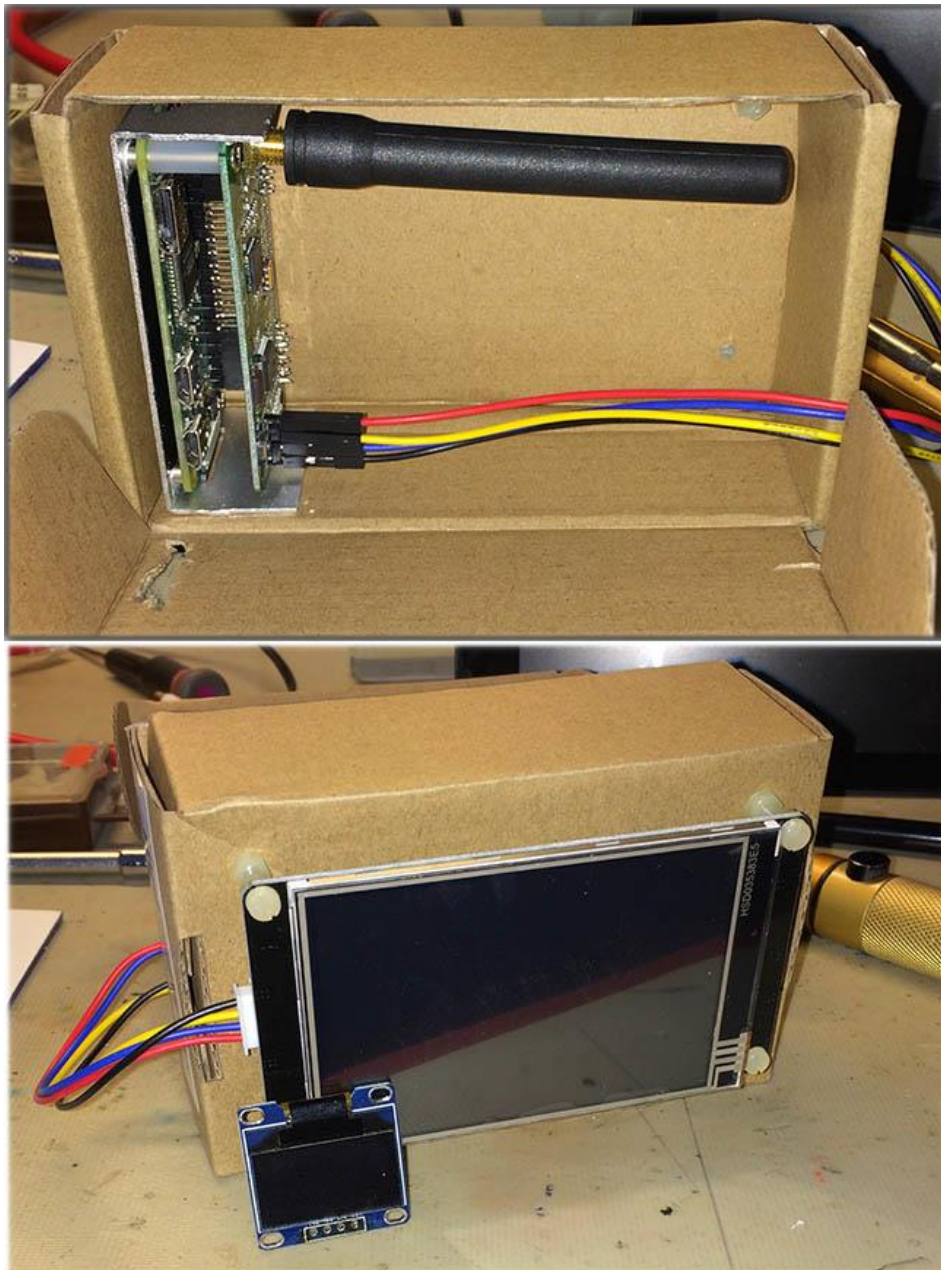


Jumbo Spot og Pi-Star D-Star opsætning.

Når ikke der er en D-Star repeater i nærheden eller den er optaget af en anden QSO er et Hotspot en måde at komme på D-Star nettet, når vi så bare bruger en andet tale gruppe = TG så DCS004 B stadigvæk er fri for opkald...



Mit Jumbo Hotspot bor i en ganske simpel pap æske ;-) mest for at kunne holde det tilføjede større display oprejst, Displayet er et Nextion Enhanced 3 ½ Tomme NX4832K035 med berøringsfølsom skærm, samt mulighed for at designe udsende og funktioner i et tilhørende program, billedet her under viser (mere eller mindre) mit 'foreløbige' design ;-)



Jumbo Hotspot i standby.



Jumbo Hotspot i modtager mode.

Billederne af min opsætning bør tale for sig selv, jeg bruger som billederne også viser Pi-Star, til at kontrollere mit Jumbo Hotspot med.

Pi-Star Digital Voice - Configuration

Dashboard | Admin | Expert | Power | Update | Backup/Restore | Factory Reset

Gateway Hardware Information

Hostname	Kernel	Platform	CPU Load	CPU Temp
pi-star	4.9.35+	Pi Zero W Rev 1.1 (512MB)	0.79 / 0.28 / 0.15	44.4°C / 111.9°F

Control Software

Setting	Value
Controller Software:	<input type="radio"/> DStarRepeater <input checked="" type="radio"/> MMDVMHost (DV-Mega Minimum Firmware 3.07 Required)
Controller Mode:	<input checked="" type="radio"/> Simplex Mode <input type="radio"/> Duplex Repeater (or Half-Duplex on Hotspots)

Apply Changes

MMDVMHost Configuration

Setting	Value
DMR Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 900
D-Star Mode:	<input checked="" type="checkbox"/> RF Hangtime: 20 Net Hangtime: 200
YSF Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
P25 Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
NXDN Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
YSF2DMR:	<input type="checkbox"/>
YSF2NXDN:	<input type="checkbox"/>
YSF2P25:	<input type="checkbox"/>
DMR2YSF:	<input type="checkbox"/> Uses 7 prefix on DMRGateway
DMR2NXDN:	<input type="checkbox"/> Uses 7 prefix on DMRGateway
FOCSAG:	<input type="checkbox"/> FOCSAG Paging Features
MMDVM Display Type:	Nextion <input type="checkbox"/> Port: modem <input type="checkbox"/> Nextion Layout: ON7LDS L2 <input type="checkbox"/>

Apply Changes

Min opsætning bruger et Nextion Display...

General Configuration

Setting	Value
Hostname:	pi-star Do not add suffixes such as .local
Node Callsign:	OZ5RZ
Radio Frequency:	432.487.500 MHz
Latitude:	55.6875 degrees (positive value for North, negative for South)
Longitude:	012.4583 degrees (positive value for East, negative for West)
Town:	Copenhagen, JO65FQ
Country:	Denmark, DK
URL:	http://www.radiohobby.dk <input type="radio"/> Auto <input checked="" type="radio"/> Manual
Radio/Modem Type:	STM32-DVM / MMDVM_HS - Raspberry Pi Hat (GPIO) <input type="checkbox"/>
Node Type:	<input checked="" type="radio"/> Private <input type="radio"/> Public
APRS Host:	denmark.aprs2.net <input type="checkbox"/>
System Time Zone:	Europe/Copenhagen <input type="checkbox"/>
Dashboard Language:	english_uk <input type="checkbox"/>

Apply Changes

D-Star Configuration

Setting	Value
RPT1 Callsign:	OZ5RZ <input type="checkbox"/> B <input type="checkbox"/>
RPT2 Callsign:	OZ5RZ <input type="checkbox"/> G <input type="checkbox"/>
Remote Password:	*****
Default Reflector:	DCS004 <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="radio"/> Startup <input type="radio"/> Manual
ircDDBGateway Language:	English_(UK) <input type="checkbox"/>
Time Announcements:	<input checked="" type="checkbox"/>
Callsign Routing:	<input checked="" type="checkbox"/> Connect ircDDB for call routing
Use DPlus for XRF:	<input type="checkbox"/> Note: Update Required if changed

Apply Changes

Firewall Configuration

Setting	Value
Dashboard Access:	<input checked="" type="radio"/> Private <input type="radio"/> Public
ircDDBGateway Remote:	<input checked="" type="radio"/> Private <input type="radio"/> Public
SSH Access:	<input checked="" type="radio"/> Private <input type="radio"/> Public
Auto AP:	<input checked="" type="radio"/> On <input type="radio"/> Off Note: Reboot Required if changed
uPNP:	<input checked="" type="radio"/> On <input type="radio"/> Off

Apply Changes

Wireless Configuration

Refresh Reset WiFi Adapter Configure WiFi

Wireless Information and Statistics

Interface Information	Wireless Information
Interface Name : wlan0	Connected To : OZ5RZ
Interface Status : Interface is up	AP Mac Address : b4:fb:e4:2e:59:2a
IP Address : 192.168.1.45	Bitrate : 24.0 MBit/s
Subnet Mask : 255.255.255.0	Signal Level : -73 dBm
Mac Address : b8:27:eb:03:c8:a7	Transmit Power : 31 dBm
Received Packets : 45111082	Link Quality : 53 %
Received Bytes : 3252974771 (3.0 GiB)	Channel Info : 2.4GHz Ch1 (2.412 GHz)
Transferred Packets : 15518743	WiFi Country : JP
Transferred Bytes : 2221717445 (2.0 GiB)	

Information provided by ifconfig and iwconfig

Remote Access Password

User Name	Password
pi-star	Password: <input type="password"/> Confirm Password: <input type="password"/> Set Password
WARNING: This changes the password for this admin page AND the "pi-star" SSH account	

Pi-Star web config, © Andy Taylor (MW0MWZ) 2014-2020.
 Need help? Click here for the Support Group
 Get your copy of Pi-Star from here.

Her under vist hvordan 'Dashboard' nogenlunde gerne skulle se ud;-).

Hostname: pi-star
Pi-Star: 3.4.16 / Dashboard: 20201205

Pi-Star Digital Voice Dashboard for OZ5RZ

Dashboard | Admin | Live Logs | Power | Update | Configuration

Gateway Hardware Information

Hostname	Kernel	Platform	CPU Load	CPU Temp
pi-star	4.9.35+	Pi Zero W Rev 1.1 (512MB)	0.47 / 0.2 / 0.12	44.4°C / 111.9°F

Service Status

MMDVMHost	DMRGateway	YSFGateway	YSFParrot	P25Gateway	P25Parrot
DStarRepeater	ircDDBGateway	TimeServer	PiStar-Watchdog	PiStar-Remote	PiStar-Keeper

Modes Enabled

D-Star	DMR
YSF	P25
YSF XMode	NXDN
DMR XMode	POCSAG

D-Star Link Information

Radio	Default	Auto	Timer	Link	Linked to	Mode	Direction	Last Change (CEI)
OZ5RZ B	DCS004 B	Auto	Never	Up	DCS004 B	DCS	Outgoing	03:53:09 Dec 7th

D-Star Link Manager

Radio Module	Reflector	Link / Un-Link	Action
OZ5RZ B <input type="button" value="v"/>	DCS004 <input type="button" value="v"/> B <input type="button" value="v"/>	<input checked="" type="radio"/> Link <input type="radio"/> UnLink	<input type="button" value="Request Change"/>

Gateway Activity

Time (CEI)	Mode	Callsign	Target	Src	Dur(s)	Loss	BER
20:00:00 Dec 7th	D-Star	OZ5RZ/TIME	CQCQCQ	Net	3.9	0%	0.0%
19:27:52 Dec 7th	D-Star	OZ7BKJ/ID51	CQCQCQ	Net	0.7	8%	0.0%
17:29:08 Dec 7th	D-Star	OZ1FKU/705	CQCQCQ	Net	1.1	0%	0.0%
16:24:59 Dec 7th	D-Star	OZ5VO/RSNC	CQCQCQ	Net	1.2	0%	0.0%
16:24:56 Dec 7th	D-Star	OZ5VO/9700	CQCQCQ	Net	1.1	1%	0.0%
16:24:40 Dec 7th	D-Star	OZ5VO/705	CQCQCQ	Net	3.9	0%	0.0%
16:16:56 Dec 7th	D-Star	OZ1CCJ/2820	CQCQCQ	Net	0.5	0%	0.0%
16:15:03 Dec 7th	D-Star	OZ8CU	CQCQCQ	Net	5.9	0%	0.0%
16:09:49 Dec 7th	D-Star	OZ7AP/5100	CQCQCQ	Net	4.1	0%	0.0%
16:09:22 Dec 7th	D-Star	OZ4AFR/705	CQCQCQ	Net	2.1	0%	0.0%
16:09:01 Dec 7th	D-Star	OZ8ZY/7100	CQCQCQ	Net	19.9	0%	0.0%
15:57:04 Dec 7th	D-Star	OZ4ACK/705	CQCQCQ	Net	4.0	0%	0.0%
15:55:35 Dec 7th	D-Star	OZ4KA/DSDV	CQCQCQ	Net	0.3	0%	0.0%

Local RF Activity

Time (CEI)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI
------------	------	----------	--------	-----	--------	-----	------

Network Status

D-Star Net	DMR Net
YSF Net	P25 Net
YSF2DMR	NXDN Net
YSF2NXDN	YSF2P25
DMR2NXDN	DMR2YSF

Radio Info

Trx	Listening
Tx	432.487500 MHz
Rx	432.487500 MHz
PW	HS_Hat:v1.3.3

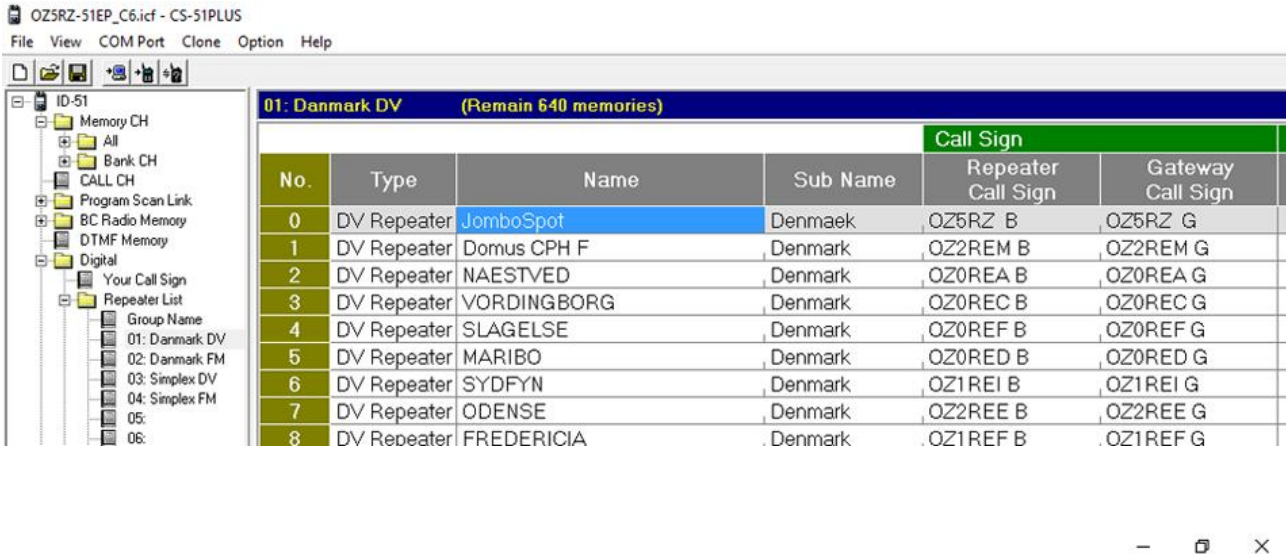
D-Star Repeater

RPT1	OZ5RZ B
RPT2	OZ5RZ G

D-Star Network

APRS	denmark.aprs2.net
IRC	rr.openquad.net
Linked to DCS004 B (DCS Outgoing)	

De to næste billeder (et billede delt til to) viser i øverste linje, opsætningen af min ICOM 51 til at kunne bruge mit Jumbo hotspot.



Gateway Call Sign	Frequency				Tone			USE (FROM)	Position	Latitude	Longitude
	Operating Freq	DUP	Offset Freq	Mode	Tone	Repeater Tone					
Z G	434.487500	-DUP	0.000000	DV	—	—	Yes	Exact	55°41.03'N	012°28.56'E	
REM G	434.550000	-DUP	2.000000	DV	—	—	Yes	Exact	55°40.46'N	012°30.05'E	
REA G	434.562500	-DUP	2.000000	DV	—	—	Yes	Exact	55°13.40'N	011°44.39'E	
REC G	434.587500	-DUP	2.000000	DV	—	—	Yes	Approximate	55°00.32'N	011°54.33'E	
REF G	434.575000	-DUP	2.000000	DV	—	—	Yes	Exact	55°22.36'N	011°20.11'E	
RED G	434.512500	-DUP	2.000000	DV	—	—	Yes	Approximate	54°46.28'N	011°30.26'E	
REI G	434.587500	-DUP	2.000000	DV	—	—	Yes	Approximate	55°05.00'N	010°20.00'E	
REE G	434.537500	-DUP	2.000000	DV	—	—	Yes	Exact	55°22.44'N	010°30.31'E	
REF G	434.525000	-DUP	2.000000	DV	—	—	Yes	Exact	55°34.02'N	009°43.31'E	

For at få kontakt med Jumbo hotspot via WI-FI skal en filen ved navn wpa_supplicant.conf laves, filens indhold er vist her under, ssid og psk skal tilpasses det ønskede WI-FI netværk, der kan ligge flere WI-FI netværk i samme fil, gentag fra linje 7 til 12 for hver netværk med en tom linje imellem.

```

t.Kommandoer.txt | my.ini | OZ6PSJ_JumboSpot.txt | wpa_supplicant.conf
1  ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev
2  update_config=1
3  ap_scan=1
4  fast_reauth=1
5  country=JP
6
7  network={
8      ssid="HomeBox-xyzq_2.4G"
9      psk="dit password"
10     id_str=""
11     priority=100
12 }

```

Filen kopieres til root / roden på SD kortet (som vist her under), hvor Linux selv finder filen og installere den i systemet, samt fjerner den fra root, så skal noget ændres skal en ny fil laves.

Navn	Ændringsdato	Type	Størrelse
.fseventsd	06-07-2018 08:17	Filmappe	
overlays	17-07-2017 22:17	Filmappe	
bcm2708-rpi-0-w.dtb	17-07-2017 22:17	DTB-fil	16 KB
bcm2708-rpi-b.dtb	17-07-2017 22:17	DTB-fil	15 KB
bcm2708-rpi-b-plus.dtb	17-07-2017 22:17	DTB-fil	16 KB
bcm2708-rpi-cm.dtb	17-07-2017 22:17	DTB-fil	15 KB
bcm2709-rpi-2-b.dtb	17-07-2017 22:17	DTB-fil	17 KB
bcm2710-rpi-3-b.dtb	17-07-2017 22:17	DTB-fil	18 KB
bcm2710-rpi-cm3.dtb	17-07-2017 22:17	DTB-fil	16 KB
bootcode.bin	17-07-2017 22:17	BIN-fil	50 KB
cmdline.txt	02-08-2016 11:36	Tekstdokument	1 KB
config.txt	18-08-2017 10:06	Tekstdokument	2 KB
COPYING.linux	17-07-2017 22:17	LINUX-fil	19 KB
fixup.dat	17-07-2017 22:17	DAT-fil	7 KB
fixup_cd.dat	17-07-2017 22:17	DAT-fil	3 KB
fixup_db.dat	17-07-2017 22:17	DAT-fil	10 KB
fixup_x.dat	17-07-2017 22:17	DAT-fil	10 KB
issue.txt	27-05-2016 14:41	Tekstdokument	1 KB
kernel.img	17-07-2017 22:17	Diskafbildningsfil	4,277 KB
kernel7.img	17-07-2017 22:17	Diskafbildningsfil	4,472 KB
LICENCE.broadcom	17-07-2017 22:17	BROADCOM-fil	2 KB
LICENSE.oracle	27-05-2016 14:41	ORACLE-fil	19 KB
start.elf	17-07-2017 22:17	ELF-fil	2,789 KB
start_cd.elf	17-07-2017 22:17	ELF-fil	645 KB
start_db.elf	17-07-2017 22:17	ELF-fil	4,877 KB
start_x.elf	17-07-2017 22:17	ELF-fil	3,848 KB
wpa_supplicant.conf	15-01-2019 12:50	CONF-fil	1 KB