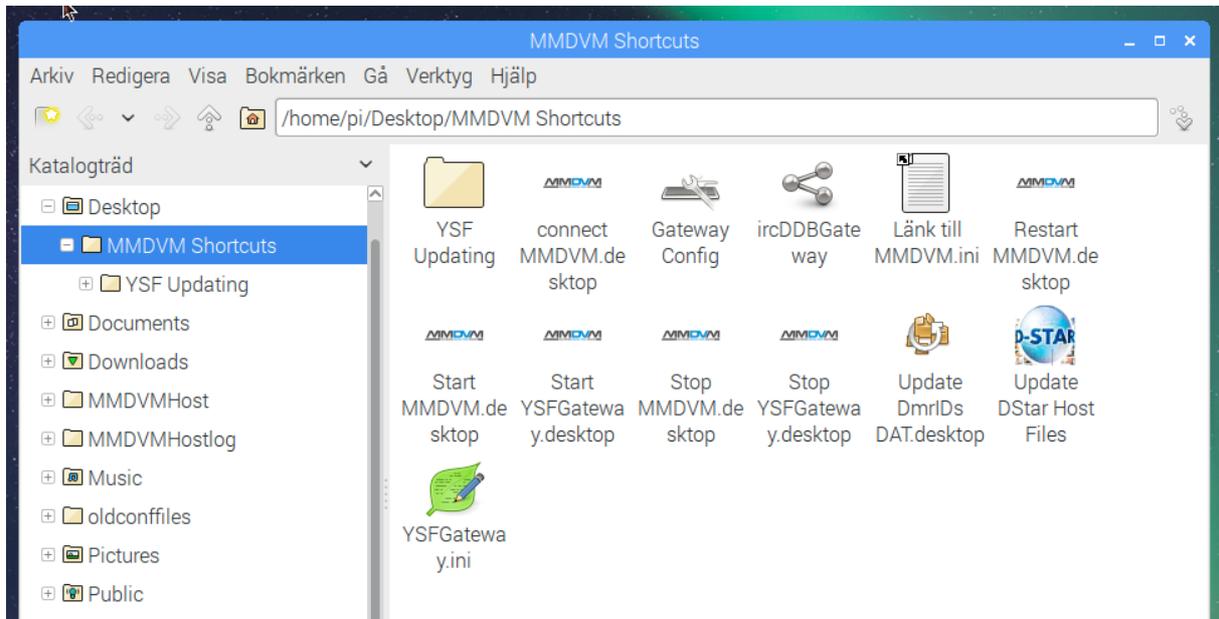


# Ver. 1.0.1 README file SA5LKC DVMega RPi

If you have any questions about this image file email me at [jocke@sa5lkc.se](mailto:jocke@sa5lkc.se) or comment on [www.sa5lkc.se/dvmega](http://www.sa5lkc.se/dvmega)



On the desktop you have a few shortcuts to some options and config the hotspot.

## DON'T FORGET TO CHANGE THE PASSWORD FOR PI!

Login via **SSH** or **VNC** and open the terminal window. Type the command **passwd** and then type your new password for user Pi. And to change the password for **VNC** login just do this. Write the command **x11vnc -storepasswd** and then enter new password for **VNC** then press **Y** to write the new password.

```
pi@DVMega:~ $ x11vnc -storepasswd
Enter VNC password:
Verify password:
Write password to /home/pi/.vnc/passwd? [y]/n y
Password written to: /home/pi/.vnc/passwd
```

- ✓ This image was made on a 8gb microSD card so if yours is larger, you can set the **Raspi-config** by expanding the space on your SD card.
- ✓ **MMDVMHost** the **DMR** and **DSTAR** and **Fusion/C4FM** Enabled. This change in **MMDVM.ini** the respective fashion. Type **config** in the terminal and u get **MMDVM.ini**
- ✓ **ircDDBGateway** is set to start automatically, and start up the reflector **DCS010B** (Ragchew / Slask). Do not forget to change your information there that, Callsign etc.
- ✓ **MMDVMHost** runs as a service and auto-start at boot of your Pi (CMD window appears on the screen, showing the status of **MMDVMHost**.)
- ✓ **YSFGateway** is set to start automatically, and connects to **13131**
- ✓ **VNC** start automatically and the password is **raspberry**

MMDVM-Dashboard by DG9VH for Hotspot: **CALLSIGN**

MMDVMHost by G4KLX Version: 20161124 (compiled 05 Jan 2017)  
 Firmware:  
 DMR-Network: BrandMeister

**BrandMeister**  
DMR Master Server

[View Log](#)
[Reboot MMDVMHost](#)
[Reboot System](#)
[ShutDown System](#)
[+ DMRplus](#)
[BrandMeister](#)

Currently TXing

Time (Europe/Stockholm)	Mode	Callsign	Name	DSTAR-ID	Target	Source	TX-Time
No active TXing							

System Info

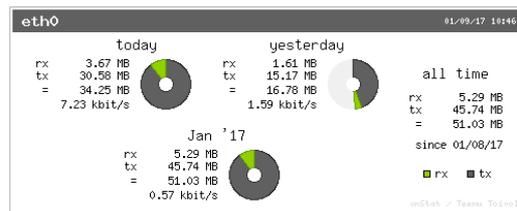
CPU-Temperature	CPU-Frequency	System-Load	CPU-Usage	Uptime	Idle
39,546 °C	600 MHz	8 %	<div style="width: 8%; background-color: #28a745; height: 10px;"></div>	17 hrs, 1 min, 32 s	17 hrs, 19 mins, 57 s

Disk Use

File System	Mount Point	Use	Free	Used	Total
/dev/root	/	<div style="width: 52%; background-color: #28a745; height: 10px;"></div> 52%	3.27 GB	3.45 GB	7.1 GB
/dev/mmcblk0p1	/boot	<div style="width: 35%; background-color: #28a745; height: 10px;"></div> 35%	39.05 MB	20.89 MB	59.95 MB

- ✓ **MMDVMHost Dashboard** is installed along with a Web server and PHP. Locally on your Pi, you can connect to <http://127.0.0.1/> for Dashboard. To see the Dashboard from any computer or mobile device on the same network as your Pi? then connect a web browser to the local IP address of your pi and it will appear in your browser.
- ✓ You can also use **ircDDB** remote software from a phone and connect to pi IP address, you can change the port or password in the Gateway config if needed. It is Enable by default, and the password is **raspberry**
- ✓ If you do not use **DSTAR** you can stop **ircDDBgateway** Autostart if you want. Edit the file [/home/pi/Scripts/start\\_ircddbgateway.sh](/home/pi/Scripts/start_ircddbgateway.sh) and comment out the two lines by placing # in front of the first two rows. If you need to disable **YSFGateway** autostart delete or move the file </home/pi/.config/autostart/Start YSFGateway service>

## Hotspot Statistic



Network Summary

### Traffic statistics on a hourly basis for the last 24 hours

Traffic statistics on a hourly basis for the last 24 hours

day	rx	tx	total	avg. rate
01/08/17	1.61 MB	15.17 MB	16.78 MB	1.59 kbit/s
01/09/17	3.67 MB	30.58 MB	34.25 MB	7.23 kbit/s
estimated	6 MB	66 MB	72 MB	

Traffic statistics on a daily basis for the last 30 days

month	rx	tx	total	avg. rate
Jan '17	5.29 MB	45.74 MB	51.03 MB	0.57 kbit/s
estimated	18 MB	165 MB	183 MB	

I have also added some statistics that show both TX and RX traffic over the Internet connection. So it is easier to keep track of how much it is. And this is also as web interface. Run `http://localip/vnstat` to get there. The file in `/home/pi` is called `vnstat.sh`, in there you can change ether wlan0 or eth0 at your choice. To reset the statistic you only have to delete the files in `/var/lib/vnstat/` directory

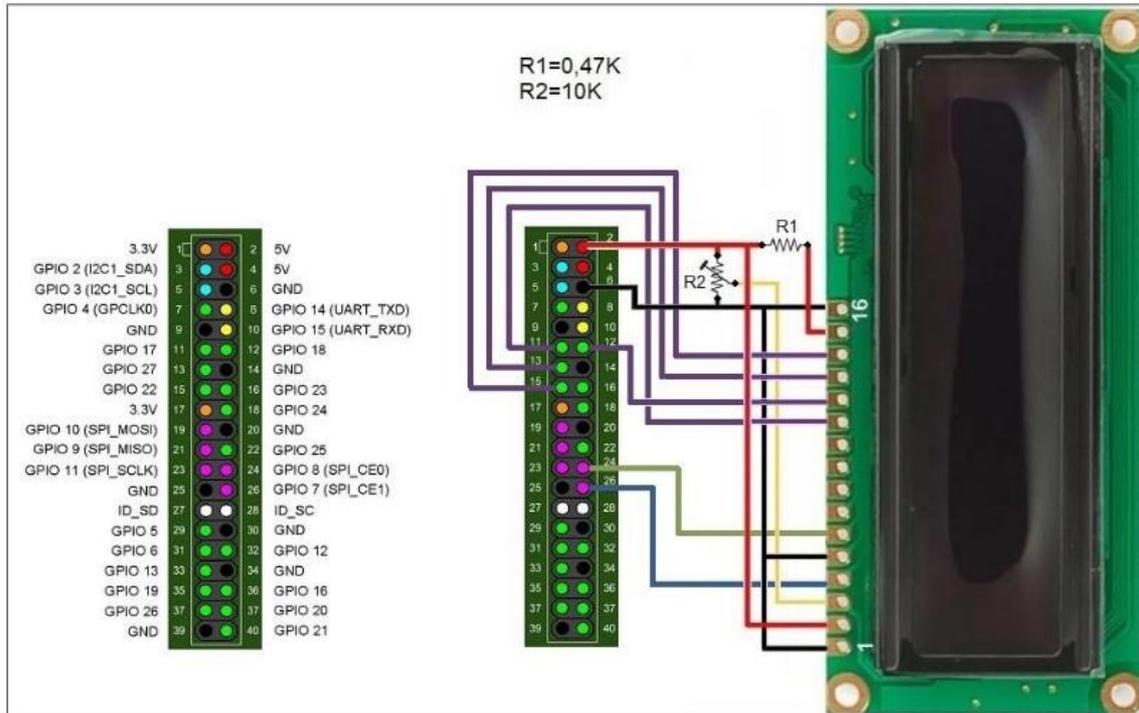
To edit `MMDVM.ini` I have simplified it with Bash alias write the command `config` in the terminal window. In the file, you must set your call and ID for this to work.

```
sön 8 jan 2017 17:30:01 CET: CPU temp - 33.6'C, GPU temp - ;
sön 8 jan 2017 17:35:02 CET: CPU temp - 35.7'C, GPU temp - ;
sön 8 jan 2017 17:40:01 CET: CPU temp - 35.7'C, GPU temp - ;
sön 8 jan 2017 17:45:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 17:50:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 17:55:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 18:00:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 18:05:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 18:10:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:15:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:20:01 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 18:25:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:30:02 CET: CPU temp - 36.8'C, GPU temp - ;
sön 8 jan 2017 18:35:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:40:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:45:01 CET: CPU temp - 37.3'C, GPU temp - ;
sön 8 jan 2017 18:50:01 CET: CPU temp - 38.4'C, GPU temp - ;
sön 8 jan 2017 18:55:01 CET: CPU temp - 38.4'C, GPU temp - ;
sön 8 jan 2017 19:00:01 CET: CPU temp - 39.0'C, GPU temp - ;
sön 8 jan 2017 19:05:01 CET: CPU temp - 39.0'C, GPU temp - ;
```

The temp warning and log is the `temp.log` in `/home/pi` directory. To reset you only have to delete this file. Temp log is checking the CPU / GPU temp every 5 minutes and log it. When it get hot (70 celcius)

the hotspot shutdown's safely. If you want to change this, edit the file [checktemp.sh](#) in `/etc/cron.d`  
In the future I going to fix the script so it can email warnings.

## LCD HD44780 Wire to Raspberry Pi GPIO



Don't forget to uncomment # in the MMDVM.ini under Display.

```
[General]
Callsign=CALLSIGN
Timeout=320
Duplex=0
# ModeHang=10
RFModeHang=10
NetModeHang=3
#Display=HD44780
Daemon=0
```

This project created during my free time so all contributions to the cost of server costs, future updates will be gratefully received. Thanks

