

3219 Haas Avenue

Bridgeton, MO 63044

US

HL-100R MANUAL

#### HIDes 4 Band USB "Professional Receiver

want to

Sell an item

Name

Mel Whitten

Call Sign

K0PFX

Phone (optional)

+13147391108

Email

#### mel@melwhitten.com

Brief Description of item

HIDes 4Band USB "Professional" Receiver

Details, price, condition, etc.

HIDes USB Modulator DVB-T 100MHz to 2500MHz with 1 thru 8MHz bandwidth selection. Windows and Linux SDKs. Docs available free from HIDes's dropbox including software. Very extensive documentation. No host CPU required. Download from here:

http://www.hides.com.tw/downloads\_eng.html

\$100 plus shipping USPS

3219 Haas Avenue Bridgeton, MO

63044 US

UT-210 Quick Install Guide and UT-210 Spec Sheet











#### PAGE 7

#### LINKS:

#### **SOLAR UPDATE**



The K7RA Solar Update (arrl.org)

# SLATS REPEATER DVB-T WØATN

**Technical Summary** 

**Coordinates:** 38.72126N -90.46454W, Grid Square:

EM48sr What3Words

Elevation: 671 ft AMSL, 90 foot Rohn tower

**Transmitter:** HiDes HV-200Pro 426.000 MHz Vertical polarization, DVB-T 16QAM @ 4MHz Bandwidth, Video PID 641, Audio PID 642, DCI ATV BP RX/TX Filters **Output Power:** 426.000 MHz: (DVB-T) 25w Average **Receiver:** HV-110, 440.000 MHz, 4 MHz bandwidth, 16 OAM DVB-T

Antennas: (2) New-Tronics Hustler Spirits, 9db 426TX

and 440RX

**Talk-Back radio:** 2 Mtr FM Diamond Antenna at 45 ft **Coordination:** Missouri Repeater Council (MRC) 2016

**Sponsor:** SLATS – St. Louis Amateur Television

Society (SLATS).

Popular off the shelf equipment for High Definition receiving and transmitting is available at the <u>HiDes</u> Company and on eBay

#### **Ham Radio Quick Links:**

#### **Amateur Television Network**

https://www.atn-tv.com/

ATN Repeater video streaming

https://www.atn-tv.com/events/streaming

#### ATN on YouTube

https://www.youtube.com/
AmateurTelevisionNetwork

<u>ATN</u> on Whereby.com https://whereby.com/atn1

#### **TAPR - Tomorrow's Ham Radio**

https://tapr.org

#### **DIGITAL ATV**

# Digital Amateur Television D-ATV

https://www.dxzone.com/catalog/ Operating Modes/Digital ATV/

#### YouTube Videos

#### Dave Casler KEØOG - YouTube

Videos <a href="https://www.youtube.com/channel/UCaBtYooQdmNzq63eID8RaLQ">https://www.youtube.com/channel/UCaBtYooQdmNzq63eID8RaLQ</a>

# Solar Index & Propagation Made Easy The SmokinApe

https://www.youtube.com/user/ TheSmokinApe

#### **Upcoming Hamfests, Conferences & Conventions!**

- 05/17/2024 05/19/2024. Dayton Hamvention, ARRL National Convention and 08/17/2024 08/18/2024.
- St. Charles Hamfest / Convention: 8/11/24
- SMARC Pre-Field Day Hamfest: June 1, 2024, 1707 W Chestnut Expy, Springfield, MO
- SLSRC 2024 Field Day: June 22-23, 2024, Love Park