



MMDVM UVIYN Hotspot Configuration

The MMDVM UVIYN hotspot is a completely assembled MMDVM Hotspot with self-contained rechargeable batteries. Supports DMR, YSF and P25. Charging requires a 2 Ampere DC input using the micro USB cable.

A few steps are needed to get you online and on the air with the hotspot.

WiFi Configuration

Note: the MMDVM Hotspot only operates on 2.4GHz Wifi

1. Turn on the hotspot by a short press on the power button (top left side), wait 2 minutes for it to boot up.
 - (Note: two short presses on the power button will turn Off the hotspot)
2. On your PC, open your WiFi networks and look for SSID “DMRP25YSF-xxx” and connect to it, no password needed
3. Point your web browser to 192.168.8.1, user= root and password= 12345678

The screenshot shows a web browser window with the address bar displaying "192.168.8.1/cgi-bin/luci". The page title is "BG7IYN". The main heading is "Authorization Required" with the instruction "Please enter your username and password." Below this, there are two input fields: "Username" with the value "root" and "Password" with the value "12345678". At the bottom, there are two buttons: "Login" and "Reset". The footer text reads "Powered by BG7IYN 2019".

Screenshot courtesy of manufacturer



4. On the top menu bar click on **Network** and select **WiFi**

The screenshot shows the ttci web interface. At the top, there is a navigation bar with the user ID 'BG7IYN' and menu items: Status, System, Network, and Logout. The 'Network' menu is open, showing options: Interfaces, **Wifi** (highlighted with a white arrow), DHCP and DNS, Hostnames, Static Routes, Firewall, and Diagnostics. Below the menu, the 'Status' section is visible, displaying system information:

Hostname	
Model	128
Firmware Version	OpenWrt Chaos Calmer 15.05.
Kernel Version	3.18.29
Local Time	Tue Feb 12 23:10:24 2019
Uptime	0h 29m 45s
Load Average	0.02, 0.05, 0.10

5. **Scan** for WiFi networks then click on Join to select your 2.4GHz SSID WiFi

The screenshot shows the 'Wireless Overview' section of the ttci web interface. At the top, there is a navigation bar with the user ID 'BG7IYN' and menu items: Status, System, Network, Logout, and an 'AUTO REFRESH ON' button. Below the navigation bar, there are two radio status indicators: 'radio0: Master "DMRP25YSF-6CFA"' and 'radio0: Client "UplinkAp"'. The 'Wireless Overview' section displays two wireless networks:

SSID	Mode	Signal	Actions
Generic WEXT 802.11bg (radio0)	Master	10%	Scan, Add, Disable, Edit, Remove
UplinkAp	Client	10% Wireless is disabled or not associated	Enable, Edit, Remove

Below the wireless overview, there is an 'Associated Stations' section with a table header:

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
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6. Click on **Join Network** to select your WiFi (example here is SSID TZB)



Join Network: Wireless Scan

 100%	TZB Channel: 12 Mode: Master BSSID: 54:36:9B:1D:85:07 Encryption: WPA2 - PSK	
 100%	MOTION Channel: 12 Mode: Master BSSID: 54:36:9B:1B:3A:44 Encryption: open	
 100%	E&T technologies Channel: 6 Mode: Master BSSID: A0:57:E3:0C:66:98 Encryption: WPA2 - PSK	
 100%	Channel: 6 Mode: Master BSSID: A0:57:E3:0C:66:9D Encryption: WPA2 - PSK	
 100%	Channel: 6 Mode: Master BSSID: A0:57:E3:0C:66:99 Encryption: WPA2 - PSK	

7. Enter your WiFi password and **Submit**

Join Network: Settings

Repeater wireless configuration Configure wireless for Widora repeater interface.

WPA passphrase

 Specify the secret encryption key here.

Name of the new network

 The allowed characters are: A-Z, a-z, 0-9 and _

Create / Assign firewall-zone

 lan:

 wan:

 unspecified -or- create:

Choose the firewall zone you want to assign to this interface. Select *unspecified* to remove the interface from the associated zone or fill out the *create* field to define a new zone and attach the interface to it.

8. Click on **Network**, then **WiFi**, then click on **Enable** next to your WiFi SSID



radio0: Master "DMRP25YSF-6CFA" radio0: Client "TZB"

Wireless Overview

Generic WEXT 802.11bg (radio0) Scan Add

SSID: DMRP25YSF-6CFA | Mode: Master
10% **BSSID: 0C:EF:AF:D2:6C:FA | Encryption: -** Disable Edit Remove

SSID: TZB | Mode: Client
10% *Wireless is disabled or not associated* Enable Edit Remove

Activate this network

Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
------	-------------	--------------	--------	-------	---------	---------

No information available

Powered by BG7IYN 2019

radio0: Master "DMRP25YSF-6CFA" radio0: Client "TZB"

Wireless Network: Client "TZB" (apcli0)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup

Status **SSID: TZB | Mode: Client**
10% *Wireless is disabled or not associated*

Wireless network is disabled Enable

Interface Configuration

General Setup **Wireless Security**

ESSID

Mode

Back to Overview Save & Apply Save Reset



Configure DMR ID and Frequency

The screenshot shows the BG7IYN web interface. At the top, there is a navigation bar with the text 'BG7IYN' and several dropdown menus: 'Status', 'System', 'Network', and 'Logout'. Below this, the main content area is titled 'DMR P25 Settings' and includes the status 'Host Running Ready QSO'. There are tabs for 'Service' and 'Global'. A dropdown menu is open, listing various system settings: 'System', 'Administration', 'Software', 'Startup', 'Scheduled Tasks', 'Mount Points', 'RADIO_DMR_P25', 'LED Configuration', 'Backup / Flash Firmware', and 'Reboot'. A red arrow points to the 'RADIO_DMR_P25' option. At the bottom right of the interface, there are three buttons: 'Save & Apply', 'Save', and 'Reset'. The footer of the page reads 'Powered by BG7IYN 2019'.



9. Enter your Call Sign and DMR ID. Also select the frequency for your hotspot, both TX and RX should be the same (choose a frequency that will not interfere with local repeaters or other communications)

DMR P25 Setting Here

Host Running Ready QSO

Service

Global

YSF

YSFHosts

P25

P25Hosts

TECH

```
[General]
Callsign=BH8DIB      change to your callsign
Id=4608012          change to your dmrids
Timeout=240
Duplex=0
# ModeHang=10
RFModeHang=300
NetModeHang=300
Display=Nextion
Daemon=0

[Info]
RXFrequency=439600000
TXFrequency=439600000  RX/TX freq must same
Power=1
Latitude=22.5668
Longitude=113.9678
Height=3
Location="NY"
Description="USA"
URL=http://iumbospot17.blogspot.com
Changing MMDVM.ini
```



DMR P25 Setting Here

Host Running Ready QSO

Service Global YSF YSFHosts P25 P25Hosts

```
[D-Star]
Enable=0
Module=C
SelfOnly=0
AckReply=1
AckTime=750
AckMessage=0
ErrorReply=1
RemoteGateway=0
# ModeHang=10

[DMR]
Enable=1 Set 1 to enable DMR
Beacons=1
BeaconInterval=100
BeaconDuration=3
ColorCode=1
SelfOnly=0
EmbeddedLCOnly=0
DumpTADData=1
```

Changing MMDVM.ini

DMR P25 Setting Here

Host Running Ready QSO

Service Global YSF YSFHosts P25 P25Hosts TECH

```
[NXDN Id Lookup]
File=/etc/NXDN.csv
Time=24

[Modem]
Port=/dev/ttyS1
#gm950i_TXInvert_0_RXInvert_0
#gm300_RXInvert_0_TXInvert_1
TXInvert=0
RXInvert=0
PTTInvert=0
TXDelay=100
RXOffset=0
TXOffset=0 RXOffset see on labels
DMRDelay=0
RXLevel=50
TXLevel=50
TXDCOffset=0
CWIdTXLevel=50
D-StarTXLevel=50
```

Changing MMDVM.ini



Optional Modes

Service Global YSF YSFHosts P25

System Fusion]

```
Enable=1          set 1 enable YAESU
LowDeviation=0
SelfOnly=0
TXHang=4
#DSQ=1
RemoteGateway=0
#ModeHang=5
```

P25]

```
Enable=1          set 1 enable P25
#AC=293
SelfOnly=0
OverrideUIDCheck=0
RemoteGateway=0
#ModeHang=10
```

NXDN]

```
Enable=0          don't support NXDN yet
#AN=1
SelfOnly=0
```

Changing MMDVM.ini

10. Change the IP address to the nearest US DMR BrandMeister Master server

3101 New York, NY is IP **107.191.99.14**

3102 Dallas, TX is IP **74.91.114.19**

3103 San Jose, CA is IP **74.91.118.251**

3108 Atlanta, GA is IP **64.94.238.196**



DMR P25 Setting Here

Host Running Ready QSO

Service

Global

YSF

YSFHosts

P25

P25Hosts

TECH

Debug=0

[DMR Network]

Enable=1

Address=47.100.76.205 **change this BM server IP for your country**

#bm.dv.or.kr 47.100.76.205

Port=62031

Jitter=300

Local=62032

Password=passw0rd

Options=

Options=StartRef=46001;RelinkTime=15;UserLink=1;TS1_1=460;TS1_2=46600;TS1_3=3100;TS1_4=91;TS1_5=92;

Slot1=1

Slot2=1

ModeHang=5

Debug=0

DMR P25 Setting Here

Host Running Ready QSO

Service

Global

YSF

YSFHosts

P25

P25Hosts

TECH

PWMBright=100

PWMDim=16

DisplayClock=1

UTC=0

[Nextion]

Port=modem **change this to modem support 2.2inch tft lcd**

Port=/dev/ttyAMA0

#Port=\\.\COM5

Brightness=50

DisplayClock=1

UTC=0

IdleBrightness=10

ScreenLayout=3



OPTIONAL SETTINGS FOR YSF MODE

DMR P25 Setting Here

Host Running Ready QSO

Service Global **YSF** YSFHosts P25 P25Hosts TECH

```
[Network]
Startup=Local Parrot
#Startup=CN-China-03
#Startup=CN China #1
InactivityTimeout=60
Revert=0
Debug=0

[aprs.fi]
Enable=0
# Server=asia.aprs2.net
Server=euro.aprs2.net
Port=14580
#it is your aprs password
#Password=15505
Password=24482
Description=Jumbospot YSF lgate
Suffix=Y
```

default YSF Server is Parrot, you can just press X button on FT2D to select Server, or change Startup Server Reference YSFHosts's Name

Set 1 you can see your Callsign on aprs.fi when you press PTT on FT2D

Change your aprs password to login aprs

DMR P25 Setting Here

Host Running Ready QSO

Service Global **YSF** YSFHosts P25 P25Hosts TECH

```
[General]
Callsign=BH8DIB
Suffix=RPT
# Suffix=ND
Id=4600145
RptAddress=127.0.0.1
RptPort=3200
LocalAddress=127.0.0.1
LocalPort=4200
Daemon=0

[Info]
RXFrequency=439600000
TXFrequency=439600000
Power=1
Latitude=22.5668
Longitude=113.9678
Height=0
Name=Nowhere
Description=Multi-Mode Repeater
```

change to your callsign

change to your dmr id

change to your operate freq same in Global TX/RX Freq



DMR P25 Setting Here

Host Running Ready QSO

Service Global **YSF** YSFHosts P25 P25Hosts TECH

FileRoot=YSFGateway

[YSF Network]

Enable=1

Port=42000

Hosts=/etc/YSFHosts.txt

ReloadTime=60

ParrotAddress=127.0.0.1

ParrotPort=42012

YSF2DMRAddress=127.0.0.1

YSF2DMRPort=42013

YSF2NXDNAddress=127.0.0.1

YSF2NXDNPort=42014

YSF2P25Address=127.0.0.1

YSF2P25Port=42015

[FCS Network]

Enable=1

set 1 you can use FT2D press X button to select Server

Rooms=/etc/FCSRooms.txt

Port=42001

OPTIONAL SETTINGS FOR YSF MODE

DMR P25 Setting Here

Host Running Ready QSO

Service Global YSF **YSFHosts** P25 P25Hosts TECH

Copy CN China#2 to YSF StartUP if you want use this server default

```

39552;BM-TG-2087;BrMstr TG2087;51.254.126.212;42007;001;
93206;BM-TG-2088;BrMstr TG2088;51.254.126.212;42008;001;
81116;BM-TG-20883;BrMstr TG20883;51.254.126.212;42083;001;
35402;BM-TG-2089;BrMstr TG2089;51.254.126.212;42009;001;
36096;BR YSF724;C4FM - DV Braz;66.55.64.14;42000;004;http://ysf.dvbrazil.com.br/
85044;C4FM-SEOUL;TG45004 XLX170;121.162.91.45;42000;003;http://ysfso.dvham.com/indexysf.php
77353;CA Canada;C4FM Ontario;144.217.241.23;42100;010;http://c4fmontario.hopto.org
49473;CA QUEBEC;QC FR Fusion;64.34.60.44;42000;001;http://www.ve2mrc.com/ysfr/index.php
79602;Carolina Link;Carolina Link;52.3.47.55;42000;007;http://52.3.47.55/index.php
30998;CH 228 Swiss;Bridge BM22820;176.10.105.210;42000;007;http://ysf.hb-connect.ch/
52796;CH JOTA;Jota CH;157.161.57.65;42001;000;http://pi2.woody.ch:8080/YSFReflector-Dashboard/ (ipv6 only)
18829;CN CC#1;TG 460501;47.104.177.248;42000;001;https://mmdvm.cc/ysf/
80337;CN China #1;C4FM YSF;120.234.41.144;42000;043;http://ysf.sz790.com:8081/
82442;CN China #2;W24269/TG46072;116.6.107.115;42006;007;http://ufozhuzi.tpdnns.cn:8081/
09724;CN China #99;YSF Test;103.107.105.251;42000;000;http://ysf.ncwxd.com
40973;CN-China-03;C4FM;123.58.6.137;42000;002;http://123.58.6.137:8088
30490;CO 4 KILO MIKE;Antioquia;190.159.68.105;42000;000;
36245;CO HK_BMDMR_LCRA;YSF to DMR;186.29.69.76;42000;002;http://bmdmr.lcra.org.co
72001;CO HK_NAL_LCRA;BM TG732;186.154.94.181;42000;001;http://ysfnal.lcra.org.co

```



OPTIONAL SETTINGS FOR P25

DMR P25 Setting Here

Host Running Ready QSO

Service Global YSF YSFHosts **P25** P25Hosts TECH

[General]

CallSign=BH8DIB **Change to your
call sign**
RptAddress=127.0.0.1
RptPort=32010
LocalPort=42020
Announcements=1
Daemon=0

[Id Lookup]

Name=/etc/DMRids.dat
Time=24

[Log]

Logging levels, 0=No logging
DisplayLevel=1
FileLevel=0
FilePath=/tmp/
FileRoot=P25Gateway

[Network]

Startup=10402 **change the number you want to startup P25 server, Reference in P25Hosts**

Changing P25Gateway.ini

Pacific, 1040x

10400 pacificp25.repeater.info 41000
10401 pacifictac1.repeater.info 41010
10402 47.104.177.248 41000
10403 120.234.41.144 41000

America-Ragchew, 28299

28299 65.101.7.51 41000

Alabama Link

31010 p25.alabamalink.info 41000

31665 P25-DMR Gateway

31665 74.91.127.166 41000

31672 P25 PI-Star chat

31672 w1msg.trianglenc.net 41000

50525 Bridge to YSF, NXDN and DMR

50525 50525.p25dvm.com 41000

add new p25 server in new line here

Changing P25Hosts.ini




11. When done setting all the desired Modes, Click on **Service tab**, then **Save & Apply**, then **Restart**


DMR P25 Setting Here

Host Running Ready QSO

Service Global YSF YSFHosts P25 P25Hosts TECH

Restart to Enable New Config  2

after change ,press 1,2 to enable new config

1 

12. Should you have any issues, you can reset the Hostpot and start over by clicking **Perform Reset**

BG7IYN Status System Network Logout


Flash operations

Actions Configuration

Backup / Restore

Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform squashfs images).

Download backup:

Reset to defaults:  if have problem just reset

To restore configuration files, you can upload a previously generated backup archive here.

Restore backup: No file chosen

Flash new firmware image

Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration (compatible firmware image).

Keep settings:

Image: No file chosen



Final Step

Program the codeplug on your DMR radio with each channel matching the frequency of the hotspot, and start enjoying full access to the DMR network.

END OF DOCUMENT