TYT DMR
MD-9600 & MD-UV380

Prepared by W8BR
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Code Plug Data Structure

W8BR – TYT MD-UV380
And TYT MD-9600 Mobile

Suggested steps, in order.

1. Basic Settings
2. Create Contacts
3. Create Receive Groups
4. Create Channels
5. Create Zones / Scan Lists

Digital Contacts List
(Talk Groups & Individual IDs)
Contacts Lists contain:

- Talk Group Name
- Talk Group Number
- Call Type (Group Call)
- Call ID #
- (No) Call Receive Tone

Digital Receive Groups
(Grouping of Digital Contacts)

Channel Information

- Channel Name
- Frequenc(ies)
- Contact Name
- Group List
- Color Code
- Repeater Time Slot
- Etc.

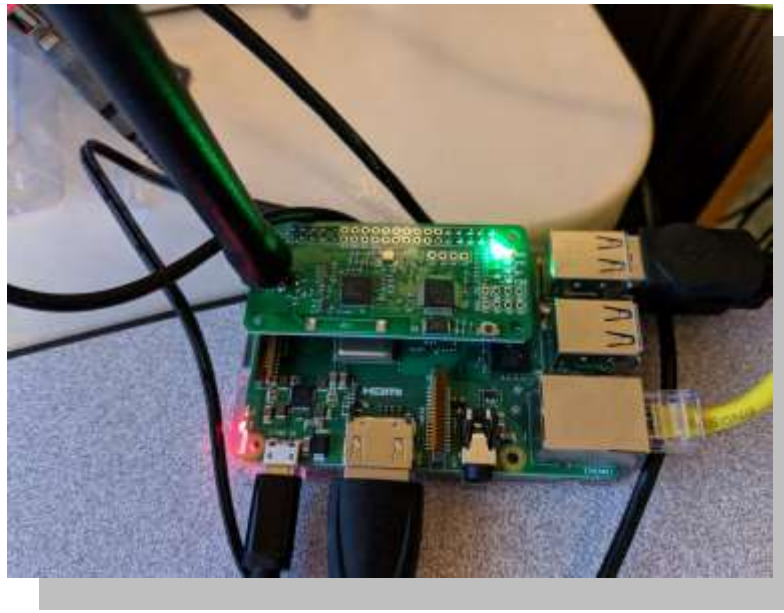
Zone Information
(Grouping of Channels by Town, County, Simplex, Analog, Digital, etc.)

- Channel A
- Channel B

Scan List
(Group Available Channels)

*** A separate Channel needs to be created for every Talk Group desired. For example: One repeater with multiple Talk Groups or one Hotspot will require separate Channels for each Talk Group desired.**

Pi-Star Hotspot
Using
Multi-Mode Digital Voice Modem (MMDVM)
and Raspberry Pi 3 B+

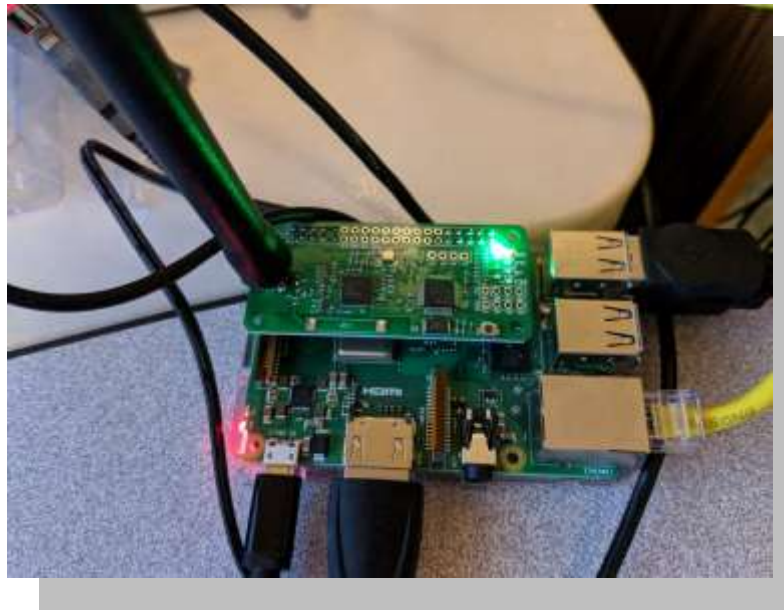


W8BR – Homebrew Hotspot

Pi-Star Hotspot

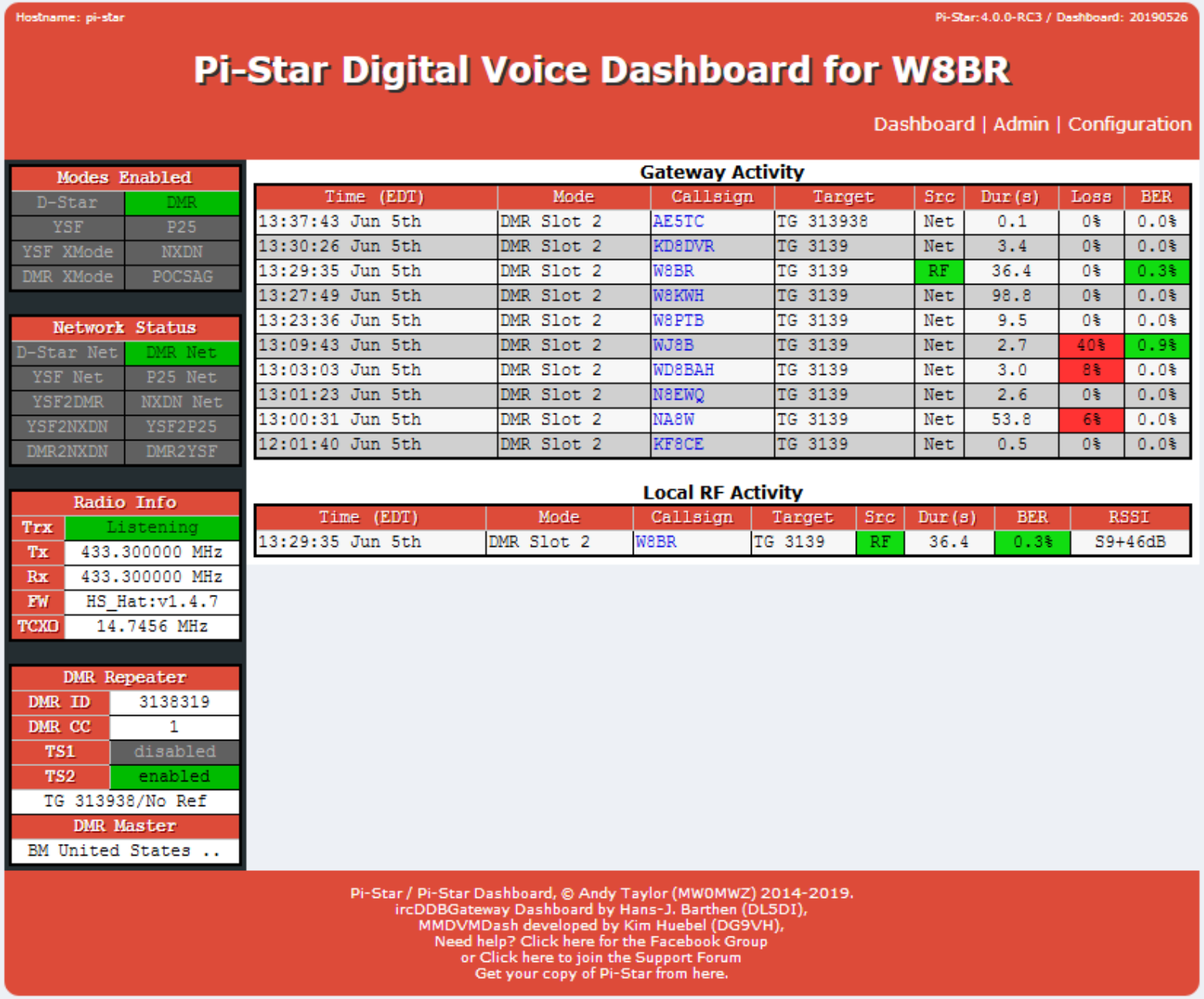
Setup is facilitated with:

- HDMI Display
- USB Keyboard
- Internet LAN connection or Wifi

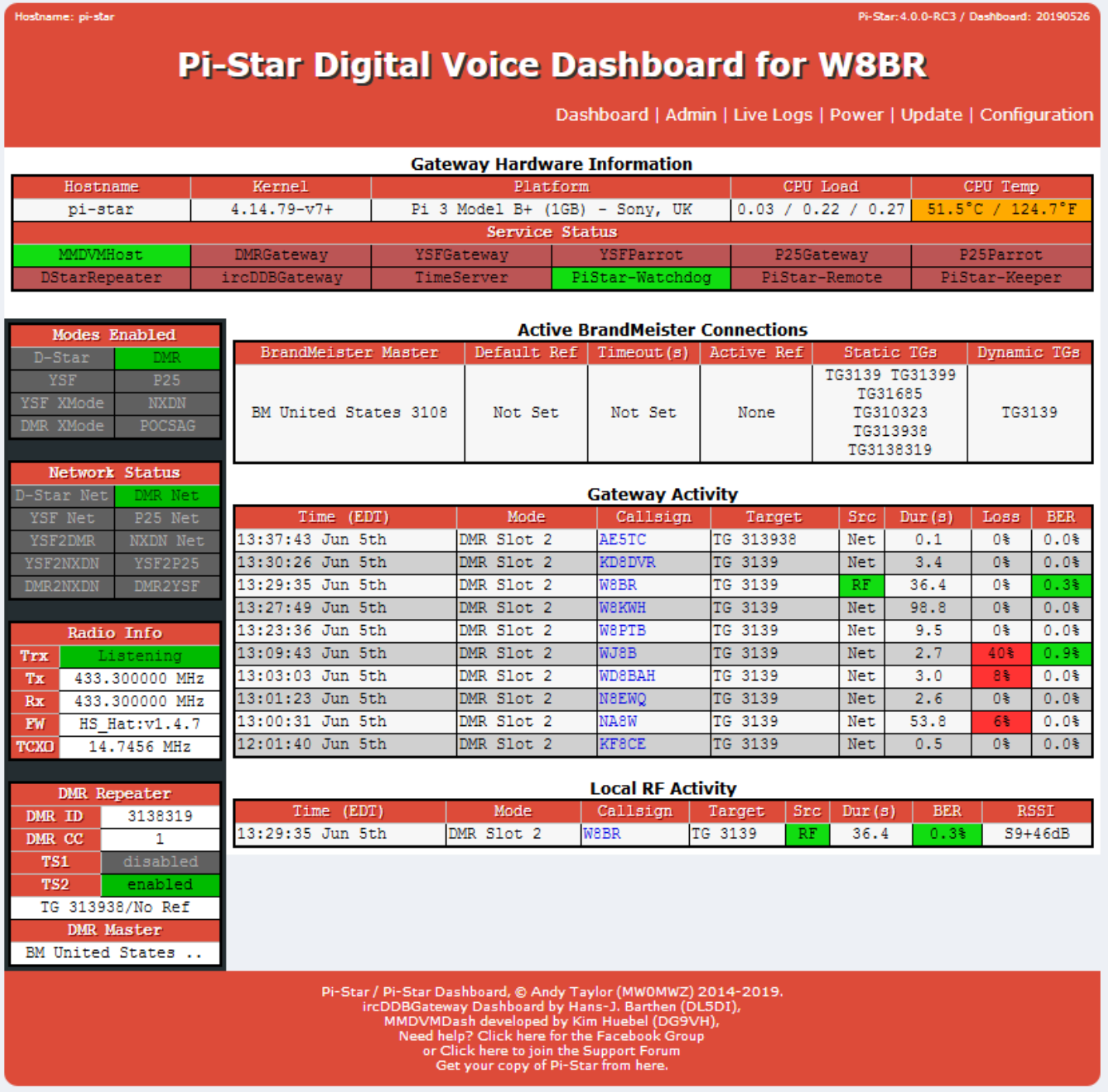


W8BR – Homebrew Hotspot

Dashboard Screen



Admin Screen



Top Of Screen

Configuration Screen

Pi-Star:4.0.0-RC3 / Dashboard: 20190526

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	4.14.79-v7+	Pi 3 Model B+ (1GB) - Sony, UK	0.17 / 0.3 / 0.3	51.5°C / 124.7°F

Control Software

Setting	Value
Controller Software:	○ DStarRepeater ◉ MMDVMHost (DV-Mega Minimum Firmware 3.07 Required)
Controller Mode:	◉ Simplex Node ○ Duplex Repeater (or Half-Duplex on Hotspots)

Apply Changes

MMDVMHost Configuration

Setting	Value			
DMR Mode:	●	RF Hangtime: 20	Net Hangtime: 20	
D-Star Mode:	○	RF Hangtime: 20	Net Hangtime: 20	
YSF Mode:	○	RF Hangtime: 20	Net Hangtime: 20	
P25 Mode:	○	RF Hangtime: 20	Net Hangtime: 20	
NXDN Mode:	○	RF Hangtime: 20	Net Hangtime: 20	
YSF2DMR:	○			
YSF2NXDN:	○			
YSF2P25:	○			
DMR2YSF:	○	Uses 7 prefix on DMRGateway		
DMR2NXDN:	○	Uses 7 prefix on DMRGateway		
POCSAG:	○	POCSAG Paging Features		
MMDVM Display Type:	OLED	Port: /dev/ttyUSB0	Nextion Layout: G4KLX	

Apply Changes

General Configuration

Setting	Value		
Hostname:	pi-star	Do not add suffixes such as .local	
Node Callsign:	W8BR		
CCS7/DMR ID:	3138319		
Radio Frequency:	433.300.000	MHz	
Latitude:	40.117503	degrees (positive value for North, negative for South)	
Longitude:	-82.18444	degrees (positive value for East, negative for West)	
Town:	Frazeysburg EN80vc		
Country:	United States		
URL:	http://www.qrz.com/db/W8BR		◉ Auto ○ Manual
Radio/Modem Type:	STM32-DVM / MMDVM_HS - Raspberry Pi Hat (GPIO)		
Node Type:	◉ Private ○ Public		
APRS Host:	euro.aprs2.net		
System Time Zone:	America/New_York		
Dashboard Language:	english_uk		

Apply Changes

DMR Configuration

Setting	Value
DMR Master:	BM_United_States_3108
Hotspot Security:	●●●●●
BrandMeister Network:	Repeater Information | Edit Repeater (BrandMeister Selfcare)
DMR ESSID:	3138319 None
DMR Colour Code:	1
DMR EmbeddedLCOnly:	○
DMR DumpTAData:	●

Apply Changes

Firewall Configuration

Setting	Value	
Dashboard Access:	◉ Private ○ Public	
ircDDBGateway Remote:	◉ Private ○ Public	
SSH Access:	◉ Private ○ Public	
Auto AP:	◉ On ○ Off	Note: Reboot Required if changed
uPNP:	◉ On ○ Off	

Apply Changes

Wireless Configuration

Refresh | Reset WiFi Adapter | Configure WiFi

Wireless Information and Statistics

Interface Information	Wireless Information
Interface Name : wlan0	Connected To : CenturyLink0370
Interface Status : Interface is up	AP Mac Address : 54:83:3a:7e:42:36
IP Address : 192.168.0.8	
Subnet Mask : 255.255.255.0	Bitrate : 65.0 MBit/s
Mac Address : b8:27:eb:11:45:a0	Signal Level : -39 dBm
Interface Statistics	Transmit Power : 31 dBm
Received Packets : 9064	Link Quality : 70/70
Received Bytes : 3319005 (3.1 MiB)	
Transferred Packets : 271	
Transferred Bytes : 42794 (41.7 KiB)	

Information provided by ifconfig and iwconfig

Remote Access Password

User Name	Password			
pi-star	Password:		Confirm Password:	Set Password

WARNING: This changes the password for this admin page AND the "pi-star" SSH account

Bottom Of Screen