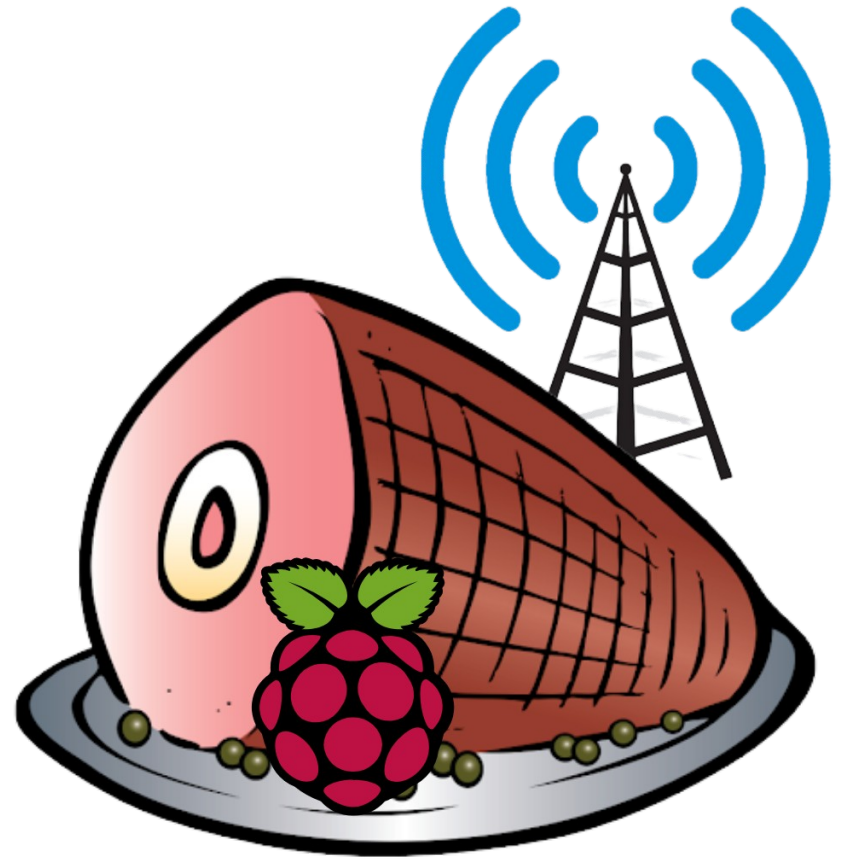


Delicious HamPi

- Presenter: Bruce MacAlister, W4BRU, w4bru@arri.net
- Venue: via Zoom to Richmond Amateur Radio Club, <http://rarclub.net/>
- Date: January 9th 2021



Who did it



18:51:34

Enter Query by Callsign

Search

Database

Swapmeet

Resources

Contact

Subscribe

W3DJS



USA

David J Slotter

710 Dacula Road Ste 4A #193
Dacula, GA 30019
USA

QSL: LotW, QRZ, eQSL, ClubLog, HamC

Email: w3djs@arrl.net



XML Subscriber Lookups: 19987

L

Biography

Detail

Logbook

Log a NEW contact with W3DJS...

What it is

A complete load of:

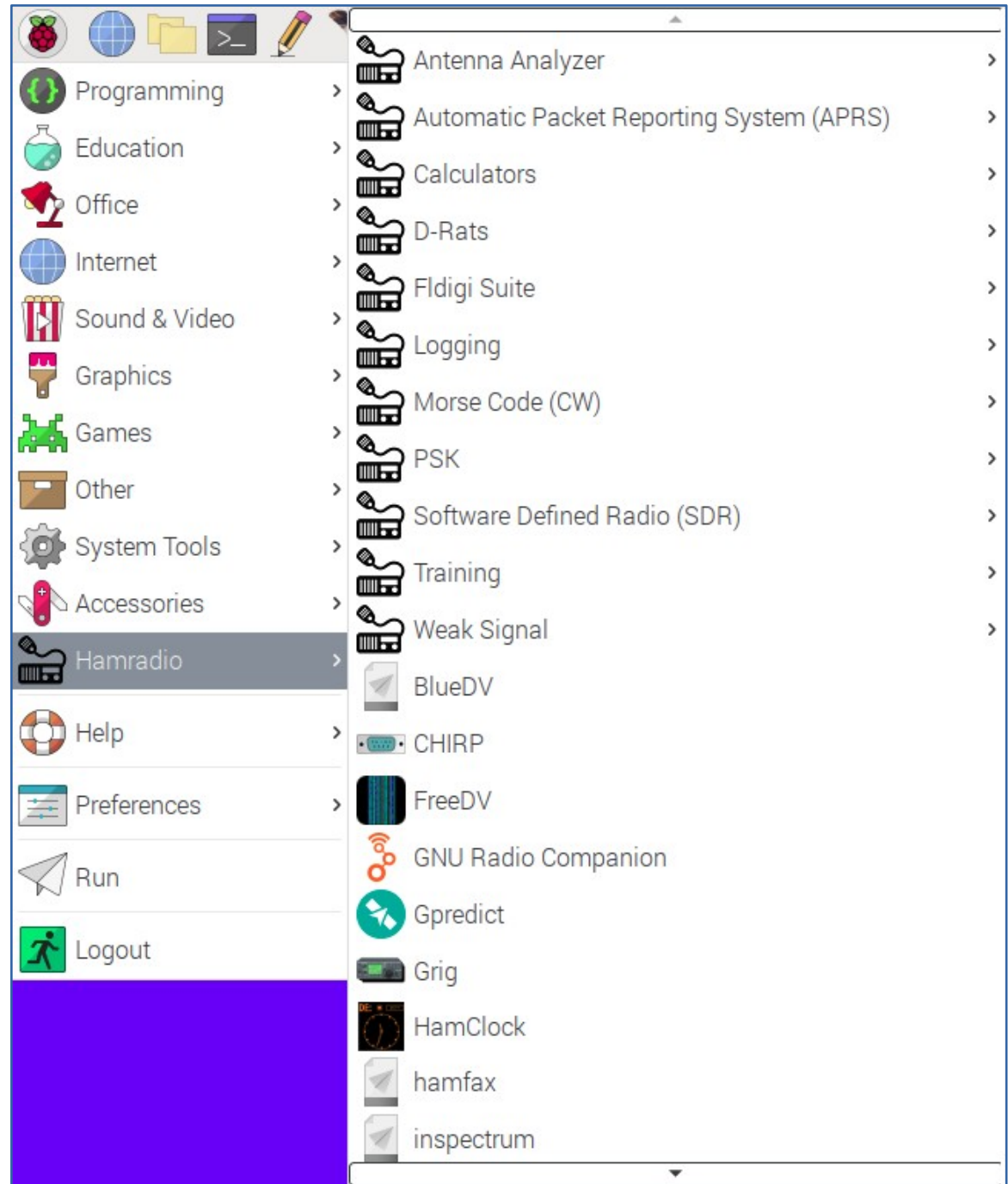
- The Raspberry Pi operating system
- 80+ ham radio apps fully integrated
- A support system on Groups.io
- Wiki documentation
- Regular updates
- Advice on backups, etc.



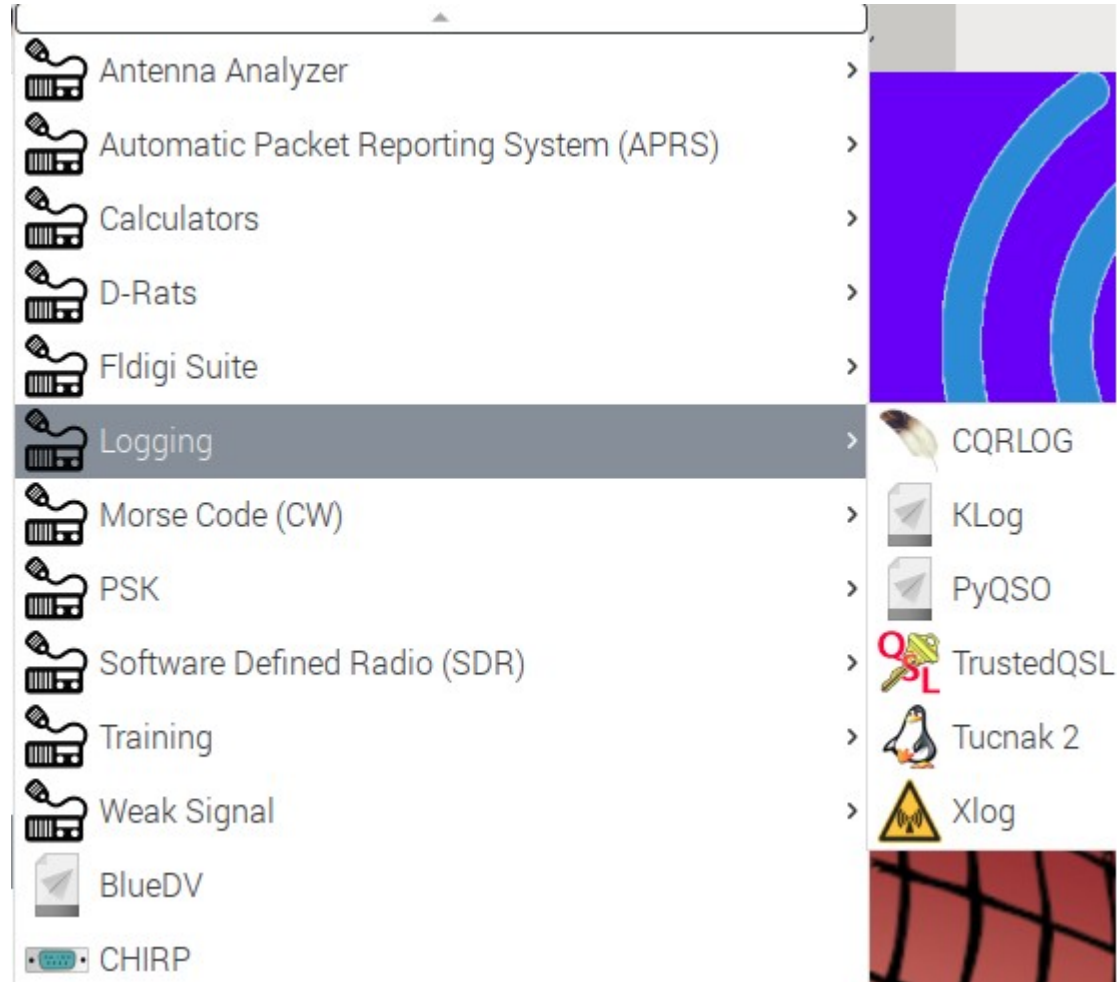
What it contains

- General Ham Radio Applications: Main set of general tools.
- Antenna Applications: Design and analysis software for Antennas.
- Software Defined Radio: RTL-SDR, SDRPlay SDR, HackRF SDR
- APRS Applications: APRS "Automatic Position Reporting System"
- FLDigi Application Suite: PSK 31, Olivia, CW, RTTY, etc
- Digital Mode Applications: JT65, JT9, T10, FT8, FT4, WSPR.
- Logging Applications: CQRLog, Xlog, etc
- Winlink Applications: worldwide radio email.
- Morse code Applications: Morse code rig control and training.

Ham menu



Logging choices



CQRLog

File View Window Statistics Online log Help

qsodate	time_on	callsign	freq	mode	rst_s

QSO nr. 1 QTH profile: 1-FM17GN;Richmond, VA USA;IC-7 QSL needed !!

Call: K4WNW Frequency: 7.20400 Mode: SSB (AUTO) RST sent: 59 RST rcvd: 59

Name: Sheila QTH: [] GRID: [] PWR: 100 QSL_S: [] QSL_R: []

ITU: 08 WAZ: 05 IOTA: [] State: [] County: [] Award: []

DXCC ref.: W Comment to QSO: [] QSL VIA: []

Offline Comment to callsign: []

Date: 2021-01-04 Start time: 21:16 End time: 21:16

DXCC statistic

	5	7	10.1	14	18	21	24	28	50
SSB		X		X					
CW		X							
DIGI		X		X					

DXCC info

USA - AL,FL,GA,KY,NC,SC,TN,VA

WAZ:05 Cont: NA
 ITU:08 DXCC:W
 LAT:33.18N LONG:82.23W
 DIST.:649 km AZIM:223
 ☀ 07:34:08 🌙 17:36:38
 2021-01-04 16:15:03 GE
 Local:
 ☀ 07:26:14 🌙 17:06:18

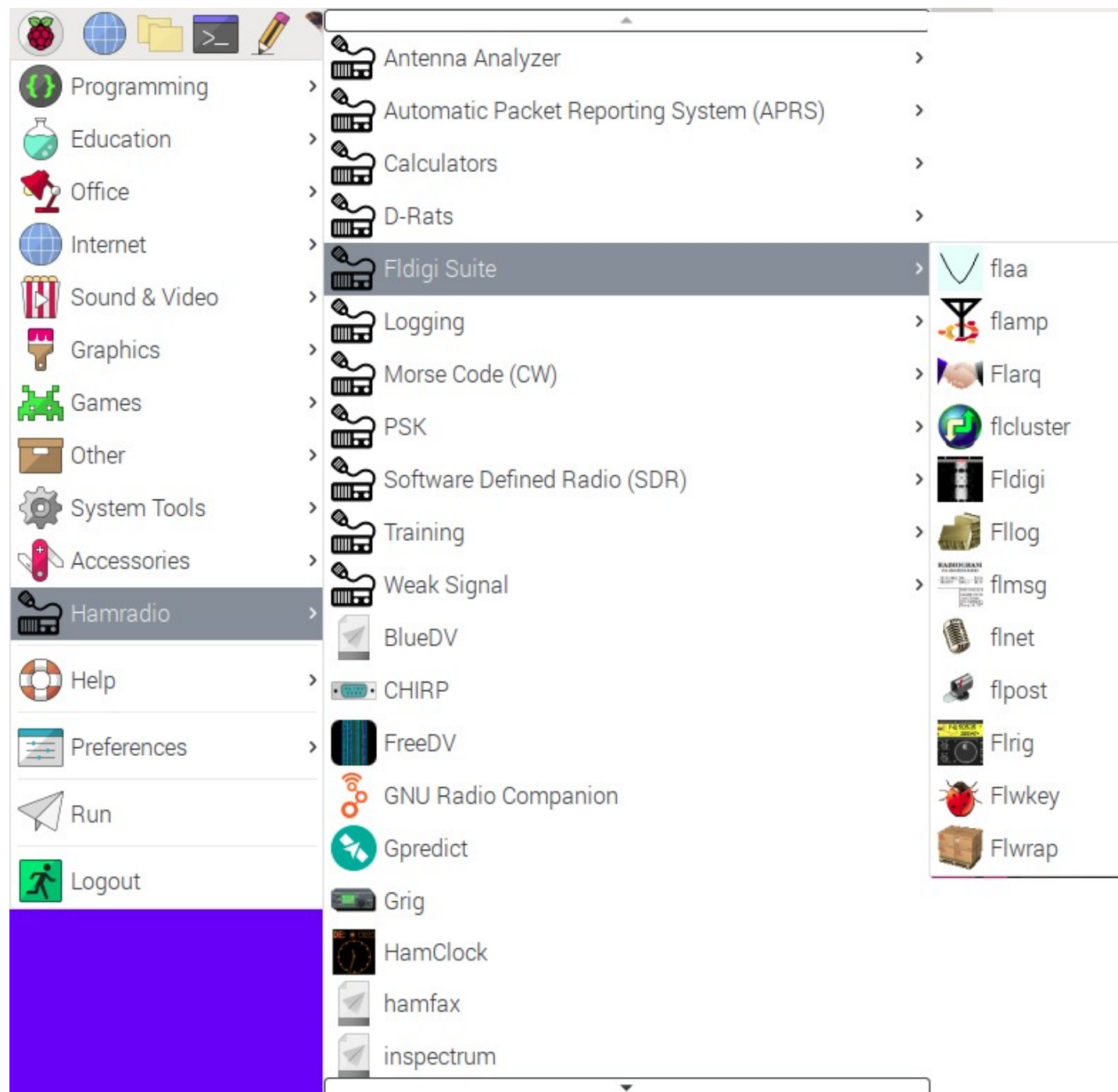
Callbook (qrz.com)

K4WNW
 SHEILA J BLACKLEY

Save QSO [enter] Quit program

My grid (to change press CTRL+L) FM... Ref. call (to change press CTRL+R) K4W... Ver. 2.3.0 (001)

Fldigi



fldigi

The screenshot shows the fldigi software interface. At the top, the frequency is set to 7070.000. The interface includes a menu bar (File, Op, Mode, Configure, View, Logbook, Help) and various control buttons. A large yellow text area displays a QSO log entry:

7070.62
b QSB m SB![!
iSo, I'll close this tut
Have a hol
joll i RockinY safe nn6happy ne<oenrte
rethanks xr the QSO Chauncey, 73, God bless o Live long and prosper, and may the (solar)
fluxbe with you
1/1/2021 20:00Z N3CAU de KC8T KC8T sk sk

Below the log entry is a blue area for the current QSO. At the bottom, there is a waterfall display showing frequency from 500 to 3000 kHz. The interface also includes a status bar at the bottom with various indicators and controls.

Fldigi & CQRlog






















The screenshot displays the Fldigi software interface. The 'File' menu is open, showing various options with their respective keyboard shortcuts. A red arrow points to the 'Show QSO list' option. The background shows a control panel with fields for location, RST sent/rcvd, PWR, QSL_S, QSL_R, and Award.

Menu Item	Shortcut
Open or create new log	
New QSO	Ctrl+F2
Show QSO list	Ctrl+O
Remote mode for fldigi	Ctrl+M
Remote mode for wsjt	Ctrl+J
Show/edit long note	Ctrl+N
Send spot (~ or CTRL+W)	Ctrl+W
Add to band map (+,Ctrl+A)	
CW Messages	
Reload CW interface	
Comment to callsigns	
Refresh TRX/ROT control	
Tune	Ctrl+T
Preferences	Ctrl+P
Close	Ctrl+Q

Control Panel Fields:

- Location: Richmond, VA USA;IC-7
- AUTO: [Dropdown]
- RST sent: 599
- RST rcvd: 599
- PWR: 100
- QSL_S: [Dropdown]
- QSL_R: [Dropdown]
- Award: [Text Field]
- QSL VIA: [Text Field]
- Comment to callsign: [Text Field]

WX...digital

 Antenna Analyzer	>	
 Automatic Packet Reporting System (APRS)	>	
 Calculators	>	
 D-Rats	>	
 Fldigi Suite	>	
 Logging	>	
 Morse Code (CW)	>	
 PSK	>	
 Software Defined Radio (SDR)	>	
 Training	>	
 Weak Signal	>	
 BlueDV		 GridTracker
 CHIRP		 js8call
 FreeDV		 jt dx
 GNU Radio Companion		 Message Aggregator
		 wsjtx

JS8Call

File Configurations Mode Log View Control Help

7.077 750
1500 Hz

W4BRU
20:11:03 (-100ms)
2021 Jan 01

RX TX NORMAL+MULTI+AUTO+CONF+HB
SPOT LOG TUNE

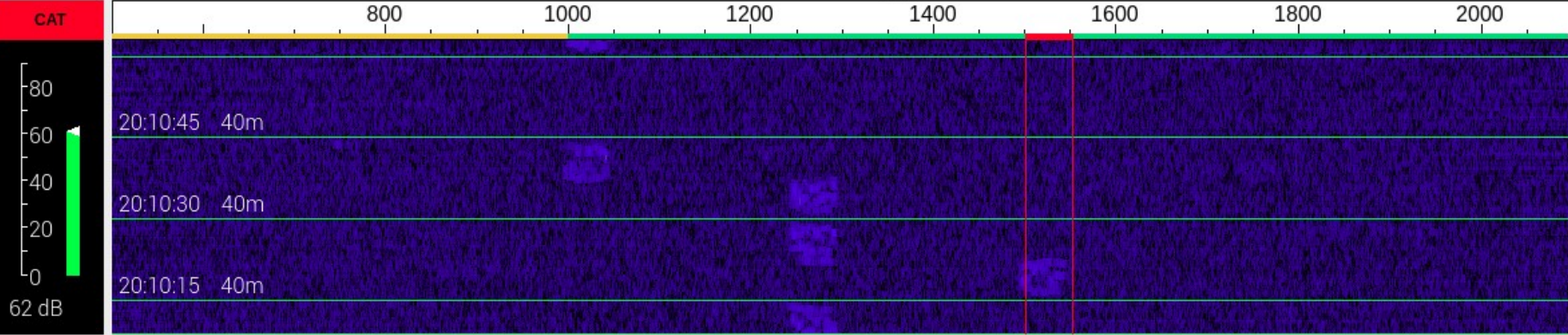
Offset	Age	SNR	Message(s)
997 Hz	1m	-10 dB	KB1CTC: KB9LX SNR -12 ◇
1247 Hz	15s	-12 dB	...: KB1CTC QUERY MSGS ◇ MSG ID 92 ◇

21:17:25 - (850) - W4BRU: @HB HEARTBEAT FM17 ◇
20:07:55 - (550) - W4BRU: @HB HEARTBEAT FM17 ◇

TYPE YOUR OUTGOING MESSAGES HERE.

Callsigns (6)	Age	SNR	Offset	✓	Name	mm
@ALLCALL						
KB1CTC	1m	-12 dB	1247 Hz			
KB9LX	45s	-09 dB	1246 Hz			
KJ4ERJ	3m	-15 dB	881 Hz			
KN4EBW	3m	-02 dB	410 Hz			
KN6KIG	18d	-15 dB	1771 Hz			

HB CQ REPLY SNR INFO STATUS Saved Directed Deselect Send Halt



Control
Offset
Offset:
QSY
Center

Decoding JS8 Last Tx: W4BRU: @HB HEARTBEAT FM17 3/15

HamPi support network

Groups.io replaces Yahoo special interest groups

Groups.io

Find or Create a Group

Help

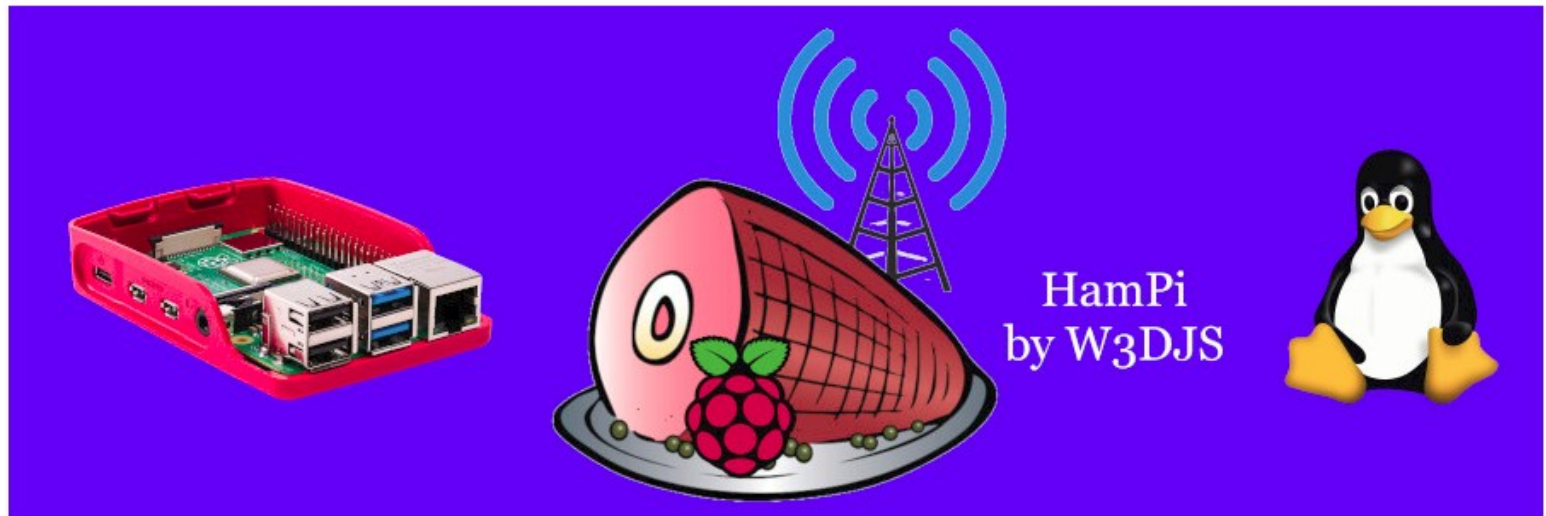
Log In

Sign Up

Home

Messages

Hashtags



HamPi Ham-Pi@groups.io

HamPi is a [Raspberry Pi computer image](#) file that has over 80 amateur radio application installed.

- HamPi applications [wiki](#) and information on the applications.

The HamPi version V1.2 was released on December 7, 2020, see message #389.

The HamPi version V1.1 was released on September 20, 2020, see message #165.

- Video: [Ham Radio - HamPI, possibly the best general ham radio image for the raspberry pi.](#)

David, [W3DJS](#), released HamPi V1.0 on June 19, 2020.

- Video: [HamPi Ham Radio Software for Raspberry Pi from W3DJS](#)

- Video: [HamPi Raspberry Pi Image for Ham Radio \(timestamp 11 to 53 minutes\)](#)

Hampi Wiki

🏠 dslotter / HamPi

<> Code

! Issues 16

🔗 Pull requests

▶ Actions

📁 Projects

📖 Wiki

Home

Neon22 edited this page 26 days ago · 29 revisions

Welcome to the Wiki for HamPi.

(Version 1.2 documentation)



How you load it

- Sign up for <https://groups.io/>
- Under groups.io “Find” HamPi
- Use the videos, etc. to guide your install

A screenshot of a post from the HamPi group on Groups.io. The post features a blue header image with a red Raspberry Pi case and a ham on a plate. Below the image, the post text reads: "HamPi Ham-Pi@groups.io HamPi is a [Raspberry Pi computer image file](#) that has over 80 amateur radio applications - HamPi applications [wiki](#) and information on the applications. The HamPi version V1.2 was released on December 7, 2020, see message #389. The HamPi version V1.1 was released on September 20, 2020, see message #165. - Video: [Ham Radio - HamPi, possibly the best general ham radio image for the ras](#) David, W3DJS, released HamPi V1.0 on June 19, 2020. - Video: [HamPi Ham Radio Software for Raspberry Pi from W3DJS](#) - Video: [HamPi Raspberry Pi Image for Ham Radio \(timestamp 11 to 53 minutes\)](#)

Raspberry Pi description

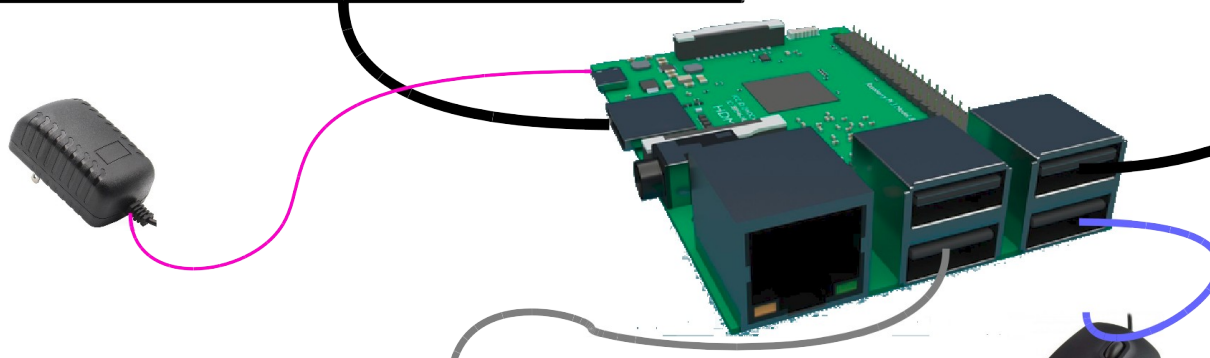
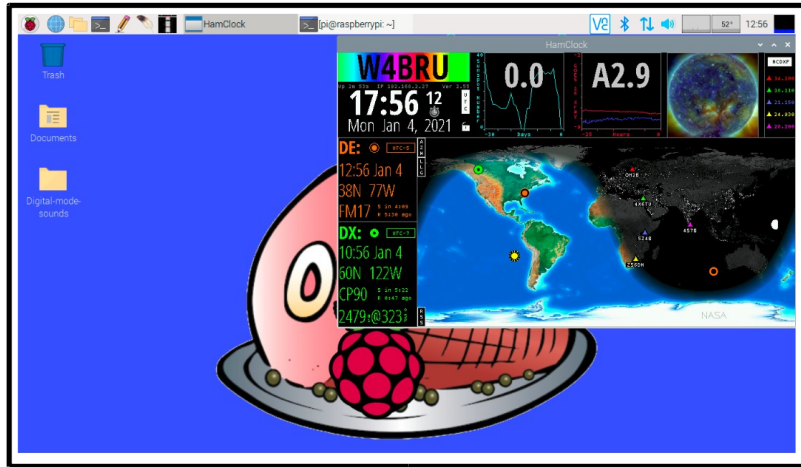
<u>Family</u>	<u>Model</u>	<u>Size</u>	<u>Ethernet</u>	<u>Wireless</u>
Raspberry Pi 3	B	Standard	Yes	Yes
	A+	Compact	No	Yes
	B+	Standard	Yes	Yes
Raspberry Pi 4	B (1 GiB)	Standard	Yes Gigabit	Yes
	B (2 GiB)	Standard	Yes Gigabit	Yes
	B (4 GiB)	Standard	Yes Gigabit	Yes
	B (8 GiB)	Standard	Yes Gigabit	Yes
	400 (4 GiB)	Keyboard	Yes Gigabit	Yes



Raspberry Pi connections



W4BRU connections



Facing the Terminal

Step 1: Backup Pi Home Directory using the following command (it is all one line):

```
cd /tmp && tar --use-compress-program=pigz -cvf pi_home_dir.tar.gz --exclude-caches --exclude 'pi/.cache/' --exclude "pi/Downloads/*" --exclude "pi/GridTracker/*" --exclude "pi/HamRadio/*" --exclude "pi/YAAC/*" --exclude "pi/dump1090_1.3.1_sdrplay/*" --exclude "pi/wsjtx_to_n3fjp/*" --exclude "pi/Documents/GridTracker/*" --exclude "pi/Documents/ardop-list/*" --exclude "pi/.local/lib/python3.7/*" --exclude "pi/perl5/*" --exclude "pi/ardop/*" --absolute-names --preserve-permissions /home/pi/
```

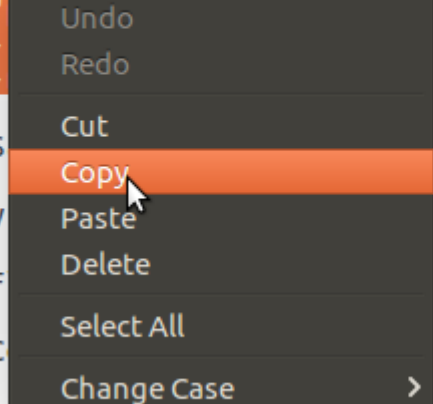
Step 2: Shut the Pi off the Pi

Then copy the backup file "pi_home_dir.tar.bz2" on to external media, for example, a USB memory stick.

Step 3: Flash the backup file to a new (micro)SD card.

Step 4: Copy the backup file "pi_home_dir.tar.bz2" to your /tmp directory on the new HamPi card.

Step 5: This is optional. If you want to test the backup you may run Tar in a test or dry run mode.



File Edit Tabs Help

```
pi@raspberrypi:~ $ cd /tmp && tar --use-compress-program=pigz -cvf pi_home_dir.tar.gz --exclude-caches --exclude "pi/.cache/" --exclude "pi/Downloads/*" --exclude "pi/GridTracker/*" --exclude "pi/HamRadio/*" --exclude "pi/YAAC/*" --exclude "pi/dump1090_1.3.1_sdrplay/*" --exclude "pi/wsjtx_to_n3fjp/*" --exclude "pi/pyqso-1.1.0/*" --exclude "pi/Documents/GridTracker/*" --exclude "pi/Documents/ardop-list/*" --exclude "pi/.local/lib/python3.7/*" --exclude "pi/perl5/*" --exclude "pi/ardop/*" --absolute-names --preserve-permissions /home/pi/
```

Sources of connection advice

- Hampi group in Groups.io.
- The group for your transceiver (like IC-7610) or rig interface (like Signal Link) in Groups.io.
- Search for independent support groups that don't use groups.io like CQRLog and fldigi.
- Email notes to W4BRU, KX4QC, and W4PGT

Setting up software

The image shows a composite of several overlapping software configuration windows. The background window is a main configuration panel with tabs for 'Program', 'Station', 'New QSO', 'Visible columns', 'Bands', 'TRX control', 'ROT control', and 'Modem'. It features a 'rigctld' section with a text field for the binary path set to '/usr/bin/rigctld'. Below this are tabs for 'Radio one' and 'Radio two'. The 'Radio one' tab is active, showing fields for 'Radio one, desc.: IC-7300-1', 'Host: localhost', 'RIG model: 373 Icom IC-7300', 'Device (e.g. /dev/ttyS0): /dev/ttyUSB0', 'Poll rate: 500', and 'Port number: 4532'. It also includes checkboxes for 'Use CWR instead of CW' (unchecked) and 'Run rigctld when program starts' (checked), and a section for 'Radio one serial parameters' with dropdowns for 'Serial speed: default', 'Data bits: default', 'Stop bits: default', 'Parity: default', 'Handshake: default', 'DTR: default', and 'RTS: default'. A 'Callbook search' window is overlaid on the bottom left, with 'QRZ.com' selected, 'User name: w4bru', and a masked password. Another 'rigctld' configuration window is overlaid on the right, showing 'Radio two, desc.: fldigi', 'Host: localhost', 'RIG model: 1 Hamlib Dummy', 'Device (e.g. /dev/ttyS0):', 'Poll rate: 500', and 'Port number: 4532'. It also has the 'Run rigctld when program starts' checkbox checked and 'Radio two serial parameters' with 'Serial speed: 19200', 'Data bits: default', 'Stop bits: default', 'Parity: default', 'Handshake: HARDWAR', 'DTR: default', and 'RTS: default'. A 'Station' information window is also visible in the top right, containing fields for 'Call: W4BRU', 'Name: Buce', 'QTH: Richmond VA US', and 'Loc: FM17GN'.

Pi vendors

- <https://www.raspberrypi.org/products>

These companies are all Raspberry Pi Approved Resellers. You will be taken to their site to buy this product.



Pi vendors

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DESIGN THE WORLD



Hampi – questions, discussion

